

MINUTES

**MEETING OF THE BOARD OF DIRECTORS'
OPERATIONS COMMITTEE**



SAN ANTONIO RIVER AUTHORITY

May 9, 2011, 2:00 p.m.

GENERAL AND CEREMONIAL ITEMS:

1. **CALL TO ORDER WAS MADE BY THE CHAIRMAN, MR. H. B. RUCKMAN III, AT 2:04 P.M.**
2. **PLEDGE OF ALLEGIANCE WAS RECITED**
3. **THE COMMITTEE SECRETARY, NÁZIRITE RUBÉN PÉREZ, CALLED THE ROLL AND REPORTED THE FOLLOWING COMMITTEE MEMBERS PRESENT:**

- John J. Flieller
- Michael W. Lackey, P.E. (2:11 p.m. arrival)
- Názirite Rubén Pérez
- H. B. Ruckman III
- Adair R. Sutherland
- Thomas G. Weaver

4. **CERTIFICATION OF A QUORUM WAS ANNOUNCED BY THE SECRETARY, MR. PÉREZ**

5. **INTRODUCTION OF VISITORS**

Ms. Sanchez announced the visitors who were present in the audience.

6. **CITIZENS TO BE HEARD**

Ms. Sanchez announced that there were no citizens signed up to speak.

7. **APPROVAL OF THE MINUTES OF THE BOARD OF DIRECTORS' OPERATIONS COMMITTEE MEETING HELD ON APRIL 11, 2011**

Staff recommended a motion that the minutes of the Operations Committee meeting held on April 11, 2011, be passed and approved, as presented.

Motion made by Thomas G. Weaver

Seconded by John J. Flieller

Vote: 5 - 0 Passed

Other: Michael W. Lackey, P.E.
(Absent)

In order to accommodate visitors in the audience and without any objections, Mr. Ruckman called on Agenda Item 12.

12. PRESENTATION, DISCUSSION, AND APPROPRIATE ACTION REGARDING A RESOLUTION AUTHORIZING THE EXECUTION OF A COOPERATIVE AGREEMENT BETWEEN THE SAN ANTONIO RIVER AUTHORITY AND THE UNIVERSITY OF TEXAS AT SAN ANTONIO (UTSA) CENTER FOR WATER RESEARCH FOR COLLABORATIVE WATERSHED RESEARCH, INVESTIGATION, EDUCATION, AND RELATED SERVICES

Staff recommended a motion indicating Operations Committee support for staff to present to the San Antonio River Authority Board of Directors a resolution authorizing the General Manager to execute a Cooperative Agreement between the San Antonio River Authority and the University of Texas at San Antonio Center for Water Research relating to potential future joint efforts and scientific work.

Motion made by Thomas G. Weaver

Seconded by Adair R. Sutherland

Vote: 6 - 0 Passed - Unanimously

Attachments:

Cooperative Agreement UTSA

Mr. Ruckman returned to the regular order of business and called on Agenda Item 8.

8. PRESENTATION, DISCUSSION AND APPROPRIATE ACTION REGARDING THE SURFACE WATER RIGHT LEASE WITH OIL AND GAS COMPANIES

Staff recommended a motion indicating Operations Committee support for presenting to the San Antonio River Authority Board of Directors a recommendation to approve the Contract for the Surface Water Lease.

Motion made by Michael W. Lackey, P.E.

Seconded by Thomas G. Weaver

Vote: 4 - 2 Passed

Nay: Adair R. Sutherland
Michael W. Lackey, P.E.

9. PRESENTATION, DISCUSSION AND APPROPRIATE ACTION REGARDING UPDATES TO THE SAN ANTONIO RIVER AUTHORITY CONSERVATION PLAN

Staff recommended a motion indicating Operations Committee support for presenting to the San Antonio River Authority Board of Directors a recommendation to approve the updated Conservation Plan.

Motion made by Thomas G. Weaver

Seconded by John J. Flieller

Vote: 6 - 0 Passed - Unanimously

Attachments:

Conservation Plan

10. PRESENTATION, DISCUSSION AND APPROPRIATE ACTION REGARDING AUTHORIZING THE EXECUTION OF AN INTERLOCAL AGREEMENT WITH THE TEXAS WATER DEVELOPMENT BOARD TO FUND SENATE BILL 1, SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP ACTIVITIES FOR DEVELOPMENT OF THE 2016 REGIONAL WATER PLAN

Staff recommended a motion indicating Operations Committee support for presenting to the San Antonio River Authority Board of Directors a recommendation to authorize the General Manager of the San Antonio River Authority to negotiate and execute a contract with the Texas Water Development Board for funds to conduct Senate Bill 1, Fourth Cycle Regional Water Planning activities for the development of the 2016 Regional Water Plan.

Motion made by Adair R. Sutherland

Seconded by John J. Flieller

Vote: 6 - 0 Passed - Unanimously

11. DISCUSSION AND APPROPRIATE ACTION ON AN INTERLOCAL AGREEMENT WITH SAN ANTONIO WATER SYSTEM FOR THIRD PARTY BILLING

Staff recommended a motion indicating Operations Committee support for presenting to the San Antonio River Authority Board of Directors approval to authorize the General Manager to negotiate and execute an amendment to the San Antonio Water System Interlocal Agreement for Utility Billing Services.

Motion made by John J. Flieller

Seconded by Michael W. Lackey, P.E.

Vote: 6 - 0 Passed - Unanimously

12. **PRESENTATION, DISCUSSION, AND APPROPRIATE ACTION REGARDING A RESOLUTION AUTHORIZING THE EXECUTION OF A COOPERATIVE AGREEMENT BETWEEN THE SAN ANTONIO RIVER AUTHORITY AND THE UNIVERSITY OF TEXAS AT SAN ANTONIO (UTSA) CENTER FOR WATER RESEARCH FOR COLLABORATIVE WATERSHED RESEARCH, INVESTIGATION, EDUCATION, AND RELATED SERVICES**

Having already addressed Item 12, Mr. Ruckman called for Item 13.

13. **PRESENTATION, DISCUSSION AND APPROPRIATE ACTION REGARDING A RESOLUTION AUTHORIZING THE GENERAL MANAGER TO EXECUTE AN ASSIGNMENT AND ASSUMPTION OF LEASE BETWEEN JOE CARUSO GOLF, INC., AND CARUSO GOLF MANAGEMENT, LLC, AND AN ESTOPPEL CERTIFICATE FOR THE LEASE ON SAN ANTONIO RIVER AUTHORITY PROPERTY LOCATED AT SALADO CREEK WATERSHED PROTECTION AND FLOOD PREVENTION PROJECT 6 ALSO KNOWN AS HILL COUNTRY VILLAGE DAM IN SAN ANTONIO, BEXAR COUNTY, TEXAS**

Staff recommended a motion indicating Operations Committee support for presenting to the San Antonio River Authority Board of Directors a resolution to authorize the General Manager to execute an Assignment and Assumption of Lease between Joe Caruso Golf, Inc., and Caruso Golf Management, LLC, and an Estoppel Certificate for the lease on San Antonio River Authority property located at Salado Creek Watershed Protection and Flood Prevention Project 6 also known as Hill Country Village Dam in San Antonio, Bexar County, Texas.

Motion made by Adair R. Sutherland

Seconded by Michael W. Lackey, P.E.

Vote: 6 - 0 Passed - Unanimously

Attachments:

Assignment and Assumption of Lease

Consent of Assignment

Estoppel Certificate

14. **BRIEFING REGARDING LAND RIGHTS ACQUISITION STATUS**

There being no action taken on this item, Mr. Ruckman called for Agenda Item 15.

Committee member Lackey requested to recuse himself from Agenda Items 15 and 16 due to a conflict of interest and then stepped out of the Board room until discussions were over.

15. PRESENTATION, DISCUSSION AND APPROPRIATE ACTION REGARDING SOLAR DEVELOPMENT OPPORTUNITIES ON SAN ANTONIO RIVER AUTHORITY LANDS

There being no action taken on this item and after appropriate disclosure in accordance with Chapter 551 of the Texas Government Code, the Open Meetings Act, Section 551.072, Mr. Ruckman then recessed to meet in Executive Session at 3:25 p.m. for deliberation concerning Agenda Item 16.

16. EXECUTIVE SESSION PURSUANT TO TEXAS GOVERNMENT CODE SECTION 551.072 FOR DELIBERATION REGARDING THE PURCHASE, EXCHANGE, LEASE, OR VALUE OF REAL PROPERTY FOR SOLAR DEVELOPMENT OPPORTUNITIES

While in Executive Session, Legal Counsel had advised the Committee to disclose pertinent public information. Therefore, the Executive Session having concluded, the Operations Committee Meeting resumed into Open Session at 3:41 p.m. with an open discussion on those certain details.

There being no action taken on this item, Mr. Ruckman called for Agenda Item 17. Mr. Lackey then returned to the meeting.

17. STATUS REPORT ON THE SAN ANTONIO RIVER IMPROVEMENTS PROJECT

There being no action taken on this item, Mr. Ruckman called for Agenda Item 18.

18. GENERAL MANAGER'S REPORT CONCERNING THE FOLLOWING:

- **UPCOMING EVENTS CALENDAR,**
- **FUTURE BOARD AND/OR COMMITTEE MEETINGS, AND**
- **MEETINGS INVOLVING THE ATTENDANCE OF ONE OR MORE BOARD MEMBERS**

There being no action taken on this item, Mr. Ruckman called for Agenda Item 19.

19. ITEMS FOR FUTURE CONSIDERATION

There being no action taken on this item, Mr. Ruckman called for Agenda Item 20.

20. NEXT MEETING DATE

It was announced that the next Operations Committee meeting will be Monday, June 6, 2011, at 2:00 p.m.

21. ADJOURN

There being nothing further to report, Ms. Sutherland moved to adjourn. Mr. Ruckman called the meeting adjourned at 4:02 p.m.

PREPARED AND RECOMMENDED FOR COMMITTEE APPROVAL BY THE MANAGER.

SUZANNE B. SCOTT, General Manager

APPROVED BY THE BOARD OF DIRECTORS' OPERATIONS COMMITTEE AT THE MEETING HELD ON JUNE 6, 2011.

H. B. RUCKMAN III, Committee Chairman

ATTEST:

NÁZIRITE RUBÉN PÉREZ, Committee Secretary

COOPERATIVE AGREEMENT

Between
THE UNIVERSITY OF TEXAS AT SAN ANTONIO
CENTER FOR WATER RESEARCH
And
SAN ANTONIO RIVER AUTHORITY
SAN ANTONIO, TEXAS

The San Antonio River Authority, an agency of the State of Texas (hereafter referred to as “SARA”), headquartered in San Antonio, Texas, and the University of Texas at San Antonio, hereafter referred to as UTSA, a state agency and institution of higher education organized under the laws of the State of Texas, hereby mutually agree as follows:

WHEREAS, SARA is committed to the preservation, protection and sustainability of the San Antonio River Watershed, including all sub-watersheds, and to collaborative, adaptive, and strategic actions that address watershed issues and priorities; and

WHEREAS, UTSA is organized and maintained in the State of Texas to conduct programs of education, research, and public services designed to benefit all people of the State including research, education, and services related to water resources, water resources management, water conservation, and water economics and policy; and

WHEREAS, UTSA offers several disciplines and programs including but not limited to , civil engineering, geology, hydrology, geographic information systems, computer modeling, archeology, environmental education, and environmental science; and

WHEREAS, SARA and UTSA are mutually interested in and desire to cooperate in fostering education and conducting scientific research, engineering, technical services, administration, sustainability, natural resource management and outreach in the San Antonio River Watershed and elsewhere; and

WHEREAS, both parties to this Agreement wish to cooperate with one another to achieve their common goals and for the general benefit of the people of the San Antonio River Watershed ; and

WHEREAS, UTSA requires sponsors and funding to effectively promote education and conduct scientific research; and

NOW, THEREFORE, in consideration of the above recitals as well as the obligations herein made and undertaken, the parties hereto mutually agree as follows:

1. Term of Agreement

This Cooperative Agreement (referred to herein as the “Agreement”) shall

become effective upon the date of signature by the party last signing this Agreement and shall continue in full force and effect for a period of five (5) years thereafter. The term of each work order shall be set forth in the approved Work Order.

2. Scope of Services

Any Work Orders (as hereinafter defined) conducted under this Agreement will, unless otherwise set forth in an individual Proposal accepted by SARA, be administered by the Director of the University of Texas at San Antonio Center for Water Research.

Any of SARA's departments may request that UTSA perform services using the Work Order Process described in Section 3 of this Agreement. The services requested may include, but are not limited to, data gathering, programming, running models, internships, research and development, peer review processes (e.g. reviewing prior studies, conducting literature searches), and completion of reports needed either for submission to meet SARA's requirements, or to provide technical background needed by SARA staff to develop policy, planning, programming or project recommendations. The reports may contain evaluations of alternatives and recommended solutions to problems in order to aid the decision-making and policymaking functions of SARA staff. Notwithstanding any other provision in this Agreement, SARA retains complete responsibility for its use and implementation of any work product (including, without limitation, any results, information, evaluations, or recommendations) it obtains from UTSA under this Agreement. Such use and implementation of the work product will include, without limitation, any decisions, plans, project recommendations or policies formulated or adopted by SARA after receiving such work product from UTSA under this Agreement.

In response to a Work Request, UTSA may provide assistance using reasonable best efforts, subject to the Work Order process described in Section 3 of this Agreement, in the following generally described disciplines:

Research

- Ground and surface water availability and water quality modeling of aquifers and surface-water systems and their interactions;
- Water quality treatment, pre-treatment or blending issues including disinfection methodologies and disinfection by-product analyses;
- Desalination treatment and disposal methodologies;
- Geographical Information Systems (GIS) applications;
- Water quality monitoring devices
- Water quality and quantity research projects;
- Archeological sites within the San Antonio River Watershed;
- Effectiveness of outreach and public education about environmental issues of interest in the San Antonio River Watershed;

Planning Assistance

- Data collection and analysis of surface and groundwater management and permitting systems;
- Data collection and comparative analysis of traditional storm water retention and polishing infrastructure, sustainable storm water retention and polishing infrastructure, and low impact development design;

-
- Support of Environmental Management Systems;
- Review and analysis of water resource supply and quality management plans, projects and policies;
- Environmental, economic and engineering analyses related to water delivery, water supply, recycled water and wastewater programs;
- Natural Channel Design (NCD) including data collection, and establishment of regional design criteria;
- Demographic projections affecting future water usage and facilities' needs;
- Assistance in system expansion programs;
- Program assessments (reviews/evaluations/audits); and
- Geographical Information Systems, Global Positioning Systems supported services

UTSA will provide technical staff, equipment, and all other services to accomplish the work, tasks, schedule and priorities contained in any Proposal accepted by SARA, except for such SARA's staff time, equipment and other services specifically identified in the Proposal as those to be provided by SARA. UTSA staff will work under the direction of the SARA personnel to accomplish the specific tasks and priorities contained in any Proposal accepted by SARA. At the direction of SARA and upon request by UTSA, UTSA staff assigned to perform any services pursuant to the terms of this Agreement and any approved Proposal may be located within SARA' offices in order to improve communication and work efficiency.

3. Work Order Process

A request for Services shall be communicated to UTSA through the UTSA Center for Water Research in a written work request (referred to in this Agreement as a "Work Request") prepared by SARA. Each Work Request will be submitted by SARA to UTSA Center for Water Research and will contain the following information:

- The title of the proposed research or technical services work order and proposed work order number;
- A general description of the scope of work;
- A general description of the tasks and deliverables to be completed;
- A total not-to-exceed cost for all of the work, services or other tasks necessary to complete the entire scope of work described in the Work Request and other financial information as necessary;
- The expected time for completion of all of the tasks described in a Work Request, including the beginning date and completion date;
- The confidential nature of the materials provided by SARA and the confidentiality of the data, reports or studies prepared by UTSA, provided however, UTSA may only keep materials confidential as authorized under the Public Information Act or other appropriate law, it being agreed that notwithstanding anything in this Agreement or any Work request or Proposal, prior to release of any materials or information that SARA may consider proprietary or confidential, UTSA will decline to release the information for the purpose of timely requesting an Attorney General decision, and UTSA will timely

submit a request for an Attorney General decision, claiming all appropriate exceptions, including an exception relating to information involving privacy or property interests of SARA as a third party, and in addition, UTSA shall notify SARA in writing within a reasonable time not later than the tenth (10th) business day after the date UTSA received the request for information, and UTSA and SARA will take such additional steps as appropriate and/or required by the Texas Public Information Act, to request an opinion of the Attorney General as to whether or not disclosure is so required; and

- The insurance requirements of UTSA for the Work Order;
- The name of SARA Work Order Project Manager and the names of any other SARA staff contacts available for consultation;
- What percentage, if any, of the work or services described in a Work Request will be shared or performed by SARA staff;
- Description of any required software or models;
- Description of any required commercial insurance in keeping with the results of a risk assessment based on the scope of services to be provided;
- Description of any specifically required quality assurance/quality control procedures or formats;
- Description of any data, reports, or models that SARA has agreed to provide to UTSA to complete the work (it being agreed that any such data, reports or models shall be provided as a convenience to UTSA, without any representation or warranty by SARA as to the quality, accuracy or completeness of the information contained therein); and
- Acknowledgments in technical articles.

Within fourteen calendar days after the receipt of a Work Request, UTSA shall either decline the Work Request or prepare and submit to SARA a proposal containing a work plan (hereafter the "Proposal") that describes in detail all means and methods that will be employed by the UTSA to complete all of the tasks that are described in a Work Request, it being agreed that if UTSA fails to respond to a Work Request within said fourteen calendar day period, UTSA shall be deemed to have elected to decline the Work Request. UTSA has the right to decline any Work Request that falls outside the scope of its mission or expertise as determined by UTSA.

Any Proposal that is submitted by UTSA to SARA shall contain the following information:

1. A detailed description of the methods and technical approach that will be employed to complete all of the work that is described in a Work Request, including the date of completion for each task and/or subtask described in a Work Request and for preparation of all of the deliverables related to each such task and/or subtask;
2. An estimated schedule for the commencement and completion of the Work Request;
3. A list of the people who are proposed to work on the Work Request, together with an estimate of the time to be spent by each person;
4. The estimated level of effort per labor classification, a not-to-exceed cost for performance of all of the work described in a Work Request that is to be performed by UTSA, which shall include direct labor, material, other direct costs,

- indirect costs, and the costs and fees of consultants and subcontractors, that will be incurred in connection with the completion of the Work Request, together with a not-to-exceed cost for all reimbursable expenses (e.g., travel, meals, lodging, etc.);
5. An agreement regarding the confidentiality of the Work;
 6. A Certificate of Insurance evidencing compliance with the specified insurance requirements for the Work Request, if required; and
 7. A description of the quality assurance and quality control procedures, which shall be used to insure quality of work.

Within fourteen calendar days after receipt of a Proposal by SARA, SARA shall either accept the Proposal, disapprove the Proposal, or disapprove the Proposal and request modifications, it being agreed that if SARA fails to respond to the Proposal within said fourteen calendar day period, SARA shall be deemed to have elected to disapprove the Proposal. If a Proposal is accepted by SARA (a Proposal that is accepted by SARA is hereafter referred to as a “Work Order”), SARA will issue a written Notice to Proceed and upon receipt by UTSA Center for Water Research, the Center shall start work (all of the work, services or other effort of any kind that is to be performed pursuant to the provisions of the Work Order is hereafter referred to collectively as the “Work”). Each Notice to Proceed shall contain a not-to-exceed cost (as agreed upon in the Proposal Process) that represents the total value of that Work Order.

4. Availability for Questions

UTSA agrees to respond to questions raised by SARA staff regarding Work performed under this Agreement for a period of one year after the later of the conclusion of this Agreement or the conclusion of any Work Order in effect under this Agreement. SARA recognizes that normal staff turnover and other staff assignments after the conclusion of this Agreement or the conclusion of any Work Order in effect under this Agreement may limit UTSA’s ability to respond to questions.

5. Quality Assurance / Quality Control

UTSA shall employ thorough quality assurance / quality control procedures (QA/QC) for all Work performed, including but not limited to QA/QC of raw data (e.g. check for data entry errors, conduct checks of spreadsheet calculations, check validity of modeling inputs, conduct checks of programming algorithms, employ any automated reasonableness, and perform range/parameter checks that may be available to QA data, and UTSA shall employ statistical and/or graphical analysis techniques as appropriate.

6. Safety and Security Operating Procedures

UTSA and its employees, contractors and subcontractors will comply with all safety and security operating procedures provided by designated SARA staff while in the performance of any Work on SARA premises.

7. Key Personnel

SARA has the right to object to the assignment of any UTSA employees, contractors or subcontractors who are designated by UTSA to perform any of the Work. Any such objection shall be provided in writing to UTSA. UTSA will not assign persons to whom SARA has objected to perform any of the Work or any part of a Work Order.

Prior to substituting any personnel specified to perform any of the Work by UTSA in a Work Order, UTSA shall notify SARA in writing, at least ten (10) calendar days in advance of the proposed substitution. Personnel who are proposed to be substituted shall have comparable qualifications to those of personnel being replaced. No substitution of personnel shall be made without the consent of SARA, which consent shall not be unreasonably withheld.

8. Administration

Unless otherwise set forth in a Work Order, UTSA will assign the Director of the University of Texas at San Antonio Center for Water Research to administer any Work provided for under the terms of this Agreement. Progress reports will be submitted to SARA by the Work Order, on a quarterly basis unless otherwise stated in a Work Order. A final draft of any report under any Work Order shall be submitted to SARA for review and comment before finalization of said report. Billing will be done by UTSA on a quarterly basis unless otherwise stated in a Work Order. Billings will be directed to the SARA employee designated in the Work Order, or if no one is designated in the Work Order, then to:

Assistant General Manager
San Antonio River Authority
P.O. Box 839980
San Antonio, TX 78283

9. Work Order Funding Procedures

Payments to UTSA will be made according with the following:

- Payments must be made in compliance with the Prompt Payment Act
- Payments will be made upon receipt and after approval of the standard University invoices, including the minimum information set forth below. The progress reports as addressed in Section 8 will describe the Work accomplished to date under each Work Order.
- Using SARA's invoicing format.

10. Maximum Payment Obligation of SARA

Notwithstanding anything in this Agreement or any Work Order to the contrary, absent a written notice from an authorized representative of SARA, the maximum aggregate amount that SARA shall be obligated to pay to UTSA under this Agreement, any Work Order, or the aggregate of all Work Orders from time-to-time shall not under any

circumstances exceed the sum of Five Hundred Thousand and No/100 Dollars (\$500,000.00) (the "Contract Amount"), it being acknowledged and agreed by UTSA that as of the date of this Agreement, the Contract Amount is the maximum amount that has been appropriated for services under this Agreement, and any increase in the Contract Amount during the term of this Agreement must be approved by the SARA Board of Trustees.

11. Termination

This Agreement and any Work Order may be terminated for cause or convenience. Such termination shall be effected by written notice of either party to the other thirty (30) calendar days prior to actual termination. If this Agreement is so terminated, the parties shall be liable only for payment for Work actually performed prior to the effective date of termination, it being agreed that the terminated party shall, upon receipt of notice of termination, take all reasonable steps to immediately cease all Work and wind up the Work at the least possible cost to the other party.

12. Intellectual Property and Publication Rights

Unless otherwise provided in a Work Order, (a) title to all inventions and discoveries resulting from the research performed under this Agreement or any approved Work Order shall reside in UTSA, and (b) UTSA and any UTSA staff working on a Work Order have the right to publish or otherwise publicly disclose information gained in the course of the services performed under this Agreement or any Work Order, subject to SARA rights to review and comment in Section 8 above, and (c) in order to allow SARA an opportunity to identify and to protect any proprietary, critical infrastructure, or other confidential information provided to UTSA by SARA, UTSA will submit any prepublication materials to SARA for review and comment at least sixty (60) calendar days prior to planned submission for publication.

13. Agreement Jointly Drafted

This Agreement has been jointly drafted by the parties. By their signatures below, the parties represent and acknowledge that they have had a full and fair opportunity to review and read this Agreement and that each has had a full opportunity to consult with their counsel in connection with the drafting, review, negotiation, and execution of this Agreement. The parties represent each to the other that they have executed this Agreement with the intent to be fully bound according to its terms; that in signing this Agreement they have relied solely on their own knowledge or their duly authorized representative's knowledge and judgment and/or the advice of their own attorneys and not in reliance upon any representation, advice, statement or action of any kind of the other party or other party's representatives or attorneys, except to the extent that such representations, statements or actions are expressly set forth in this Agreement. The

parties expressly disclaim reliance on any fact or representation made by any other party or any other party's representatives or attorneys that is not expressly contained in this Agreement.

14. Chapter 791, Government Code Requirement

The Parties agree to follow the applicable requirements of Chapter 791 of the Government Code. The Parties specifically agree to pay for the activities set out in this agreement from current revenues.

15. Entire Agreement

This Agreement constitutes the entire agreement of the parties to this Agreement relating to the subject matter of this Agreement and it supersedes any and all prior understandings, agreements, or discussions between the parties to this Agreement and Exhibits hereto with respect to the subject matter of this Agreement. The parties to this Agreement agree and acknowledge that there have been no representations, agreements or understandings, oral or written, between or among the parties to the Agreement and which are not fully expressed in this Agreement.

16. No Oral Modification

This Agreement may not be modified or amended except by written agreement executed by the parties hereto.

17. Governing Law

This Agreement shall be governed by and entered into in accordance with the laws of the State of Texas and shall be enforceable in Bexar County, Texas.

18. Severability

The provisions of this Agreement are severable, and the invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision. In addition, in the event that any provision of this Agreement (or portion thereof) is determined by a court of competent jurisdiction to be unenforceable as drafted by virtue of scope, duration, extent, or character of any obligation contained therein, the parties acknowledge that such provisions (or portions thereof) shall be construed in the manner designed to effectuate the purposes of such provisions to the maximum extent enforceable under Texas law.

19. Assignment and Binding Effect

Neither party may assign this Agreement or the performance of any of the Work without the prior written consent of the other party. To the extent assignment is permitted by this paragraph, this Agreement shall be binding upon and inure to the benefit of the parties' respective successors, assigns and legal representatives.

20. Headings

The headings in this Agreement are for the convenience of reference and shall not limit or otherwise affect the meaning, or be used in the construction of, any provision herein.

21. Authority to Execute

Each party to this Agreement represents to the other party that each has authority to and is authorized to execute this Agreement in the capacity in which this Agreement is executed.

22. No Third Party Beneficiaries

This Agreement is made by and for the benefit of the parties to this Agreement only. There are no third-party beneficiaries of this Agreement.

23. Counterparts

This Agreement may be executed in one or more original counterparts, each of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have entered into and executed this Agreement, to be effective as of the date of signature by the party last signing this Agreement.

Pamela Bacon
Associate Vice President for Business Administration
The University of Texas at San Antonio

Date

Suzanne B. Scott
General Manager
San Antonio River Authority

Date

Water Conservation and Drought Contingency Plan



SAN ANTONIO
RIVER AUTHORITY
Water Brings Us Together

June 20, 2007

**San Antonio River Authority
Water Conservation & Drought Contingency Plans**

Table of Contents

Page

Article I – San Antonio River Authority

- Sec. 1.0 Introduction
- Sec. 2.0 Intent and Purpose
- Sec. 3.0 Definitions

Article II – SARA’s Water Conservation Plan

- Sec. 1.0 Introduction
- Sec. 2.0 San Antonio River Authority Water Utility Profile
- Sec. 3.0 Water Conservation Goals for Municipal and Industrial Uses
- Sec. 4.0 Coordination with Region L Water Planning Group
- Sec. 5.0 Conservation Plan Elements
 - Sec. 5.1 Water Source Metering
 - Sec. 5.2 Universal Metering, Meter Testing/Replacement and Record Management
 - Sec. 5.3 Determination and Control of Unaccounted-For Water
 - Sec. 5.4 Public Information and Education
 - Sec. 5.5 Conservation Water Rate Structure
 - Sec. 5.6 Implementation and Enforcement
 - Sec. 5.7 Leak Detection and Repair
 - Sec. 5.8 Water Use Record Management
 - Sec. 5.9 Wholesale Water Supply Contracts
 - Sec. 5.10 Water Reuse/Recycling
 - Sec. 5.11 Water Conserving Landscaping
 - Sec. 5.12 Water Conserving Plumbing Fixtures and Retrofit Program

Article III – SARA’s Drought Contingency Plan

- Sec. 1.0 Introduction
- Sec. 2.0 Declaration of Policy, Purpose, and Intent
- Sec. 3.0 Public Involvement
- Sec. 4.0 Public Education
- Sec. 5.0 Coordination with Water Utilities
- Sec. 6.0 Authorization
- Sec. 7.0 Application
- Sec. 8.0 Drought Response Stage Criteria and Water Use Restrictions
 - Sec. 8.1 Stage 1 - Conservation Stage
 - Sec. 8.2 Stage 2 - Water Warning
 - Sec. 8.3 Stage 3 - Water Emergency
 - Sec. 8.4 Stage 4 - Water Crisis
 - Sec. 8.5 Stage 5 - Emergency Water Shortage Condition
- Sec. 9.0 Water Rationing
- Sec. 10.0 Enforcement
- Sec. 11.0 Variances

Appendices

- A. SARA's Water Utility Profile Data
- B. Letter to Region L transmitting SARA's Plan
- C. Sample Water Rationing Plan

Article I
San Antonio River Authority

Sec. 1.0 Introduction

The San Antonio River Authority (SARA) was created by the 45th Texas Legislature on May 5, 1937, and then reorganized in 1961 to plan, manage and implement water-related programs and projects within the San Antonio River Basin. The State of Texas empowered SARA to preserve, protect and manage the resources and the ecology of the San Antonio River and its tributaries. SARA's jurisdictional territory covers the San Antonio River Basin in Bexar, Goliad, Karnes and Wilson counties; however, because events that occur outside of the Basin affect the River, SARA's interests extend beyond those boundaries. The quality and quantity of water within the San Antonio River Basin extends because of factors outside the district that contribute to the health and well-being of the River and communities within SARA's jurisdiction.

SARA's mission statement, as adopted by the Board on September 19, 2001, is:

THE SAN ANTONIO RIVER AUTHORITY IS ENTRUSTED TO PROTECT AND PRESERVE OUR SHARED WATER RESOURCES AND, TOGETHER WITH OUR PARTNERS, PURSUE INNOVATIVE SOLUTIONS THAT WILL SERVE GENERATIONS TO COME.

This mission statement recognizes:

- 1) that SARA is entrusted by the State of Texas and the River Authority's constituents to protect water resources in the district,
- 2) that SARA's job is to protect and preserve the water in the district and the environment it supports,
- 3) that SARA shares water resources with others who depend upon them,
- 4) that SARA is more effective when we work in partnerships with others, and
- 5) that SARA needs to be creative and innovative in planning long-term solutions to water-related matters in the district.

In addition to the mission statement, the Board approved a positioning statement that conveys SARA's focus on water-related issues and concerns. The positioning statement also illustrates that SARA's services and expertise address diverse water-related issues. The positioning statement is:

Water Brings Us Together:

- **To ensure that adequate water resources exist to serve the needs of the district.**
- **To protect communities from flooding.**
- **To preserve the quality and quantity of water in the San Antonio River and its tributaries.**
- **To nurture parks and natural resources.**

In 1996, severe drought conditions affected every region of the State. Water systems throughout the State were forced to cope with water shortages or system capacity problems. In reaction to the 1996 drought, the 75th Texas Legislature enacted Senate Bill 1, which directed the State to take a regional approach to water planning. One of the provisions of the legislation required the Texas Natural

Resource Conservation Commission (TNRCC) to adopt rules requiring wholesale and retail public water suppliers to develop water conservation and drought contingency plans.

Water conservation and drought contingency plans work together to help Texans manage short-term and long-term water shortages. The goal of a water conservation plan is to achieve lasting, long-term improvements in water use efficiencies using strategies to reduce the amount of water withdrawn from a particular source, and to ensure that the water withdrawn is used in an efficient manner. Drought contingency plans are short-term in nature, using temporary supply and demand management measures in response to temporary and potentially recurring water shortages and other emergencies.

Sec. 2.0 Intent and Purpose

In addition to adopting the same as part of its overall stewardship of the water resources within the San Antonio River Basin, as a water right holder and wholesale water supplier, SARA is required to submit a Water Conservation and Drought Contingency Plans to the TCEQ. Accordingly, in satisfaction of both its Mission and its statutory regulatory duties, SARA has adopted a Water Conservation Plan and will develop and adopt a Drought Contingency Plan consistent with the requirements of 30 TAC 288.

Sec. 3.0 Definitions

The following definitions shall apply to both SARA's Water Conservation and Drought Contingency Plan, unless otherwise defined in the respective Plan:

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

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

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

Customer: Any person, company, or organization using water supplied by SARA.
Domestic water use: Water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Drought Contingency Plan: A strategy or combination of strategies for temporary supply management and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies. A drought contingency plan may be a separate document identified as such or may be contained within another water management document(s).

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

Hand-held hose: A gardening hose or any flexible tube of plastic, rubber, or similar materials of diameter of 2 inches, or less, used to convey water for beneficial purposes by an individual.

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

Irrigation use: The use of water for the irrigation of crops, trees, and pastureland, including, but not limited to, golf courses and parks which do not receive water through a municipal distribution system.

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.

Municipal per capita water use: The sum total of water diverted into a water supply system for residential, commercial, and public and institutional uses divided by actual population served.

Municipal use: The use of potable water, and in some instances non-potable water, within or outside a municipality and its environs, whether supplied by a person, privately owned utility, political subdivision, or other entity, as well as the use of sewage effluent for certain purposes, including the use of treated water for domestic purposes, fighting fires, sprinkling streets, flushing sewers and drains, watering parks and parkways, and recreational purposes, including public and private swimming pools, the use of potable water in industrial and commercial enterprises supplied by a municipal distribution system without special construction to meet its demands, and for the watering of lawns and family gardens.

Non-essential water use: Water uses that are either non-essential required for the protection of public health, safety, and welfare. Such uses for human needs, or not may include: irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under the respective Plan; use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle; 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 or preparation for painting or maintenance; flushing gutters or permitting water to run or accumulate in any gutter or street; use of water to fill, refill, or add to any indoor or outdoor swimming pools or jacuzzi-type pools; use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life; failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and use of water from hydrants for construction purposes or any other purposes other than fire fighting.

Non-Potable Water: Water that is neither intended for, nor suitable for, human consumption.

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

Pollution: The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

Potable Water: Water that is suitable for drinking and the supply has been investigated and approved.

Public water supplier: An individual or entity that supplies water to the public for human consumption.

Regional water planning group: A group established by the Texas Water Development Board to prepare a regional water plan pursuant to Texas Water Code §16.053.

Retail public water supplier: An individual or entity that for compensation supplies water to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants as an incident of that employee service or tenancy when that water is not resold to or used by others.

Reuse: The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake, or other body of state-owned water.

Soaker hose: A hose typically made of rubber or plastic that allows water to pass through pores of the hose and drip from the hose, not spray from the hose.

Water conservation plan: A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water. A water conservation plan may be a separate document identified as such or may be contained within another water management document(s).

Wholesale public water supplier: An individual or entity that for compensation supplies water to another for resale to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants as an incident of that employee service or tenancy when that water is not resold to or used by others.

Wholesale public water customer: An individual or entity that purchases water to resell the same to the public for human consumption.

Article II **Water Conservation**

1.0 Introduction

The Texas Legislature passed Senate Bill 1 in 1997, to address state-wide water supply issues. The Texas Commission on Environmental Quality (TCEQ) has promulgated rules (Title 30, Texas Administrative Code, Chapter 288) to reflect the Senate Bill 1 requirements. The provisions of Chapter 288 require the San Antonio River Authority to develop, submit, and implement a formal TCEQ approved “Water Conservation Plan” to implement efficient water use practices. This Article describes the San Antonio River Authority's Water Conservation Plan to meet the regulatory requirements of Chapter 288 (30 TAC) of the TCEQ rules.

2.0 San Antonio River Authority Water Utility Profile

Profile data for the San Antonio River Authority water utility is provided in Appendix A. SARA does not provide water utility service on either a retail or wholesale basis. SARA is participating, however, in the development of multiple regional water supply projects that will facilitate SARA's providing potable water on a wholesale basis, including the Guadalupe Blanco River Authority's (“GBRA”) Western Canyon Water Supply Project as a wholesale customer and the Lower Guadalupe Water

Supply Project with the GBRA. SARA owns and operates 3 wastewater utility systems that generate treated effluent that can provide a reuse water supply. Appendix A includes data on SARA’s projected service populations, number of connections, historical metered wastewater sales and wastewater production, and general projected wastewater utility system information.

3.0 Water Conservation Goals for Municipal and Industrial Uses

Municipal per capita water use is generally defined as "the sum total of water diverted into a water supply system for residential, commercial, public and institution uses divided by the actual population served." It is common practice to use “municipal per capita water use” both for water supply and conservation planning, and to assess the long-term effectiveness of water conservation programs.

The objective of the SARA’s water conservation plan is to promote and publicize water conservation methods that will enable SARA to meet its goal of municipal water use to 142 gallons per capita per day (gpcd) by 2010, 139 gpcd by 2015 and 134 gallons gpcd by 2030. Current per capita use within the region is 149 gpcd.

This municipal per capita water use statistic includes water used within the home for drinking, toilet flushing, bathing, food preparation, dishwashing, laundry, cleaning, and outdoor uses at home, including landscape irrigation, car washing, and outside cleaning. In addition to the water used at homes, the per capita water use statistic includes a person’s share of water used in the workplace for toilet flushing, drinking, cleaning, and lawn irrigation of commercial properties. Outside the home uses also include the water used in commercial establishments such as restaurants, laundries, and car washes. Institutional water use, such as water used in schools, churches, recreation centers, and water used by cities for fire protection, sanitation, and public recreation, is also included in the per capita water use statistic. The municipal per capita water use statistic does not include use of any water for industrial purposes.

SARA’s goal of 134 gallons per capita per day (gpcd) by 2030 will be accomplished primarily through public information and education, the use of water-efficient plumbing fixtures such as toilets, shower heads, and faucets in new construction, and in replacement of existing plumbing fixtures as maintenance and repair are required. These fixtures are designed for low quantities of flow per unit of use. In 1991 the Texas Legislature passed Senate Bill 587, establishing minimum standards for plumbing fixtures sold within Texas. The water efficient “Plumbing Fixture Act” became effective on January 1, 1992 and allowed for wholesalers and retailers to clear existing inventories of pre-standards plumbing fixtures until January 1, 1993. The standards, as specified by Senate Bill 587, are shown in Table 3-1.

**Table 3-1.
Minimum Standards for Plumbing Fixtures**

Fixture	Standard
Wall-Mounted Flushometer Toilets	2.00 gallons per flush
All Other Toilets	1.60 gallons per flush
Shower Heads	2.75 gallons per minute of 80 psi
Urinals	1.00 gallons per flush
Faucet Aerators	2.20 gallons per minute of 80 psi
Drinking Water Fountains	Shall be self-closing

The TECQ has promulgated rules requiring the labeling of both plumbing fixtures and water using appliances sold in Texas. The labels must specify the rates of flow for plumbing fixtures and lawn sprinklers, and the amounts of water use per cycle for clothes washers and dishwashers.

The Texas Water Development Board (TWDB) estimated that the installation of the new plumbing fixtures in dwellings, offices, and public spaces could reduce per capita water use by about 22 gallons per day. The estimated conservation effect is shown in Table 3-2.

**Table 3-2.
Estimated Water Savings
Associated with New Plumbing Fixtures**

<i>Fixture</i>	<i>Water Savings (gpcd)</i>
Wall-Mounted Flushometer Toilets	14.0
Shower Heads	5.5
Urinals	2.1
Faucet Aerators	0.3
Drinking Water Fountains	0.1

The TWDB estimates that the installation of the low-flow plumbing fixtures in new construction and in replacement of fixtures in existing structures will phase in most of this conservation effect by the year 2020.

In addition to the conservation potential of new plumbing fixtures, a degree of conservation can be accomplished by using more efficient water-using appliances (e.g., dishwashers and washing machines), modifying lawn and landscaping plans to use grasses that require less water, improved leak detection, and educating the public on personal water conservation techniques. All of SARA’s water conservation methods are presented below in Section 5.0.

SARA’s industrial conservation goal is to encourage efficient water use consistent with each respective industry’s operations. On a system level, SARA’s goal is to maintain an efficient delivery system that controls conveyance losses to a practical level.

Regardless of the effectiveness of SARA’s Water Conservation Plan, municipal water use in SARA’s service area is expected to increase in the future due to increased population. Because future development, and commercial/industrial water uses are expected to increase along with residential and apartment water uses, overall municipal water use will increase. SARA plans to enhance the effectiveness of its water conservation efforts by contractually mandating in any water supply agreement it enters into that the purchaser develop and implement a TCEQ approved water conservation plan.

4.0 Coordination with Region L Water Planning Group

SARA is located within the Region L Regional Water Planning Area, and SARA Staff has met with the Region L Water Planning Group to coordinate SARA’s water conservation efforts, and to discuss population and water demand projections within Region L. SARA has also responded to surveys from the Region L consultants that provides information regarding plans to develop additional water supply

sources and other information relevant to the Region L planning efforts. In accordance with the TCEQ rules, SARA has provided a copy of its water conservation plan to the Region L Regional Water Planning Group. A copy of the transmittal letter is included in Appendix B. SARA will continue to participate in the Region L planning efforts, and coordinate its water conservation efforts with the Region L group.

5.0 Conservation Plan Elements

SARA's water conservation plan will include the following water conservation methods:

- Water Source Metering;
- Universal Metering, Meter Testing/Replacement and Record Management;
- Determination and Control of Unaccounted-for Water;
- Public Information and Education;
- Conservation Water Rate Structure;
- Implementation and Enforcement;
- Leak Detection, Repair;
- Water Use Record Management
- Wholesale Water Supply Contracts;
- Water Reuse/Recycling;
- Water Conserving Landscaping;
- Water Conserving Plumbing Fixtures and Retrofit Programs.

Each method is described in the following subsections.

5.1 Water Source Metering

At such time as SARA commences receiving water from its various water supply projects, SARA will meter its water received. SARA will, thereafter, meter the water it transfers to its customers as described below.

5.2 Universal Metering, Meter Testing/Replacement and Record Management

Metering is a widely recognized essential requirement to water utility efforts to measure and reduce water demand. Similar to SARA's practice in its wastewater utility system, all water users served by SARA, including public and municipal facilities, will be metered. This requirement for universal metering of water users will be continued. The only potentially unmetered water from SARA will for uses such as for fire-fighting, main flushing, and street sweeping, which by nature do not accommodate a permanent meter location. Additionally, all water deliveries within SARA's System use metering information for billing, regulatory reporting requirements, computation of water and wastewater flow trends, and other record management activities. The record management system allows SARA to track water and wastewater use by user group (i.e., residential, commercial, institutional).

Wholesale customers of the SARA System are responsible for metering as required by their water sales contracts:

- “(a) Buyer will, at its expense, install and maintain the necessary measuring equipment, including venturi and other standard type water meters, totalizers and recording devices, with such metering equipment to be installed and maintained at the delivery point(s) in such a manner as will accurately meter the quantity of

water delivered to Buyer hereunder. The Authority [SARA] shall have access to and the right to inspect at all reasonable times Buyer's measuring equipment, appliances and all pertinent records and data for the purpose the quantity of water delivered hereunder.

- (b) The metering equipment installed and maintained by Buyer hereunder shall be checked by representatives of Buyer and the Authority [SARA] jointly at ninety (90) day periods, and more often at the reasonable request of either party ...”

The data collected from the metering of the customers of the SARA System allows for SARA to maintain a detailed record management system of water deliveries.

SARA will contract for meter repair and testing. The meter repair and testing program includes:

- Replacement of all residential meters installed for 10 years and at 4,000,000 gallons; and
- Biannual testing of all meters 2 inches and larger.

Computerized water billing reveals above normal water usage at individual connections, allowing SARA staff to identify inaccurate or leaking meters. Meters identified in this manner are investigated, followed by testing, repairs, or replacement as needed. The goal is to have metering devices with accuracy of plus/minus 5 percent of actual usage.

SARA plans to encourage wholesale customers to replace small residential meters based on abnormally high or low registered water usage, feedback from meter readers, or when the meter register appears broken or scratched.

5.3 Determination and Control of Unaccounted-for Water

At such time as SARA commences sales of water from its various water supply projects, SARA will collect all data needed to make annual comparisons between the amount of water introduced to the SARA distribution system and the volume of metered water sales. If the amount of unaccounted-for water is found to be significant, or to increase significantly, SARA will take appropriate actions. Such actions could include, by way of example, an accelerated meter replacement and/or repair program, recalibration of the meters which measure the amount of water introduced into the distribution system, an expanded leak detection program, and/or a water system audit to help determine the causes of such increased unaccounted-for water.

Additionally, to maintain water delivery service and to reduce and control unaccounted for water, SARA staff will routinely perform visual inspections of the transmission system to uncover abnormal conditions indicating leaks. The staff will be equipped to respond and repair equipment and pipeline breaks or employ contract assistance as required. The goal is to keep unaccounted for water at or below this 10 percent level.

5.4 Public Information and Education

Public information and education can work in two ways to accomplish water conservation. One way is to inform water users of how to manage and operate existing and new fixtures and appliances so that less water is used. This includes ideas and practices such as:

- Washing full loads of clothes and dishes;

- Using a bucket of water instead of a flowing hose to wash cars and windows;
- Turning the water off while brushing teeth or washing hands; and
- Watering lawns, gardens, and shrubs during evening (as opposed to daytime) hours.

The second way public information and education can work to conserve water is to inform and convince water users to:

- Obtain and use water-efficient plumbing fixtures and appliances;
- Adopt low water-use landscaping plans and plants,
- Find and repair leaks,
- Use greywater for lawn and shrubbery watering where regulations allow it; and
- Take advantage of water conservation incentives where available.

The following methods for public outreach currently used by SARA will include:

- A fact sheet explaining water conservation programs;
- Pamphlets on water conservation issued through mail-outs, bill stuffers, door hangers, or other methods of direct issuance;
- Corresponding announcements concerning water conservation by newspaper, radio, or cable television; and
- Print water conservation tips on water bills six times during the year or implement other information activities.
- SARA will make presentations to schools and civic groups regarding water conservation and water quality issues. Approximately 2 school presentations will be given during a typical year.
- Utility bill inserts regarding water conservation issues will be mailed periodically to all customers.
- SARA will recognize and promote “Water Week,” which occurs during the first full week in May. This educational program includes various events and media coverage to encourage public awareness about water conservation.
- SARA will continue its involvement in the Region L Planning Committee and provide public education, public information, and press releases to the media regarding area-wide water conservation issues.

SARA will continue to draw on existing water conservation educational materials as part of its program. SARA will use the resources of the TWDB, the American Water Works Association, and the American Public Works Association to assist in obtaining publications and materials for the public education program. Individual pamphlets and flyers provided from these entities would be selected for specialized water-conservation needs as they arise.

SARA will provide, as needed, water conservation literature to our customers. An example of this is property tax rate reductions that can be achieved by upgrading to water conserving equipment and technology.¹

¹ “Application and Instruction for Use Determination for Pollution Control Property and Predetermined Equipment List: Guidelines for Implementing HB 1920 and November 1993 Constitutional Amendment Proposition 2,” TNRCC, October 1996

5.5 Conservation Water Rate Structure

SARA has adopted an increasing block type water rate structure (i.e., increased cost with increased usage). SARA's non-promotional retail rate structure is shown in Table 3-3.

**Table 3-3
Retail Water Rates**

As adopted May 16, 2007 by SARA Board

Base		\$24.00
Variable	Per 100 gallons	
Tier 1	0 to 4,000	\$0.25
Tier 2	4,001 to 7,000	\$0.28
Tier 3	7,001 to 10,000	\$0.39
Tier 4	10,001 to 14,000	\$0.54
Tier 5	14,001 to 20,000	\$0.76
Tier 6	20,001 to 30,000	\$1.15
Tier 7	30,001 and over	\$1.50

5.6 Implementation and Enforcement

SARA will approve by resolution, the water conservation plan. Implementation of the plan will be on a voluntary basis, supported by the public information and education program and reinforced by fees for non-compliance.

The General Manager of the SARA, or his designee ("designee"), will act as the "administrator" of the water conservation program. The administrator will oversee the execution and implementation of all elements of the program. The administrator is responsible for maintaining adequate records for program verification.

The administrator will monitor the progress of the water conservation plan, and Make recommendations for changes using information from SARA staff. Additionally, the administrator will be responsible for submission of an annual report to the TCEQ and TWDB on the progress, and any changes to, the water conservation plan.

5.7 Leak Detection and Repair

SARA plans to initiate a leak detection program in cooperation with SAWS. The major element of this program is a "leak correlator" device that SARA uses to locate suspected leaks reported by customers and utility system field personnel. In a typically year, the "leak correlator" has been used on about 50,000 linear feet of pipeline to pinpoint suspected leak locations.

Other efforts to minimize leaks include the following:

Visual observations by meter readers, system employees, and customers who keep watch for abnormal conditions which may indicate a leak

An adequate and responsive staff with appropriate equipment is available 24 hours per day to repair any leaks that are located

5.8 Water Use Record Management

As discussed under Section 5.1, all water delivered and pumped to the distribution system is metered. The current billing system recognizes the following user categories: residential, apartment, commercial and industrial. Public water uses (such as municipally-owned parks and buildings) are included in the commercial use category. Institutional water uses (such as hospitals and schools) are also included in the commercial use category. The current user categories will be continued and should be adequate to provide adequate desegregation of water sales and to determine the amount of unaccounted-for water.

5.9 Wholesale Water Supply Contracts

The San Antonio River Authority does not currently have any wholesale water supply contracts. When SARA enters into future wholesale water supply contracts, SARA will require its wholesale customers to have a TCEQ approved water conservation plan or, if necessary, to adopt applicable provisions of the SARA water conservation plan. In addition, SARA's water sales contracts will state:

“... the parties acknowledge and agree that the applicable rates and block volumes for water deliverable under this Contract may be revised, repealed, inverted or modified by the Authority [SARA] from time to time to accomplish or encourage water conservation and/or compliance with applicable regulatory requirements.”

Also in the contracts with its industrial users, SARA will stipulate that customers need to consider water conservation as they undertake expansions and/or upgrades of their facilities and equipment.

5.10 Water Reuse/Recycling

SARA will continue to use treated effluent for process water at its wastewater treatment facilities. Such uses include wash-down and irrigation of wastewater plant areas. Additionally, SARA will continue to encourage its customers to utilize treated wastewater effluent and/or greywater for nonpotable applications whenever practicable.

One example of reuse within SARA's jurisdiction is utilizing treated wastewater effluent for irrigation of turf grasses for residential/commercial sod applications. The project will divert reuse water from Martinez Creek, San Antonio River Basin and utilize as described below:

- A diesel pump capable of pumping up to 600 gallons per minute from Martinez Creek and flow through a system of lay down pipe and side rolls, both using impact sprinklers
- The reuse water will be spread evenly and timely for production of common bermuda and Tifway 419 initially at a rate estimated at 114 ac-ft/yr, up to 800 ac-ft/yr over a period of time
- Within 5 years, a more efficient, water conserving system will be installed, i.e., a Linier Irrigation System (LIS) to vary the application rate to achieve a minimum goal of 10%

reduction. Within 10 years, a minimum goal of 15% reduction will be achieved by expanding the turf farm and installing a LIS

- A water meter, approved by the TCEQ Watermaster will be used in order to measure and account for the water diverted
- Water loss will be controlled by daily checking irrigation equipment and making immediate repairs. The LIS will minimize if not eliminate any tail water. Grasses will be kept weed free to further reduce waste
- The objective of the SARA's water conservation plan is to promote and publicize water conservation methods that will enable SARA to meet its reuse goal of 10% reduction of water use by 2010 and 15% by 2015

SARA will continue to study potential uses of reuse water and to evaluate whether it is economical to provide reclaimed water to its customers.

5.11 Water Conserving Landscaping

SARA encourages residents to adopt low-water-using landscaping principles and methods for use around the home. These same concepts are applied to parks and other public spaces. New residents of customer cities will be provided with a brochure detailing water conserving landscaping techniques for the SARA service area. SARA will work with its wholesale customers to educate and encourage the public to accept xeriscape landscaping as an acceptable way to minimize irrigation water requirements for new development.

5.12 Water Conserving Plumbing Fixtures & Retrofit Program

Since 1994, a federal law has been in effect that mandates the use of water-efficient plumbing fixtures throughout the nation. This law requires that all new toilets, showerheads, and faucets which are sold must meet requirements that result in less water use than the previous higher consumption plumbing fixtures. These water efficient fixtures should result in reduced indoor water demand in new construction, as well as by replacement fixtures installed in remodeling projects.

Additionally, SARA will make information available through its public information and education program for plumbers and customers to use when purchasing and installing plumbing fixtures, water-using appliances, and watering equipment. Information regarding retrofit devices, such as low-flow shower heads or toilet dams that reduce water use by replacing or modifying existing fixtures or appliances, will also be provided. Water conservation kits containing retrofit devices that can be easily installed by the homeowner will be available, at cost, at the SARA main office or water district office.

Article II **Drought Contingency**

1.0 Introduction

In 1997, the Texas Legislature passed Senate Bill 1 to require most public water suppliers to prepare a Drought Contingency Plan. The Texas Commission on Environmental Quality (TCEQ) has amended its rules (Title 30, Texas Administrative Code, Chapter 288) regarding Drought Contingency Plans to reflect the Senate Bill 1 requirements. Accordingly, upon development of water supply contracts, based upon water supplies available from SARA's various regional water supply projects, SARA will develop a Drought Contingency Plan for submission to and approval by TCEQ. The plan will include the elements outlined below.

2.0 Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and protect the integrity of its water system, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the San Antonio River Authority hereby adopts the following regulations and restrictions on the delivery and consumption of water.

It is important that the San Antonio River Authority initiate this Drought Contingency Plan (the Plan) to manage available water resources and ensure that sufficient water is available to maintain water pressure, firefighting supply, drinking, and sanitation requirements. This Plan also includes provisions for enforcement.

Water uses regulated or prohibited under this Plan are considered to be non-essential and the continuation of such uses during times of water shortage or other emergency water supply conditions are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Chapter 10.0.

3.0 Public Involvement

Opportunity for the public to provide input into this Plan will be provided through one or more public meetings to be scheduled once SARA promulgates a conservation water rate structure, wholesale water rate structure, and related rules and regulations.

4.0 Public Education

The SARA will periodically provide the public with information about the Plan, including information about the trigger conditions under which each Plan stage is initiated or terminated and the water use restrictions which will be implemented under each stage. Public education and information will be provided by various methods, including: publication in newspapers of general circulation in the city; press releases to local and area media; announcements and discussions on the City's cable access channel; and utility bill inserts.

The SARA staff will also provide status reports on drought response programs, water emergencies and their results to its wholesale customers, and municipalities within its service area.

5.0 Coordination with Water Utilities

SARA will coordinate with all of its wholesale water supply customers to insure that they have each developed and implemented their own Drought Contingency Plan that includes water use restrictions that are applicable to their respective retail and wholesale customers.

The proposed stages and triggering conditions in this Drought Contingency Plan to assure sufficient supplies for SARA's wholesale and retail customers. SARA requires its wholesale customers to impose water use restrictions equal to or greater than those imposed by SARA or it may reduce its maximum contracted flow rate to the wholesale customer by five percent. In addition, SARA's drought regulations solicit its wholesale customers, particularly its municipal customers, to enforce similar standards and procedures in their water systems. If a Stage 4 (Water Crisis) occurs, SARA's customers are expected to reduce their flow rate equivalent to that imposed on SARA's retail customers.

6.0 Authorization

SARA's General Manager, or his designee (hereafter referred to as the Director) is authorized to enforce the measures implemented and to promulgate regulations authorized by the Plan. The Director, upon determination that critical conditions exist, advises the General Manager who orders the implementation of the appropriate stage of this Drought Contingency Plan to protect the public health, safety, and welfare.

7.0 Application

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

The water use restrictions imposed under this Plan do not apply to the use of non-potable sources or water sources other than those provided by SARA.

8.0 Drought Response Stage Criteria and Water Use Restrictions

The Director shall monitor water system and/or demand conditions and shall determine when conditions warrant initiation or termination of each stage of this Plan. Public notification of the initiation or termination of drought response stages shall be by means that may include, but are not limited to, publication in newspapers of general circulation, cable television access channel, direct mail to each customer, signs posted in public places, press releases to local and area media, and utility bill inserts.

For the initiation of this Plan to be effective, the order must be (1) made by public announcement; and (2) published in a newspaper of general circulation in SARA's water utility service area(s) within twenty-four hours after the public announcement. The order then becomes immediately effective upon publication.

The triggering criteria described herein for each response stage are based on analysis and recognized vulnerability of the water supply source and water distribution system during high water use demands and drought conditions.

8.1 Stage 1 - Conservation Stage

Requirements for Initiation. Stage 1 will be automatically initiated on May 1 and end on September 30 of each year. It may also be initiated at other times during the year if one or more of the following occur:

Condition 1: Pursuant to requirements specified in the wholesale treated water purchase contract, notification is received from SARA requesting initiation of the Stage 1 restrictions.

Condition 2: Water demand exceeds ninety percent (90%) of the current maximum flow rate contracted with SARA for three consecutive days.

Condition 3: Short-term deficiencies in the City's distribution system limit supply capabilities.

Requirements for Termination. Stage 1 of the Plan will be automatically rescinded on September 30 of each year, unless one or more of the triggering conditions listed above have ceased to exist for a period of three (3) consecutive days.

Goal. Achieve a voluntary reduction in water use.

Voluntary Water Use Restrictions. Under Stage 1, SARA's wholesale customers shall be requested to voluntarily conserve water and voluntarily adhere to the following water use restrictions, as appropriate:

- (a) schedule landscape watering so that a particular facility location will be watered no more than two days per week.
- (b) eliminate street washing (except when used water can be captured for reuse).
- (c) reduce vehicle washing, except when the water can be captured for reuse, or if the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing (such as garbage trucks and vehicles used to transport food and perishables).
- (d) request retail customers to comply with the voluntary water use restrictions under a, b and c, above.
- (e) review operations of ornamental fountains and any other non-essential use of water and try to minimize loss or excess use.
- (f) recommend that landscaped areas be irrigated on a twice per week schedule (as discussed under Stage 2) and that such irrigation not occur between the hours of 7 a.m. and 7 p.m.
- (g) recommend irrigation of landscaped areas by means of hand-held garden hose, soaker hose, bucket, or drip irrigation system.
- (h) request retail customers to practice water conservation and to minimize or discontinue water use for non-essential purposes.

Actions to Be Taken by SARA:

- (a) communicate as necessary with SARA customers to initiate joint water management programs.
- (b) work with major water users to voluntarily reduce water use.
- (c) conduct public information programs to educate its customers, enlist their support of voluntary water use restrictions, and to remind customers that the summer water surcharge rate structure is in effect.

8.2 Stage 2 - Water Warning

Requirements for Initiation. Stage 2 may be implemented when one or more of the following conditions occur:

Condition 1: Pursuant to requirements specified in the wholesale treated water purchase contract, notification is received from SARA requesting initiation of Stage 2 of the Plan.

Condition 2: Water use exceeds one hundred percent (100%) of the current maximum flow rate contracted from SARA for five consecutive days.

Condition 3: Water use exceeds one hundred and three percent (103%) of the current maximum flow rate contracted from SARA for three consecutive days.

Condition 4: Short-term deficiencies in SARA's distribution system limit supply capabilities, such as system outage due to the failure or damage of major water system components.

Condition 5: Inability to maintain or replenish adequate volumes of water in storage to provide for public health and safety.

Requirements for Termination. Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage 2, Stage 1 becomes operative unless also rescinded.

Goal. Reduce the average daily water demand below 100 percent of the current maximum flow rate contracted from SARA.

Water Use Restrictions. All restrictions/requirements of Stage 1 shall remain in effect during Stage 2. Under threat of penalty for violation, the following water use restrictions shall apply during Stage 2:

(a) Landscape watering will be limited to twice per week, based on the last digit of the service address. Addresses with even numbers will be restricted to watering on Tuesdays and Saturdays only. Addresses with odd numbers will be restricted to watering on Wednesdays and Sundays only. Landscape watering will not be permitted on Mondays, Thursdays, or Fridays. Properties having multiple addresses will be identified by the lowest address number. If no address exists, the Director or his/her designee will assign one. Foundations and new plantings may only be watered using a hand-held garden hose, soaker hose, bucket, or drip irrigation system for up to two (2) hours on any day. Nurseries may water plant stock only without restrictions. Public gardens may water without restrictions.

(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited, except on the designated landscape watering days. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Such washing may be exempted from these regulations 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.

(c) Use of water for the draining and refill of any indoor or outdoor swimming pool or jacuzzi-type pool is prohibited, except for water used to refill pools which have undergone repair or are newly constructed.

(d) 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.

(e) Use of water from hydrants shall be 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 special permit from the SARA.

(f) Golf courses may water greens and tee boxes without restrictions. Irrigation of golf course fairways and other areas must comply with the twice per week rotation schedule specified for landscape watering.

(g) The following uses of water are defined as non-essential and are prohibited:

1. Wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
2. Use of water to wash down buildings or structures for purposes other than immediate fire protection or in preparation for painting;
3. Use of water for dust control;
4. Flushing gutters or permitting water to run or accumulate in any gutter or street;
5. Failure to repair controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

Actions to be taken by SARA.

(a) initiate public information alerts using both print and electronic media.

(b) work with civic groups, neighborhood associations, summer youth programs, and the like to encourage water conservation.

8.3 Stage 3 - Water Emergency

Requirements for Initiation. Stage 3 may be implemented when one or more of the following conditions occur:

Condition 1: Pursuant to requirements specified in the wholesale water purchase contract, notification is received from SARA requesting initiation of Stage 3 of the Plan.

Condition 2: Short-term deficiencies in SARA's distribution system limit supply capabilities, such as system outage due to the failure or damage of major water system components.

Condition 3: Inability to maintain or replenish adequate volumes of water in storage to provide for public health and safety.

Requirements for Termination. Stage 3 may be rescinded when the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage 3, the restrictions imposed under Stage 2 or Stage 1 become operative unless also rescinded.

Goal. Reduce the average daily water use below 100 percent of the current maximum flow rate contracted with SARA.

Water Use Restrictions. All requirements of Stage 1 and 2 shall remain in effect during Stage 3. Under threat of penalty for violation, the following water use restrictions shall apply during Stage 3:

(a) Landscape watering and residential car washing will be prohibited between the hours of 7 a.m. and 7 p.m. and is limited to the twice per week schedule discussed under Stage 2.

(b) Foundations and new plantings may only be watered with a hand-held garden hose, soaker hose,

bucket, or drip irrigation system for up to two (2) hours and is limited to the twice per week schedule discussed under Stage 2.

(c) Nurseries may water plant stock only between the hours of 7 a.m. and 7 p.m.

(d) Public gardens will be prohibited from watering between the hours of 7 a.m. and 7 p.m.

(e) Golf courses will be prohibited from watering greens and tee boxes between the hours of 7 a.m. and 7 p.m. and must comply with the twice per week schedule for watering fairways and other areas.

8.4 Stage 4 - Water Crisis

Requirements for Initiation. Stage 4 may be implemented when one or more of the following conditions occur:

Condition 1: Pursuant to requirements specified in the wholesale treated water purchase contract, notification is received from SARA requesting initiation of Stage 4 of the Plan.

Condition 2: Short-term deficiencies in SARA's distribution system limit supply capabilities, such as system outage due to the failure or damage of major water system components.

Condition 3: Inability to maintain or replenish adequate volumes of water in storage to provide for public health and safety.

Requirements for Termination. Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage 4, the restrictions imposed under Stage 3, Stage 2 or Stage 1 become operative unless also rescinded.

Goal. Reduce average daily water demand to below one hundred percent (100%) of the current maximum flow rate contracted with SARA.

Water Use Restrictions. All requirements of Stage 1, 2 and 3 shall remain in effect during Stage 4. Under threat of penalty for violation, the following water use restrictions shall apply under Stage 4:

(a) All landscape watering is prohibited, with the following exceptions:

- Nursery plant stock may be watered only between the hours of 7 a.m. and 7 p.m. and is limited to the twice per week schedule discussed under Stage 2.

- Foundations may be watered with a hand-held hose or soaker hose for up to two hours and is limited to the twice per week schedule discussed under Stage 2.

(b) The use of water for construction purposes under special permit is prohibited.

(c) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle not in the immediate interest of public health, safety, and welfare is prohibited.

(d) The filling, refilling, or adding of water to swimming pools and jacuzzi-type pools is prohibited.

(e) 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.

8.5 Stage 5 - Emergency Water Shortage Condition

Requirements for Initiation. Stage 5 may be implemented when the Director determines that a water supply emergency exists, based on or more of the following conditions:

Condition 1: Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or

Condition 2: Natural or man-made contamination of the water supply source(s).

Requirements for Termination. Stage 5 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist.

Goal. Restrict water usage to allow the water system to recover from the emergency condition.

Water Use Restrictions. The Director will determine what stage or stages of this Plan that should be implemented and the specific water use restrictions necessary to protect the water system and provide adequate water supply for public consumption and hygiene.

9.0 Water Rationing

In the event that water shortage conditions threaten public health, safety, and welfare, the Director is hereby authorized to ration water to SARA's customers. The Director may combine water rationing with any or all stages and/or individual water use restriction of this Drought Contingency Plan as necessary.

A Water Rationing Plan will be developed to meet the critical water shortage condition. Water will be rationed according to a water allocation plan for different customer classifications. An example water rationing plan is included in Appendix C.

10.0 Enforcement

"A person commits an offense if he or she knowingly makes, causes or permits a use of water supplied by SARA, contrary to the measures prescribed in the Drought Contingency Plan. For purposes of this subsection, it is presumed that a person has knowingly made, caused or permitted a use of water supplied by SARA, contrary to the measures implemented if the mandatory measures have been formally ordered and: (1) The manner of use has been prohibited by the drought contingency plan; or (2) The amount of water use exceeds that allowed by the drought contingency plan."

(a) No person shall knowingly or intentionally allow the use of water from the SARA 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 response stage in effect at the time pursuant to action taken by the Director in accordance with provisions of this Plan.

(b) Any person who violates this Plan is guilty of a misdemeanor. A warning may be issued for the first violation. Upon conviction of a misdemeanor violation of this Plan, a person shall be punished by a fine of not less than Two Hundred Dollars (\$200) and not more than Two Thousand Dollars (\$2,000).

Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. If a person is convicted of three (3) or more distinct violations of this Plan, the Director shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur or direct the wholesale customer responsible for retail service to property to terminate service. Services discontinued under such circumstances shall be restored only upon payment of a current connection charge, and any other costs incurred by the SARA in discontinuing, or facilitating discontinuance of service. In addition, suitable assurance must be given to the Director and/or the responsible wholesale customer, that the same action shall not be repeated while the Plan is in effect. Compliance with this plan may also be sought through injunctive relief in the district court.

(c) Any person, including a person classified as a water customer of the SARA, 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 rebuttable presumption 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 violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.

(d) Any police officer, fireman, or other sworn court officer, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the municipal court on the date shown on the citation for which the date shall not be less than three (3) days, no more than five (5) days from the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation 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 municipal court to enter a plea of guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear in municipal court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in municipal court before all other cases.

11.0 Variances

The Director, 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:

(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 an exemption from the provisions of this Plan shall file a petition for variance with the SARA within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the Director, or his/her designee, 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 Plan.
- (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.

Variations granted by the SARA shall be subject to the following conditions, unless waived or modified by the Director:

- (a) Variations granted shall include a timetable for compliance.
- (b) Variations granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Appendix "A"

SARA's Water Utility Profile Data

Wastewater

SARA's tenure as a wastewater service provider began in 1966 with the construction of the Salatrillo System, a 0.5 million gallon per day (MGD) plant located in northeast Bexar County. In 1969, SARA and the City of Converse entered into a contract for wholesale sewer service provided through the Salatrillo Plant. A 1978 contract between SARA, Converse, Live Oak, and Universal City established a uniform user charge for wholesale sewer service. Throughout this period and continuing to the present time, SARA has pursued innovative and varied funding opportunities that resulted in the expansion of the original 0.5 MGD plant into the current 5.83 MGD plant. (TPDES Permit No. 10749-001, Salatrillo Creek WWTP, Permitted Capacity 5.83 MGD, Current Average Flow 3.7 MGD).

In 1967, SARA constructed a 0.3 MGD oxidation ditch facility in the Upper Martinez Service Area, west of Salatrillo. Expanded in 1974 and 1984, Upper Martinez has a current capacity of 2.21 MGD. The system is now an extended aeration wastewater treatment plant with a state-of-the-art ultra-violet

system for effluent disinfection. It serves 7,452 customers from the Woodlake, Ventura, and Camelot Subdivisions in northeast Bexar County. (TPDES Permit No. 10749-003, Upper Martinez WWTP, Permitted Capacity 2.21 MGD, Current Average Flow 1.8 MGD).

SARA's third wastewater treatment plant, Martinez II, was completed in 1986. Construction began in 2001 to expand the plant's capacity from 1.0 million gallons per day to 2.0 MGD. Construction was completed in 2002, on schedule and under budget. With this expansion, Martinez II now serves 1,671 customers from the Woodlake and Ventura Subdivisions in northeast Bexar County. Through Salatrillo, Upper Martinez, and Martinez II wastewater treatment plants, SARA currently serves over 20,000 customers.

(TPDES Permit No. 10749-004, Martinez II WWTP, Permitted Capacity 2.0 MGD, Current Average Flow 1.2 MGD).

SARA continues to lay ground for additional wastewater services. SARA has obtained permitting to develop Martinez III, which will have a capacity of 0.15 MGD and will serve future development at the intersection of IH10 East and Loop 1604. In addition, SARA has purchased the future site of Martinez IV, which will serve communities in the Graytown Road/IH10 East area of Bexar County. (TPDES Permit No. 14042-001, Martinez III WWTP, Permitted Capacity 0.150 MGD, Current Average Flow - awaiting customers).

SARA currently owns and operates wastewater treatment facilities serving an area of approximately 50 square miles.

SARA utilities services have diversified to include sub-contractual operation of the Texas Department of Transportation's wastewater treatment plant on IH10. In Fiscal Year 2001-02, SARA also entered into contractual operation and minor maintenance of the City of LaVernia's wastewater treatment plant.

Another outstanding project in 2002 included SARA's negotiations with the Greater Randolph Area Youth Soccer Association to sell reclaimed water from the Salatrillo Wastewater Treatment Plant for watering soccer fields.

Building upon one of SARA's core responsibilities, wastewater treatment and distribution, SARA has submitted proposals for the purchase and/or operation and maintenance, and rehabilitation of wastewater plants and distribution systems within its district (Bexar, Wilson, Karnes and Goliad Counties).

Though the core of SARA's utilities services historically has centered upon the expansion and operation of wastewater treatment facilities, the future holds many contractual and non-traditional opportunities that will give SARA added opportunities to provide quality water utility services to our basin communities.

Goliad Water Supply Corporation

During FY 2001-02, SARA's utilities services expanded to include project management of first-ever centralized water supply systems in Berclair and Fannin, two rural communities in Goliad County. Among SARA's initial responsibilities was working with the Goliad County Water Supply Corporation and local community leaders to conduct outreach to property owners skeptical of government involvement in water service—despite pervasive non-compliant shallow wells that threatened the

health of the citizens. Outreach to solicit a sufficient customer base for the centralized water systems was a prerequisite to the award of grant monies funding construction. Through town hall meetings, door-to-door canvassing, and other outreach efforts, SARA staff enrolled 13% more Berclair properties and 29% more Fannin properties than were required to meet the grant requirement. After completing the outreach campaigns, SARA began serving as project manager of engineering and construction on the water systems and fulfilling administrative responsibilities. SARA will continue to serve these communities after construction by assuming the operations and maintenance, the budgeting and finance, and the customer service responsibilities associated with the water system and its business operations.

Lower Guadalupe Water Supply Project

In 2001, SARA signed an agreement with the San Antonio Water System (SAWS) and the Guadalupe-Blanco River Authority (GBRA) to develop the Lower Guadalupe Water Supply Project (LGWSP), one of the first projects from the approved State Water Plan to be implemented for our region. By 2011 LGWSP will provide a reliable supply of at least 94,500 acre-feet per year from various sources: Surface water from existing GBRA water rights; unappropriated flows from downstream of the confluence of the San Antonio and Guadalupe Rivers, including off-channel storage facilities near the proposed diversion point; and groundwater from the Gulf Coast Aquifer.

The water will be diverted from the Lower Guadalupe River below the confluence of the Guadalupe and San Antonio rivers, near Tivoli, approximately 133 miles southeast of San Antonio. SAWS and SARA will purchase the water for distribution to San Antonio and other communities within SARA's region.

In June 2001, SARA and SAWS approved an agreement designating SARA as the LGWSP Program Director. Since then, SARA has been working with SAWS and GBRA to develop the project timeline. As part of the planning process, the project is conducting comprehensive environmental and engineering studies and gathering governmental and public input. GBRA, SAWS and SARA are committed to doing what's right for the region—environmentally, economically and socially.

Western Canyon Treated Water Supply Project

The Guadalupe-Blanco River Authority, San Antonio River Authority and the San Antonio Water System have an agreement for the supply of treated water to portions of Comal, Kendall, and Bexar Counties which provided the framework for joint participation in the development, permitting, design, financing, construction, and operation of a regional water supply project to serve portions of these counties.

The project includes construction of a water treatment plant near Canyon Lake to treat at least 8,000 acre-feet of water per year. A potable water transmission line would be constructed from the water treatment plant through Comal County to points in Bexar and Kendall Counties.

The San Antonio Water System and the San Antonio River Authority on behalf of small water purveyors in Bexar County would jointly receive 4,000 acre-feet per year on a long term basis. An additional 2,000 acre-feet per year would initially be available for use in Bexar County until needed in Comal and Kendall Counties for future demands.

The Guadalupe-Blanco River Authority, San Antonio River Authority and the San Antonio Water System have negotiated separate agreements for the project. The San Antonio River Authority has

initiated contract discussions for the wholesale supply of fifty (50) acre-feet per year that SARA would be entitled to receive under its separate agreement.

Appendix “B”

Letter to Region L transmitting SARA’s Plan

Appendix "C"

SAMPLE WATER RATIONING PLAN

1. Single-Family Residential Customers:

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

Persons per Household Gallons per Month:

- 1 or 2 - ____ gal
- 3 or 4 - ____ gal
- 5 or 6 - ____ gal
- 7 or 8 - ____ gal
- 9 or 10 - ____ gal
- 11 or more - ____ gal

"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 SARA, or the SARA wholesale customer, of a greater number of persons per household on a form prescribed by the Director.

The Director shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the SARA offices to complete and sign the form claiming 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 Director. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the SARA 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 SARA in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the Director shall adopt methods to insure 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 SARA of a reduction in the number of person in a household may be fined. Residential water customers shall pay the following surcharges:

- \$__.00 for the first __,000 gallons over allocation.
- \$__.00 for the second __,000 gallons over allocation.
- \$__.00 for the third __,000 gallons over allocation.
- \$__.00 for each additional __,000 gallons over allocation.

Surcharges shall be cumulative.

2. Master-Metered Multi-Family Residential Customers:

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (e.g., apartments, mobile homes) shall be allocated __,000 gallons per month for each dwelling unit. It shall be assumed that such a customer's meter serves two (2) dwelling units unless the customer notifies SARA, or the SARA wholesale customer, of a greater number on a form prescribed by the Director. The Director shall give his/her best effort to see that such

forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the SARA, or the SARA wholesale customer, offices 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 Director. If the number of dwelling units served by a master meter is reduced, the customer shall notify the SARA in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the Director shall adopt methods to insure 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 SARA, or the SARA wholesale customer, of a reduction in the number of persons in a household may be fined.

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

- \$ __.00 for __,000 gallons over allocation up through __,000 gallons for each dwelling unit.
- \$ __.00, thereafter, for each additional __,000 gallons over allocation up through a second __,000 gallons for each dwelling unit.
- \$ __.00, thereafter, for each additional __,000 gallons over allocation up through a third __,000 gallons for each dwelling unit.
- \$ __.00, thereafter for each additional __,000 gallons over allocation.

Surcharges shall be cumulative.

3. Commercial Customers:

A monthly water usage allocation shall be established by the Director, or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately eighty-five percent (85%) of the customer's usage for corresponding 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. Provided, however, a customer, whose monthly usage is less than 10,000 gallons, shall be allocated 10,000 gallons. The Director 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 SARA to determine the allocation. Upon request of the customer or at the initiative of the Director, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, or (2) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the Director. Nonresidential commercial customers shall pay the following surcharges:

Customers whose allocation is less than __,000 gallons per month:

- \$ __.00 per __,000 gallons for the first __,000 gallons over allocation.
- \$ __.00 per __,000 gallons for the second __,000 gallons over allocation.
- \$ __.00 per __,000 gallons for the third __,000 gallons over allocation.
- \$ __.00 per __,000 gallons for each additional __,000 gallons over allocation.

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

1.10 times the block rate for each __,000 gallons in excess of the allocation up through 5 percent (5%)

above allocation.

1.20 times the block rate for each __,000 gallons from 5 percent through 10 percent (10%) above allocation.

1.30 times the block rate for each __,000 gallons from 10 percent through 15 percent (15%) above allocation.

1.50 times the block rate for each __,000 gallons more than 15 percent (15%) above allocation.

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

4. Industrial Customers:

A monthly water usage allocation shall be established by the Director for each industrial customer, which uses water for processing purposes. The industrial customer's allocation shall be approximately ninety percent (90%) of the customer's water usage baseline. Ninety (90) days after the initial imposition of the allocation for industrial customers, the industrial customer's allocation shall be further reduced to eighty-five percent (85%) of the customer's water usage baseline. The industrial customer's water usage baseline will be computed on the average water usage for the prior twelve (12) month period. If the industrial water customer's billing history is shorter than twelve (12) months, the monthly average for the period for which there is a record shall be used for any monthly period for which no billing history exists.

The Director shall give his/her best effort to see that notice of each industrial customers 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 SARA, or the SARA wholesale customer, to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the Director, the allocation may be reduced or increased, (1) if the designated period does not accurately reflect the customer's normal water usage because the customer had shut down a major processing unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional processing capacity, (3) the customer has shutdown or significantly reduced the production of a major processing unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce usage is limited, or (5) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the Director.

Industrial customers shall pay the following surcharges:

Customers whose allocation is less than __,000 gallons per month:

\$__.00 per __,000 gallons for the first __,000 gallons over allocation.

\$__.00 per __,000 gallons for the second __,000 gallons over allocation.

\$__.00 per __,000 gallons for the third __,000 gallons over allocation.

\$__.00 per __,000 gallons for each additional __,000 gallons over allocation.

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

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

1.15 times the block rate for each __,000 gallons from 5 percent through 10 percent above allocation.

1.20 times the block rate for each __,000 gallons from 10 percent through 15 percent above allocation.

1.30 times the block rate for each __,000 gallons more than 15 percent above allocation.

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

ASSIGNMENT AND ASSUMPTION OF LEASE

Joe Caruso Golf, Inc., (“Assignor”), for and in consideration of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, paid by Caruso Golf Management, LLC, (“Assignee”), does hereby transfer, assign, set over, and quitclaim, without recourse and without representation or warranty of any kind or nature whatsoever, express or implied, all right, title and interest of Assignor in and to that certain lease described as San Antonio River Authority Salado Site 6 Lease Agreement, attached hereto and made a part hereof, (the “Lease”).

Assignee hereby assumes the Lease, and agrees to perform and keep all covenants, agreements and obligations arising therefrom, and to indemnify and hold harmless Assignor from and against any and all claims, demands, causes of action, judgments, liabilities, costs and expenses which may be asserted or recovered against Assignor arising out of the Lease, (including, without limitations, attorneys’ fees and costs incident thereto), arising or accruing after the date hereof, except those due solely to acts or omissions of Assignor.

IN WITNESS WHEREOF, the Assignor and Assignee have caused this instrument to be executed on the ____ day of _____, 2011.

Assignor:
Joe Caruso Golf, Inc.

Assignee:
Caruso Golf Management, LLC

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
COUNTY OF BEXAR §

This instrument was acknowledged before me on ____ day of _____, 2011 by Joe Caruso of Joe Caruso Golf, Inc.

Notary Public, State of Texas

STATE OF TEXAS §
COUNTY OF BEXAR §

This instrument was acknowledged before me on ____ day of _____, 2011 by John David Caruso of Caruso Golf Management, LLC

Notary Public, State of Texas

ATTACHMENT “A”

CONSENT TO ASSIGNMENT AND ASSUMPTION OF LEASE

San Antonio River Authority consents to the assignment and assumption of lease dated _____ by Joe Caruso Golf, Inc. as Assignor to Caruso Golf Management, LLC as Assignee for that certain lease described as San Antonio River Authority Salado Site 6 Lease Agreement.

SAN ANTONIO RIVER AUTHORITY

By: _____
Suzanne B. Martin
General Manager

STATE OF TEXAS §

COUNTY OF BEXAR §

This instrument was acknowledged before me on _____, 2011 by Suzanne B. Martin, General Manager of San Antonio River Authority.

Notary Public, State of Texas

ESTOPPEL CERTIFICATE

This Estoppel Certificate concerns the lease between San Antonio River Authority as Landlord, and Joe Caruso Golf, LLC, as Tenant for the Leased Premises known as Salado Site 6, (and as further described in the lease), the commencement date of which was November 23, 2004, (the "Lease"). The Lease has this day been assigned to and assumed by Caruso Golf Management, LLC as Tenant. In this certificate, Joe Caruso Golf, Inc. is identified as "Assignor" and Caruso Golf Management, LLC is identified as "Assignee".

The parties certify that, to the best of their knowledge, that:

- (a) As of the date Assignee signs this certificate, neither the Landlord nor Assignor is in default of the Lease;
- (b) The monthly rent to be paid through the end of the Lease is as follows: the present monthly rent is 358.30. Rent increases are provided in the Lease;
- (c) The next rent payment is due June, 2011.
- (d) Assignor has not paid Landlord any rent more than 30 days in advance;
- (e) Landlord has not required a security deposit under the Lease;
- (f) As of the date Assignor signs this certificate, Assignor has no claim of offset against the rent;
- (g) The current term of the Lease expires on December 31, 2028;
- (h) Assignor has the option to renew the Lease on January 1, 2029 for five years, with two additional five year terms commencing January 1, 2034 and January 1, 2039;
- (i) Assignor and Assignee have accepted the leased premises and Assignee is in possession of the leased premises;
- (j) Assignor and Assignee have no ownership interest in the real property at which the leased premises are located.

Assignor and Assignee understand that this Certificate will be delivered to San Antonio River Authority and the parties are relying on the representations in this certificate.

Assignor:

Assignee:

Joe Caruso Golf, Inc.

Caruso Golf Management, LLC

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

SAN ANTONIO RIVER AUTHORITY

Suzanne B. Scott, General Manager

ATTACHMENT "B"