



# San Antonio Water Company

Incorporated October 25, 1882  
Serving the original Ontario Colony lands

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## A REQUEST FOR PROPOSALS

TO PROVIDE CONSULTING SERVICES TO THE SAN ANTONIO WATER COMPANY

PROJECT TITLE:

COMPREHENSIVE SYSTEM MASTER PLAN AND ASSET MANAGEMENT PROGRAM

RESPONSE DUE BEFORE 3:00 PM

On February 11<sup>th</sup>, 2020

## Introduction

The San Antonio Water Company is soliciting proposals from qualified firms to assist in developing a Master Plan / Asset Management Program for the Company's domestic and irrigation water systems.

The intent of the Comprehensive System Master Plan and Asset Management Program is to:

- Conduct a detailed study of both systems and recommend Capital Improvements,
- Prepare a detailed prioritization of Capital Replacements,
- Develop a comprehensive Capital Master Plan / Asset Management Program based on the findings of the Improvement and Replacement reviews, and
- Develop high-level review concerning loss-risk of water sources and possible alternatives to water supply in consideration of current sources (e.g. 100+ year-old tunnel) and projected regional environmental changes (i.e. global warming) or events (e.g. earthquakes / wildfires).

## General Information

In 1882 Canadians George and William Chaffey purchased 8,000-acres of the Cucamonga Rancho, including the water rights, and established an irrigation colony which they named Ontario, in honor of their homeland. On October 25, 1882 they also established the San Antonio Water Company under the General Corporation Laws of the United States. Rancheria water rights established back in the 1700's were transferred to the Company to support the newly established irrigation colony. The brother's vision was to develop a Mutual Water Company whose members shared equally in the locally available water supply.

The brothers sold irrigation colony land in 10-acre blocks, primarily intended for the booming citrus industry. Along with the land, the brothers sold shares in the Company, one share for each purchased acre. Each shareholder was entitled to a portion of available local water, distributed equally by the company amongst all the shareholders. The Company was responsible for distributing water on a non-profit basis to the shareholders.

Since 1882 the San Antonio Water Company has consistently provided water service to its shareholders. Although the local citrus industry has largely disappeared, the Company maintains delivery to current shareholders utilizing the same successful 'per share' distribution plan established over 135 years ago.

The Company does not import any water. Instead we are dependent on our local San Antonio Canyon and Cucamonga Canyon watersheds and downstream groundwater basins.

Currently, our shareholders include most residents of the unincorporated area of San Antonio Heights, the Cities of Upland and Ontario, the Monte Vista Water District, local quarries and the proud heritage of remaining grove irrigators.

Annual shareholder water entitlements are established based on projected availability. For 2018, full water entitlement was established at 12,000 Acre Feet (AF). The table below shows how that 12,000 AF was divided among current shareholders, along with actual water delivered in 2018.

Shareholders	Shares	Annual Entitlement, Acre Feet per Year (AFY)	Delivered (AFY)
City of Upland	4,338.75	8,150	7,544
City of Ontario	295.25	555	359
Monte Vista Water District	329.75	619	405
Domestic Customers	625.25	1,174	1,259
Rock Company	36.25	68	384
Golf Courses	116.75	219	366
Grove Irrigators	87.25	164	53.32
Inactive Shares	559.75	1,051	0
Total shares	6,389	12,001	10,369

The Company provides water through two separate systems; domestic and irrigation.

The domestic system receives the majority of its water through the San Antonio tunnel. The tunnel is built into the head of the San Antonio Canyon about 90 feet below the ground surface. The tunnel consists of 5,400 feet of 36" concrete pipe and 600 feet of a six-foot square shaft built into the bedrock below the alluvium. Portions of the shaft are supported by redwood beams. There are ten access hatches spaced about 600 feet apart; three access hatches for the tunnel and six for the pipeline. Groundwater percolating through the alluvium collects in the tunnel and, after chlorination provides 4-log inactivation, is channeled into the Company's potable water system. Two wells supply the remainder of our domestic supply. Domestic water is distributed by six booster pump stations through 25 miles of pipeline to five reservoirs.

The domestic water system provides service to the San Antonio Heights, also known as our Basic Service Area. Consisting primarily of large residential lots, the Heights is an unincorporated area of San Bernardino County approximately 2.6 square miles in size located immediately north of the City of Upland. The Company provides water to individual residential lots through 1,200 domestic meters.

The irrigation system primarily receives water from surface water diversions in the San Antonio Canyon. Additional irrigation water is supplied through seven wells located in three groundwater basins; Cucamonga Basin, Six Basins and Chino Basin. Irrigation water is distributed by two booster pump stations through 21 miles of pipeline to three reservoirs.

The irrigation system provides service to the Company's 'extended' service area. Shareholders in the extended service area include municipal and private companies. A majority of the distributed

irrigation water is treated by municipal shareholders and then delivered to their customers as domestic water. The remaining irrigation water is used for farming, landscaping and commercial use (quarry).

The Company's most recent Master Plan was developed in 2017, along with the most recent hydraulic model of the domestic water system.

## Project Scope of Services

### Task 1 – Project Management

Provide overall project management services including:

- Quality assurance/ quality control
- Teleconferences and meetings at appropriate intervals to keep Company staff updated on progress and address any needed management level decisions.

### Task 2 – Data Gathering and System Evaluation Criteria

The Company recognizes that a major upfront component of this project involves discovery tasks that will assist in developing a remaining scope of work. Consultant shall propose a mechanism to collaboratively work with staff to review, prioritize, sequence and implement dependent tasks.

### Task 3 – Capital Improvement Program

#### Domestic Hydraulic Model

1. Review and modernize existing domestic hydraulic model.
2. Conduct flow tests within and throughout domestic system. Verify the hydraulic model adequately represents real-world operating conditions of the domestic system.

#### Irrigation Hydraulic Model

3. Develop an irrigation system hydraulic model based on existing facility map book information.
4. Conduct flow tests within and throughout irrigation system. Verify the hydraulic model adequately represents real-world operating conditions of the irrigation system.

#### Capital Improvement Projects Based on Modeling Results

5. Using the modernized and calibrated hydraulic models, identify weaknesses in the existing domestic and Irrigation systems in regard to flow (fire and peak day demand), pressure and/or storage. Determine what improvements could be made to increase/improve service. Company expects consultant to use two separate models, one for each system.
6. Develop an Engineer's Opinion of Probable Construction Cost, in 2020 dollars, for each facility/project proposed for improvement in subtasks 5.

#### Task 4 – Capital Replacement Program

1. Refine a comprehensive database of Company facilities and their metadata (e.g. age, material, size) from the Company's GIS system.
2. Aggregate existing facilities into groups based on location and similarity. The intent of this task is to develop a list of replacement projects that represents all Company assets.
3. Develop an Engineer's Opinion of Probable Replacement Cost, in 2020 dollars, for each facility/project identified in subtask 2.

#### Task 5 – Master Plan and Facility Asset Management Program

1. Using costs developed in tasks one and two and an 'industry standard estimated service life' for facilities, develop a theoretical yearly asset management budget that would ensure timely system improvements and that all facilities are replaced in a timely manner.
2. Review Company's revenue and operating expenses and develop a best-fit yearly total spending limit devoted to Capital replacement, in 2020 dollars.
3. Reconcile the difference between the spending limit in subtask 1 with the spending requirement in subtask 2.
4. Develop a review and ranking process whereby each facility can be assessed compared to like facilities. The intent of this task is to develop a replacement/improvement priority list that contains all Company facilities.
5. Using all of the information developed above, prepare a 10-year Capital Replacement Prioritization List and a 5-year Capital Replacement Program.

#### Task 6 – Source Water Loss-Risk Review

1. Provide a review of projected environmental changes (e.g. rainfall and temperature patterns) in the local area that are predicted to occur over the next twenty years. What is the future local water source outlook for the Company?
2. Provide a review of catastrophic failures that could potentially impact the Company's source water (e.g. wildfire, earthquake). Of particular concern is the Company's domestic source - the San Antonio Tunnel.
3. In consideration of the findings in subtask 1 and 2, develop alternative scenarios in which the Company can continue providing full yearly entitlement to shareholders. Alternatives to consider include:
  - a. Staying-the-course. No change in operation.
  - b. Strengthen or improve current source water facilities.
  - c. Developing a conjunctive use program in one or more groundwater basins.
  - d. Develop alternative water sources (e.g. Increase yield in local watersheds and/or connection to Metropolitan Water District)
  - e. Consultant developed alternatives.

How can the Company prepare for catastrophic impacts to source water and systems?

4. Develop high-level project scope and costs for each alternative considered in subtask 3.

## Schedule

The Company anticipates the following timeline and key milestones for award of the project:

Proposal Due Date	February 11, 2020
Planning, Resource and Operations Committee (PROC) Review	February 25, 2020
Interview	TBD – If necessary
Board of Director’s Approval	March 17,2020
Consultant’s Notification	March 18, 2020

## Proposal Requirements

The proposal shall not exceed 19 pages excluding resumes, cover letter, dividers, front and back covers. No other documents will be reviewed. Please do not submit additional material. Responses to this RFP shall be in the following order and shall include:

### Executive Summary (2 pages maximum)

Summarize the contents of your firm’s proposal in a clear and concise manner.

### Firm Background and Experience (4 pages maximum)

Brief description of the firm and subconsultants, if any, including the size of the organization, location of offices and relevant capabilities and resources in relation to the project. This section should include:

- I. Experience with developing master plans and asset management programs
- II. Experience in water system planning.
- III. Similar projects with other water companies or districts
- IV. Firm’s local experience
- V. Procedures and/or policies associated with or related to work quality and cost control
- VI. Management and organizational capabilities
- VII. Verification of professional liability insurance for coverage of not less than \$1,000,000.

### Project Organization and Experience of the Project Team (2 pages maximum, not including resumes)

Proposing firm shall identify the team to be assigned to the project, by name, including at a minimum the principal, project manager, key staff and any subconsultants. Proposing firm shall describe the project team’s qualifications and experience on projects related to this specific project. Proposing firm shall explain the project team’s experience regarding all tasks associated with the scope of work. This section should include:

- I. Describe proposed project organization, including identification and responsibilities of key personnel, including sub-consultants. Include only one- page resumes.
- II. Describe the experience of the Project Manager and the experience that the proposed personnel have working on past projects as a team.
- III. Describe project management approach to the work effort, locations where work will be done, responsibilities for coordination with the Company, and lines of communication necessary to maintain project on schedule.

### Project Understanding and Approach (8 pages maximum)

Proposer shall demonstrate its preliminary understanding of the project by providing a clear and concise description of the project and major issues, based on the information provided in this RFP.

Proposer shall clearly define the tasks and activities necessary to meet the objectives outlined in the scope of work. This section should include:

- I. Description of the tasks and activities, the methodology that will be used to accomplish them.
- II. Description of the products that would result from each task and activity.
- III. Identification of points of input and review with Company staff.
- IV. Proposed project schedule identifying key tasks, their expected duration, and milestone dates.
- V. Proposers are invited to suggest additional (optional) work tasks that could be performed in conjunction with or subsequent to the scope of work. Any such tasks are to be described as optional and the benefits of performing such tasks shall be described.

### Past Projects (3 pages maximum)

Proposer shall provide project descriptions of up to three similar projects. Include the following information:

- I. Owner contact name and phone number
- II. Project team members
- III. Project size and description

### Proposed Total Professional Fee and Fee Schedule Submitted Under Separate Sealed Cover

Proposed fee shall not be the sole basis of award but will be used to evaluate the Consultant's understanding of the Scope of Work.

Include the hourly rates of all staff that will charge to the project.

Company expects to award a 'time and material, not to exceed' contract for Implementation.

### Exceptions to this RFP

The Consultant shall certify that it takes no exceptions to this RFP including, but not limited to, the Professional Service Agreement (attached).

## Evaluation Criteria

The evaluation criteria and the respective weights that will be given to each criterion are as follows:

- a) 30% Understanding and approach to the work to be done
- b) 20% Experience of firm with similar kinds of work
- c) 30% Experience of staff for work to be done
- d) 10% Overall clarity and presentation of Proposal
- e) 5% Firm's Local Experience
- f) 5% Proposed Project Fee

## Selection Process and Schedule

Key senior staff and select Company Directors will independently review and rank each proposal. Based on an aggregate of those reviews, the Company will likely enter into negotiations with the top ranked firm. If there is no clear 'top ranked' firm, interviews may be scheduled.

At this time, the Company contemplates the use of a Time and Material Not to Exceed contract for the services requested. Negotiations will cover scope of work, contract terms and conditions, attendance requirements, and appropriateness of the proposed fee.

After negotiating a proposed agreement that is fair and reasonable the General Manager will present the contract to the Company's Board for authorization to execute a contract with the most responsive firm.

## Related Documents

- Company standard Professional Service Agreement (attached)

Link for downloading available upon request

- 2017 Company Water Master Plan
- 2017 InfoWater Hydraulic Model
- Company's System Atlas (both domestic and irrigation)

The Company's GIS database is currently under development. The first iteration will be based on the Company's System Atlas. It is expected to be available in Spring 2020.

Interested proposers should immediately contact the Company to register for inclusion on the project distribution list. Revisions or supplemental information to this RFP will be issued through addenda by email and posted on the Company's website. Proposers are responsible for receipt of any and all addenda.



## Submittal Requirements

One (1) executed original marked "ORIGINAL" in red ink and 6 copies of the Proposal shall be delivered, along with one electronic copy in PDF format on thumb drive. One single sealed Proposed Fee Estimate marked "FEE ESTIMATE – 2020 Master Plan" in red ink shall be submitted separate from the proposal. Proposals will not be accepted in any other format. Proposals will not be accepted by email, fax or verbally. The proposal shall be signed by an individual, partner, officer or officers authorized to execute legal documents on behalf of the Firm.

The Response Proposal must be received no later than **3:00 p.m.** local time, on or before **February 11<sup>th</sup>, 2020** at the office of:

PROPOSAL – 2020 Master Plan  
San Antonio Canyon Water Company  
139 North Euclid Avenue  
Upland, CA 91786  
Attn: Brian Lee

Failure to comply with the requirements of this RFP may result in disqualification. Questions regarding this RFP shall be submitted in writing to [blee@sawaterco.com](mailto:blee@sawaterco.com).