

SAN GABRIEL VALLEY
MUNICIPAL



WATER DISTRICT

PROPOSAL TO PREPARE THE
2020 URBAN WATER
MANAGEMENT PLAN
UPDATE

September 8, 2020



JOHN
ROBINSON
Consulting, Inc.

In association with

SA
ASSOCIATES



September 8, 2020

San Gabriel Valley Municipal Water District
1402 N. Vosburg Drive
Azusa, CA 91702

Attention: Darin Kasamoto, General Manager

Subject: Proposal to Prepare the 2020 Urban Water Management Plan Update

Dear Mr. Kasamoto:

The John Robinson Consulting, Inc., Team (JRC Team) is excited to present our proposal for preparing SGVMWD's 2020 UWMP. The JRC Team includes SA Associates (SAA) to bring unmatched local knowledge, industry leading expertise, and shared commitment to SGVMWD. This JRC Team is comprised of small local businesses only. We have developed a cohesive Project Team to bring the necessary expertise and bandwidth while providing focused service. This Project Team brings experienced professionals to meet all of SGVMWD's criteria for this project. Collectively, our team members have prepared more than 35 UWMPs since the 1990 cycle, the vast majority of which were deemed complete and accepted by DWR without any comments.

We look forward to applying this expertise with our local knowledge and commitment to deliver your 2020 UWMP program successfully.

SGVMWD Selection Criteria

Experience and reputation in the field /
Experience in Urban Water Management Plan
preparation / Knowledge of subject matter /
Compliance with minimum qualifications

Knowledge of District

Ability to accommodate required meetings

Other factors

The JRC Team Delivers

The team has prepared 35 UWMPs since 1990 and is currently preparing 5 UWMPs for 2020. The vast majority of the plans were accepted on the first submittal.

We prepared the 2015 UWMP for the District. We have done all the recycled water studies for the District which goes directly into the discussion of reduced reliance on the Delta.

The team will be available to meet with the District and attend Public Hearing, as necessary.

We are familiar with State Water Project supply reliability, minimum SWP supplies based on DWR guidelines. In addition, our Project Team has updated ourselves on the Draft UWMP Guidebook 2020.

Our current experience also benefits your water district as we are familiar with the changes to the water code (SB7x7, AB1668, and SB606) and how it relates to the preparation of the 2020 UWMPs. We prepared fourteen 2015 UWMPs. DWR had no significant comments on the 2015 UWMPs we prepared in terms of submittal/reporting requirements.

In addition to having a nearby office in Pasadena, our extensive experience with San Gabriel Valley Municipal Water District as well as the neighboring Foothill Municipal Water District, makes us very aware of how water issues differ for foothill agencies as opposed to coastal or flatland agencies.



Attached in this Proposal you will find information on our firm and the individuals who will be serving the City's needs for this project.

We thank you for the opportunity to submit our proposal. Please call me if you have any questions or desire additional information.

Very truly yours,

John Robinson Consulting, Inc.

John Robinson
Principal

Enclosures

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SECTION I
COMPANY BACKGROUND

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COMPANY BACKGROUND

John Robinson Consulting, Inc.: John Robinson Consulting, Inc. (JR Consulting) firm was established in May 2013 as an S Corporation and is certified as a Small Business Enterprise (SBE) by the State of California Department of General Services. John Robinson is the only personnel of the firm and is located at the following address since inception and has a business license with the City of Pasadena:

John Robinson Consulting, Inc. – Headquarters Location
1055 E. Colorado Blvd. Suite 500
Pasadena, CA 91106
jrobinson@johnrobinsonconsulting.com

John Robinson has over 25 years of consulting and management experience for cities, special districts, water districts, and private and industrial clients. As the Program Manager, John brings knowledge and project/program management experience from over 35 UWMPs. His management and UWMP expertise will drive efficiency, and improve the continuity and quality of our team's deliverables. He will serve as a single point of contact for SGVMWD regarding any work on the project.

SA Associates was established in May, 1989 as a principal-owned engineering firm with offices in Los Angeles and Orange Counties. SA Associates is a California Corporation and "SA Associates" is our full legal name. SA Associates services cover a broad spectrum of engineering from investigation and feasibility reports to design, construction administration, and construction observation. The firm provides complete civil engineering services for municipalities, public and private water agencies, sanitary districts, and flood control districts. SA Associates is classified as a Minority Owned Business Enterprise (MBE), Disadvantaged Business Enterprise (DBE), and Small Business Enterprise (SBE) by local, state, and federal agencies.

SA Associates is classified as DBE, MBE and SBE by local, state and federal agencies

Our main fields of specialty are:

- Civil Engineering
- Feasibility Studies
- Water Supply Projects
- Flood Control and Drainage Projects
- Wastewater Facilities Projects
- Surveying Services
- Construction Management and Construction Inspection Services

Mr. Shahnawaz Ahmad is the primary contact and the authorized signatory on behalf of the firm. Please contact Mr. Ahmad at sahmad@saassociates.net. He is based in the Arcadia office.

OFFICE LOCATIONS

Our office locations with corresponding project team personnel and activities are as follows:

JOHN ROBINSON CONSULTING, INC. PASADENA OFFICE	SA ASSOCIATES ARCADIA OFFICE	SA ASSOCIATES ORANGE COUNTY OFFICE
1055 E. Colorado Blvd. STE 500 Pasadena, CA 91106 Tel: 626.375.9389	1130 West Huntington Drive, Unit 12 Arcadia, CA 91007 Tel: 626.821.3456 Fax: 626.445.1461	1661 N. Raymond Ave, Suite 100 Anaheim, CA 92801 Tel: 714.871.9083 Fax: 714.871.3652
Project Team Personnel Assigned to this Location: • John Robinson	Project Team Personnel Assigned to this Location: • Shahnawaz Ahmad	Project Team Personnel Assigned to this Location: • Jorge Lovo • Adam Roesch • Phong Tran

JOHN ROBINSON CONSULTING, INC. PASADENA OFFICE	SA ASSOCIATES ARCADIA OFFICE	SA ASSOCIATES ORANGE COUNTY OFFICE
Activities Performed at this Location: <ul style="list-style-type: none"> • Project Management • QA/QC 	Activities Performed at this Location: <ul style="list-style-type: none"> • Project Management • QA/QC 	Activities Performed at this Location: <ul style="list-style-type: none"> • Research • Development of Report

PROJECT SUMMARY

This project consists of providing professional services for the preparation of the District's 2020 Urban Water Management Plan Update. Services will include compilation of information and data, writing and editing text, and statistics for use in the District's 2020 Urban Water Management Plan (UWMP). The UWMP will be in accordance with the 1983 Urban Water Management Planning Act and subsequent amendments.

This proposal has been prepared in accordance with the format set forth in the District's Request for Proposals and contains a work plan for accomplishing the Project's requirements, including the following items from the District's Scope of Services found on pages 1 and 2 of the RFP:

1. Analysis of SWP water supply reliability based on the results most recent DWR SWP Delivery Reliability Report, which will include climate change assumptions and land use (through 2065)
2. Description of a minimum SWP supplies based on DWR guide lines for shortage contingency planning purposes on a 5-year basis and evaluate drought risks
3. Narrative description of the potential water supply improvements of the Bay Delta Conservation Plan
4. Updated description of status of relevant endangered species Biological Opinions
5. Description of updated SWP emergency outage scenario risk/vulnerability including seismic events
6. Language describing the extension of the SWP water supply contracts to 2085
7. Discussion of reduced reliance on the Delta. This discussion may include coordination with other SWP Contractors for a coordinated response to the state
8. Discussion of water loss audits (SB 555) and achieving water loss standards
9. Reporting on 5Bx7-7 targets and discussion of Making Conservation a California Way of Life (AB 1668/ SB 606)
10. Discuss consistency of SGMA/GSP's and local adjudications
11. Calculate energy intensity of water
12. Estimate water savings from codes and standards
13. Ensure all efforts are consistent with the anticipated DWR 2020 Guidebook for urban plans including voluntary items
14. Assessment of other related planning activities related to the 2021 UWMP planning effort that anticipates new policies, regulations and positions the region for future grant support (state and federal as appropriate)

The length of this Proposal has been kept concise for reviewability. It is the intent of this proposal to provide the District with supporting documentation which reflects the high quality of Project Team's work with regard to the preparation of UWMPs for municipal water agencies.

STATEMENTS

- Our insurance meets or exceeds the District's requirements. Certificates of Insurance will be provided if a contract is awarded.
- Our firms are not in violation of any regulatory rules and regulations that may have any impact of our operations.

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SECTION II
RELATED EXPERIENCE AND
REFERENCES

SECTION II: RELATED EXPERIENCE AND REFERENCES

EXPERIENCE FOR THE TEAM OF JOHN ROBINSON CONSULTING, INC. AND SA ASSOCIATES

Both firms have successfully prepared UWMPs in California since 1990. We recognize that the District's policy decisions are based on the content and the projections presented in the UWMP. Both of our firms have extensive experience preparing UWMP's throughout Southern California. UWMPs have become increasingly complex and more visible in recent years with water supply reliability issues becoming exceedingly important and sensitive. Besides our understanding of the California Department of Water Resources' (DWR) requirements for UWMPs, our understanding includes projects involving the development and management of water supplies, groundwater planning, water conservation programs and conjunctive use plans, water banking, the State Water Project, and water transfers. Our extensive water resources planning and implementation experience will ensure that all technical and regulatory aspects are covered.

Water Resources

Due to our vast local experience, we fully understand how important water resources are to the companies and municipalities that provide water regionally. We also understand the severity of issues faced by these providers, including the District's. Global climate change, endangered species and ecosystem protection, and the risks of catastrophic loss of key water supply components are among the factors changing water resources management. Concurrently, growing water demands create greater urgency for effective, timely solutions. Our Team has led innovative policy changes in Aquifer Storage and Recovery methods, developed joint powers authorities, which modified regional influence and water use efficiency, and has demonstrated leadership and responsiveness to catastrophic flooding and infrastructure failure events.

Water Master Planning

John Robinson Consulting, Inc. (JRC) has prepared over 75 master plans, management plans, and feasibility studies for water, sewerage, and wastewater systems, including a fair amount of master planning for private utilities. These master plans have included a full-range of assignments applicable to the District's UWMP Update. SA Associates (SAA) has prepared over 35 UWMPs, many with JRC. Members of our Project Team have successfully performed UWMP Updates in 1990, 1995, 2000, 2005, 2010, 2015 and currently 2020 for numerous clients.

Main San Gabriel Experience

The project team has extensive experience working on projects that involve the Main San Gabriel Basin. For example:

- Completing several drinking water and recycled water projects for Upper San Gabriel Valley Municipal Water District and San Gabriel Valley Water Company.
- JRC and SAA are the Owner's Representative for the City of Monterey Park for their Central Groundwater Treatment System which included ultraviolet disinfection with hydrogen peroxide, liquid GAC and ion exchange for PFAS treatment.
- John Robinson, while with another firm, performed a Groundwater Reliability Improvement Project Conceptual Study. In this study, we investigated options to increase water supply through recycled water recharge into the Main San Gabriel Basin.
- JRC and SAA are currently preparing 2020 UWMPs for Foothill Municipal Water District and four of its member agencies.

Recycled Water Experience

Our team has worked with all of the local wholesale water agencies: Metropolitan Water District of Southern California (MWD), Foothill Municipal Water District, Three Valleys Municipal Water District and Upper San Gabriel Valley Municipal Water District. Our experience with all of these agencies' water supplies and recycled water systems gives us an edge on understanding the District's water supply situation and developing creative methodologies to address future water supply concerns.

The following projects are representative of our local work, as well as the vast experience our team has performing work similar to the scope of DWR's requirements for an UWMP. Note that our proposed Team members had significant roles on all of the representative projects.



2015 Wholesale and Retail UWMPs

San Gabriel Valley Municipal Water District, including three of its member agencies

The project team of John Robinson Consulting, Inc. and SA Associates prepared the 2015 UWMPs for the District and three of its four member agencies. Those three member agencies included Azusa Light & Water (ALW) and the cities of Alhambra and Sierra Madre. In addition to the 2015 UWMP, SA Associates also prepared the 2010 UWMP for ALW.

For each agency, the project team:

- Developed 20-year per capita water use projections. SA Associates calculated service area populations and per capita water usage, which was used to determine the baseline per capita water usage.
- Examined local water supplies to evaluate water availability for the next 20 years. Evaluated water supply reliability by reviewing historical water supply and demand data during multiple dry year periods.

Upon approval of each agency's UWMP, John Robinson Consulting, Inc. provided additional services for submitting the approved plan to DWR and entered water use data using the DWR Water Use Efficiency Data Tool (WUEdata). In developing the 2015 UWMPs, SA Associates also assisted each agency in filling out and submitting the AWWA Water Audit, which calculated distribution system water losses and operational efficiency.

The District is a wholesale agency that provides groundwater recharge water for its member agencies, which include the Cities of Alhambra, Azusa, Monterey Park, and Sierra Madre, serving nearly 270,000 people in San Gabriel Valley.

DWR approved the first submittal with no comments.

Reference: Darin Kasamoto, General Manager
(626) 969-7911 | dkasamoto@sgvmwd.org



City of Alhambra, Alhambra, CA

SA Associates prepared the 2015 UWMP for the City of Alhambra. The City of Alhambra is a local water purveyor and member agency of the District. The City was incorporated in 1903. The City is approximately 7.86 square miles in size and its distribution system is divided into two major pressure zones, northern and southern. The population of the City was 85,477 as of the 2013 census.

The City primarily obtains its water supply through groundwater pumped from the westerly portion of the Main San Gabriel Basin, which is replenished by water from Northern California imported by the District on behalf of its four member cities (Alhambra, Azusa, Monterey Park, and Sierra Madre). Groundwater is pumped from the Main Basin by the City's ten active wells. The City has one well (Well No. 2) in the Raymond District, which is currently inactive. In addition, the City maintains a total of six reservoirs for storing the extracted groundwater. The City also receives its water supply by importing water through one connection (USG-5) with MWD, which obtains its water from the Colorado River and the California State Water Project (SWP).

The scope of services included updating the UWMP to comply with the UWMP Act, Article III Sections 10620-10645 of the State of California Water Code.

For the City's 2015 UWMP, SA Associates

- Described the City's water distribution system in detail.

- Summarized reliability of water supplies for existing and future demands, in normal, dry, and multiple dry years, over a 20-year period.
- Summarized water conservation and demand management measures.
- Provided Water Shortage Contingency Plan (WSCP) amendment guidance to comply with DWR requirements.

In developing the 2015 UWMP, SA Associates worked with the City of Alhambra to amend their Water Shortage Contingency Plan to be in compliance with DWR requirements by assisting with the inclusion and adoption of a 50% reduction in water supply stage.

DWR's comment on the City of Alhambra's 2015 UWMP was concerning the inclusion of a 50% reduction in water supply stage. The reason the 50% reduction stage of action was not included in the first submittal was due to its adoption after the 2015 UWMP was submitted. To address this comment, the project team simply included the City of Alhambra's adopted 50% reduction plan in the revised 2015 UWMP submittal. By closely coordinating with DWR staff by phone and email, the 2015 UWMP received DWR approval on the same day of the second submittal.

Reference: Dennis Ahlen, Director of Utilities for City of Alhambra (626) 570-3274
dahlen@cityofalhambra.org



Azusa Light & Water, Azusa CA

SA Associates prepared the 2010 and 2015 UWMP for the City of Azusa. The City was incorporated in 1898, and the water system began operation in 1899. In 1993, the City of Azusa purchased the Azusa Valley Water Company, which expanded Azusa's service area.

Upon integration with the Azusa Valley Water Company, the City's water system became known as Azusa Light & Water or ALW. In 2013, according to the United States Census Bureau, the City of Azusa had a population 47,842. ALW's service area covers about 8,900 acres (14.2 square miles) within the San Gabriel Valley and consists of five pressure zones and two small subzones. The service area encompasses the entire City of Azusa (40% of the total service area) and portions of the cities of Covina, West Covina, Glendora, Irwindale, and Los Angeles County.

ALW obtains its water via imported water, groundwater, and surface water. ALW's imported water supply is delivered through its connection, identified as USG-8, to the Upper San Gabriel Valley Municipal Water District (Upper District). Imported water is used only as an emergency water supply to supplement ALW's groundwater and surface water supplies. ALW's groundwater supply originates from 11 groundwater wells pumping water from the Main San Gabriel Basin. Groundwater accounts for about

65% of ALW's total water supply. Surface water originating from the San Gabriel River is received from two reservoirs, the San Gabriel and Morris Reservoirs, and treated at ALW's Joseph F. Hsu Filtration Plant. ALW has 13 storage reservoirs with a total capacity of 38 million gallons. ALW delivers its water supply to its customers through a 300-mile network of distribution mains and 22,000 service connections.

Update to 2010 UWMP

In addition to preparing ALW's 2015 UWMP, SA Associates updated their 2010 UWMP by making the appropriate modifications to the service area population, population baselines, and Demand Management Measures (DMMs) list, including School Education Programs to satisfy DWR and Water Code requirements.

ALW's service area encompasses about 14.2 square miles and serves approximately 23,000 customer accounts with a population of over 106,000.

ALW's 2015 UWMP was approved by DWR on the first submittal with no comments.

Reference: Melissa Barbosa, Water System Engineer; Azusa Light & Water (626) 812-5173
mbarbosa@ci.azusa.ca.us



City of Sierra Madre, Sierra Madre, CA

SA Associates prepared the 2015 UWMP for the City of Sierra Madre. For many years Sierra Madre was the only city in the San Gabriel Valley that relied entirely on groundwater for its water supply. On October 9, 2013 the City switched to a new source of water, imported from outside the Southern California region. The change was necessitated by drought-related low levels of water in the City's aquifer.

The City's Public Works Department operates the City's own water production and distribution system. Water is produced from four wells. The City has eight reservoirs, with a combined storage capacity of 7.46 million gallons, distributed via 46 miles of pipeline. The City's water system has a total of four connections. Three interconnect with the water systems of other agencies. The fourth was constructed in 2012/13 by the San Gabriel Valley Municipal Water District and serves as a direct connection between the City's water system and the Metropolitan Water District Foothill Feeder.

Scope of work included: project management and administration, data Collection and review; system

demands analysis; water supply analysis; demand management measures; supply reliability and water shortage contingency plan, UWMP preparation and submittal; and public outreach activities.

Provided key updates to 2015 UWMP:

- Water Shortage Contingency Plan
- Enforcements of SBx7-7
- Water Loses
- Updates to DMMs

SA Associates provided additional services for submitting the approved plan to DWR and entered water use data using the DWR WUEdata Tool.

The City of Sierra Madre's 2015 UWMP we prepared was approved by DWR on the first submittal with no comments.

Reference: Chris Cimino, Public Works Director for Sierra Madre (626) 355-6615
ccimino@cityofsierramadre.com



Foothill Municipal Water District, including participating four member agencies

The project team of John Robinson Consulting, Inc. and SA Associates prepared the 2015 UWMPs for Foothill Municipal Water District (FMWD) and four of its member retail water agencies, which included Crescenta Valley Water District, Lincoln Avenue Water Company, Rubio Cañon Land and Water Association, and Valley Water Company. John Robinson Consulting, Inc. worked closely with FMWD and its participating member agencies to develop a detailed UWMP outline covering elements required by law and voluntary elements (i.e., climate change impacts) desired by each agency. The goal was to reach a consensus among the participating member agencies regarding the structure and content from which each of the individual plans would be developed. Of course, each UWMP was tailored to the individual agency's needs and situation. FMWD's UWMP differed slightly as they are a wholesale water agency whereas the participants are retail water agencies.

Tabletop Exercises

As part of the preparation of the 2015 UWMP for FMWD, the team conducted three Tabletop Exercises with its member agencies as well as neighboring agencies sharing interconnections with FMWD. The Tabletop Exercises were an interactive information exchange that focused around an unplanned and a planned outage or short-term emergency (Tabletop Exercise #1), a long-term emergency (Tabletop Exercise #2), and a discussion with General Managers regarding how to meet their customers' needs during a long-term drought (Tabletop Exercise #3). The overall goal of the exercises was to identify which capital improvement projects to include in FMWD's 10-year CIP that would support FMWD's water supply reliability. Information gathered from the exercises was

incorporated into the 2015 UWMPs for FMWD and its four participating member agencies.

For Exercises #1 and #2, the goal was to identify any weaknesses existing in the distribution systems and reach a consensus on how to mitigate those weaknesses. For Exercise #3, a high-level policy discussion on long-term drought was held with participation from FMWD, MWD, the City of Glendale, and FMWD retail agency management. MWD detailed its recently updated Integrated Resources Plan (IRP) and how it expects to balance the use of local resources and conservation with imported supplies to meet future needs.

FMWD is a wholesale agency that provides imported water from MWD to 7 retail water agencies that serve a combined population of over 80,000 people.

DWR had no comments on the 2015 UWMPs we prepared for FMWD and its four participating member agencies. All five UWMPs were approved on the first submittal.

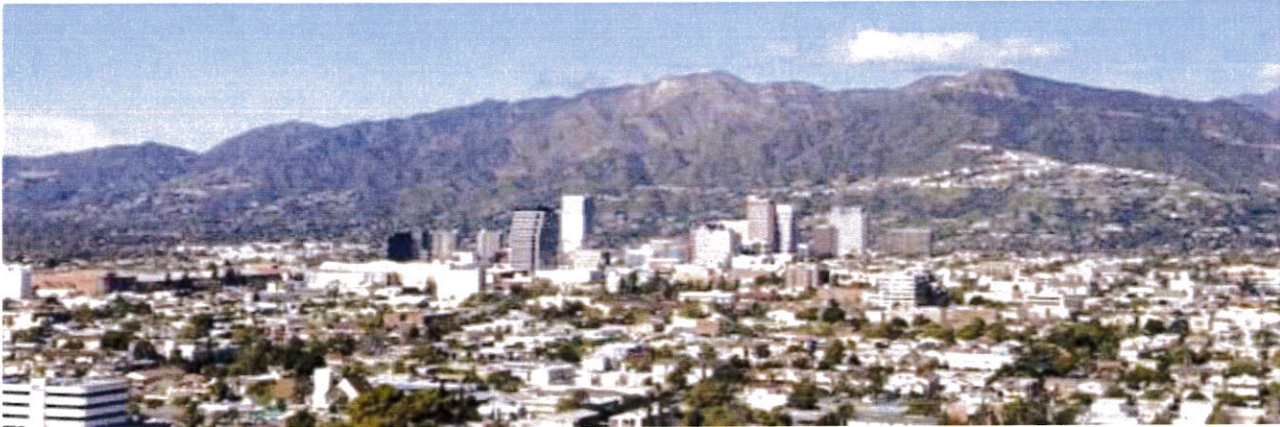
Reference: Ms. Nina Jazmadarian, General Manager; Foothill Municipal Water District (818) 790-4036 | nina.jaz@fmwd.com

Reference: Mr. David Gould, Director of Engineering; Crescenta Valley Water District (818) 236-4119 | dgould@cvwd.org

Reference: Ms. Lisa Yamashita-Lopez, General Manager; Rubio Canon Land & Water Association; (626) 797-0509 | lisa@rclwa.org

Reference: Mr. Bob Fan, General Manager; Valley Water Company (626) 790-5516 | bfan@valleywatercompany.com

Reference: Ms. Jennifer Betancourt, Water Quality Coordinator; Lincoln Avenue Water Company (626) 798-9101 ext. 11 | jennifer@lawc.org



City of Glendale Water & Power, Glendale, CA

SA Associates prepared the 2015 UWMP for the City of Glendale Water & Power. The City spans over 31 square miles and is home to nearly 200,000 people, becoming the third most populous city in Los Angeles County following the cities of Los Angeles and Long Beach. The City's potable and recycled water service area closely coincides with the City's boundaries. In 2015, the estimated resident population served by the City's water system was approximately 199,182 people.

Currently, the potable water facilities that provide service to meet existing demands within the City's service area include three MWD imported water connections, 14 active wells, 28 water storage reservoirs and tanks, 26 booster pumping stations, 6 pressure-reducing stations, and approximately 380 miles of pipeline. Additionally, the City owns and operates two water treatment plants (Glendale Water Treatment Plant and Verdugo Park Water Treatment Plant) that remove contaminants from local groundwater.

For the City's 2015 UWMP, SA Associates

- Described the City's water distribution system in detail.
- Developed 20-year per capita water use projections. SA Associates utilized census

tract data from the Southern California Association of Governments (SCAG) to estimate projected population data from 2020 to 2035. Using the service area population, SA Associates calculated per capita water usage and used it to determine the baseline per capita water usage.

- Summarized reliability of water supplies for existing and future demands, in normal, dry, and multiple dry years, over a 20-year period.
- Summarized water conservation and demand management measures.

In developing UWMPs for each public agency, SA Associates's goal is to write detailed sections that not only meet DWR requirements, but also act as a source document of clear, precise, and organized information to support water supply sustainability and long-term resource planning.

The City of Glendale's 2015 UWMP we prepared was approved by DWR on the first submittal with no comments.

Reference: Mr. Raja Takidin, Project Manager
(818) 548-3906 | rtakidin@glendaleca.gov

TEAM EXPERIENCE

The team has prepared Urban Water Management Plans for the cities and agencies listed in the chart below:

City/Agency	Urban Water Management Plan							Urban Water Shortage Contingency Plan			
	Year→	1990	1995	2000	2005	2010	2015	2020	1990	1995	2000
Arcadia		√							√		
Alhambra							√				
Azusa Light & Water						√	√				
Beverly Hills					√	√					
Covina				√							
Crescenta Valley Water District							√	√			
Foothill Municipal Water District							√	√			
Glendale							√				
La Palma		√	√	√	√				√	√	√
Lincoln Avenue Water Company							√	√			
Lomita						√	√				
Lynwood						√					
Pomona		√	√						√	√	
Rialto						√					
Rubio Cañon Land & Water Association							√	√			
San Fernando				√	√	√	√				√
San Gabriel Valley Municipal Water District							√				
Santa Monica						√	√				
Sierra Madre							√				
Torrance			√			√	√			√	
Valley Water Company							√	√			
Santa Clarita Valley Water District				√							√

2015 DWR APPROVAL

DWR has reviewed and approved of the 2015 UWMPs on the following dates:

City/Agency	DWR Approval Dates of 2015 UWMPs
Alhambra	May 11, 2017
Azusa Light & Water	December 11, 2017
Crescenta Valley Water District	January 27, 2017
Foothill Municipal Water District	April 20, 2017
Glendale	June 28, 2017
Lincoln Avenue Water Company	September 12, 2017
Lomita	March 7, 2017
Rubio Cañon Land & Water Association	September 6, 2017
San Fernando	August 31, 2016
San Gabriel Valley Municipal Water District	September 18, 2017
Santa Monica	September 22, 2016
Sierra Madre	September 6, 2017
Torrance	November 7, 2016
Valley Water Company	May 3, 2017

Eleven out of the fourteen (80%) 2015 UWMPs the project team has prepared received no DWR comments and were approved on the first submittal. The remaining three 2015 UWMPs were approved by DWR on the second submittal within only a few days of receiving comments.

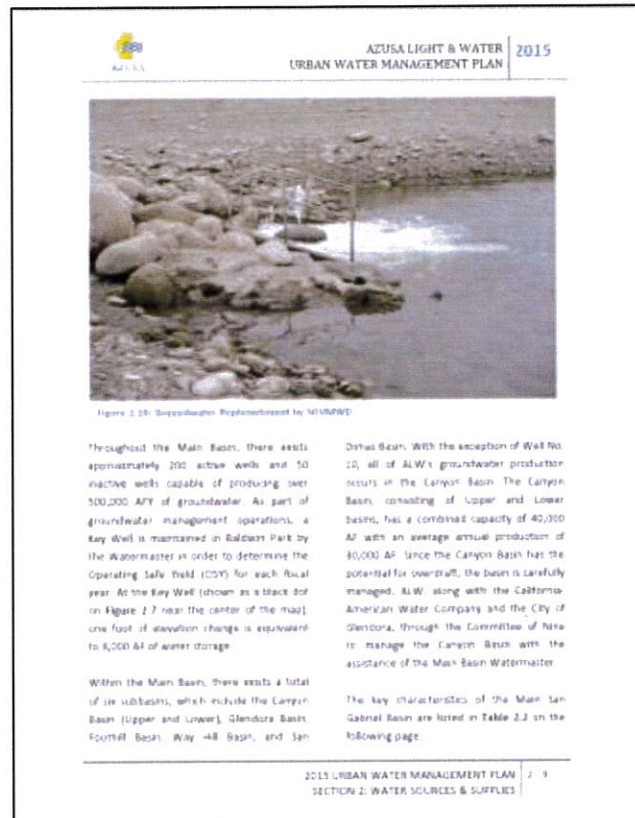
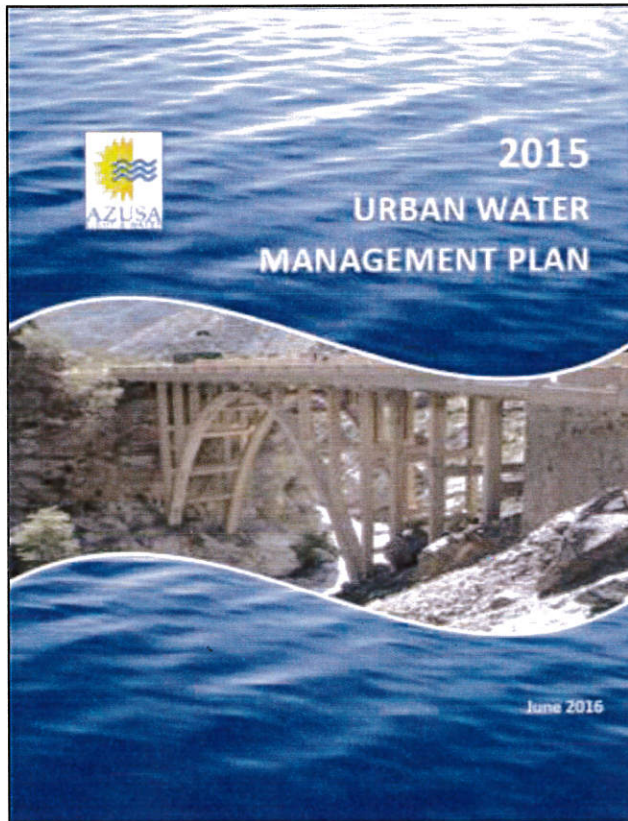
REFERENCES

The following list contains contact references of public agencies for which the project team has prepared the 2015 Urban Water Management Plan:

Agency	Contact Person	Telephone #	E-Mail	Address
Alhambra	Dennis Ahlen Deputy Director of Utilities	626.570.3274	dahlen@cityofalhambra.org	111 South First St. Alhambra, CA
Azusa Light & Water	Melissa Barbosa Sr. Water System Engineer	626.812.5173	mbarbosa@azusaca.gov	729 N. Azusa Ave. Azusa, CA
Glendale	Raja Takidin	828.548.3906	rtakidin@glendaleca.gov	141 N. Glendale Ave. Glendale, CA
Sierra Madre	Chris Cimino Public Works Director	626.355.6615	ccimino@cityofsierramadre.com	232 W. Sierra Madre Blvd. Sierra Madre, CA
Torrance	Chuck Schaich Water System Analyst	310.618.6219	cschaich@torranceca.gov	20500 Madrona Torrance, CA

SAMPLE OF PAST UWMP WORK

As indicated by the chart on the previous page, the team has extensive experience in the UWMP preparation process. Due to this familiarity, we strive to prepare UWMPs that will not only meet requirements but also act as a source document of clear, precise, and organized information. To reflect our attention to quality, we have included a sample portion of our 2015 UWMP for Azusa Light & Water below:



Full samples of the 2015 Urban Water Management Plans can be found on the State of California Department of Water Resources website. Please see the links on below:

- ❖ 2015 UWMP for the City of Azusa:
https://wuedata.water.ca.gov/public/uwmp_attachments/5544873893/00_FINAL%20DRAFT%20ALW%202015%20UWMP%20w%20APPENDICES_JUNE%202016.pdf
- ❖ 2015 UWMP for the City of Alhambra:
https://wuedata.water.ca.gov/public/uwmp_attachments/2980664908/ALHAMBRA%202015%20FINAL%20UWMP%20%28wAppendix%29%5Famend%202017%2D04%2D14%2Epdf
- ❖ 2015 UWMP for the City of Sierra Madre:
https://wuedata.water.ca.gov/public/uwmp_attachments/4559125602/Sierra%20Madre%202015%20FINAL%20UWMP%20%28wAppendix%29_2016-06-28.pdf

In preparing the 2020 UWMP for the District, we intend to provide the same level of attention to detail while providing the necessary updates in accordance with the DWR 2020 guidelines, which were released on September 2, 2020.

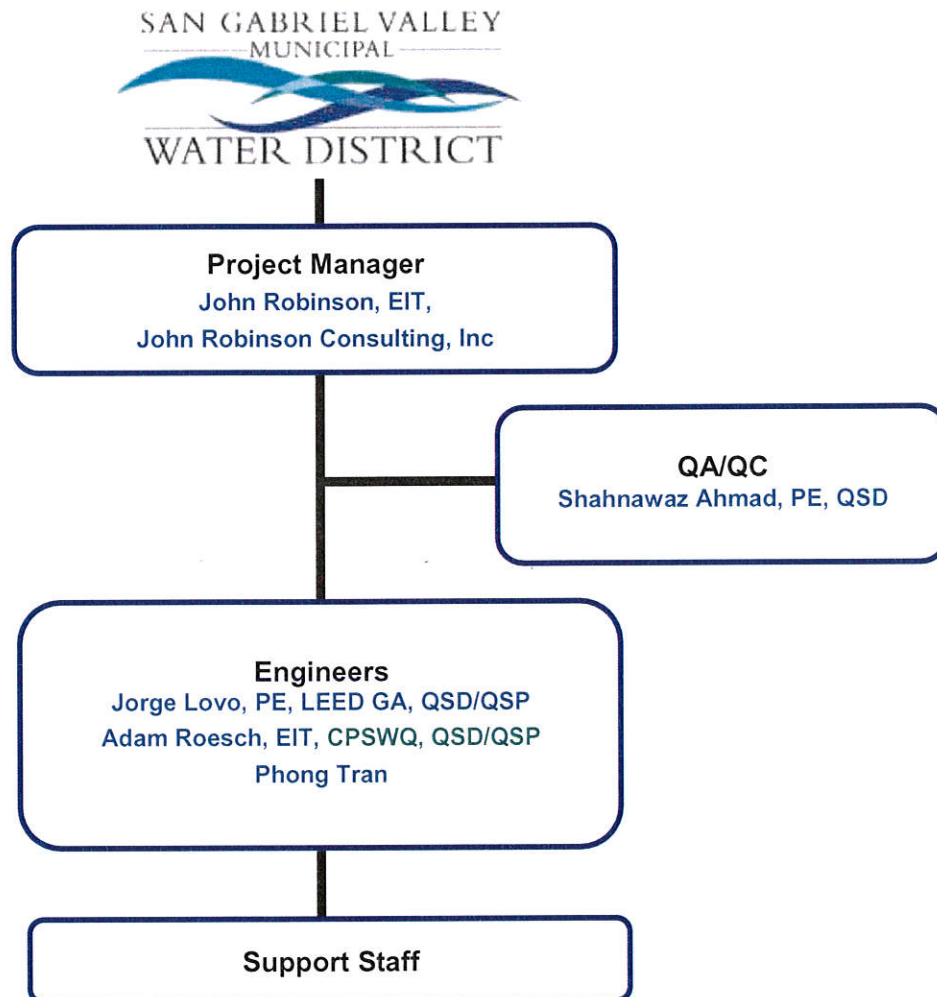
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SECTION III
PROJECT TEAM

SECTION III: PROJECT TEAM

ORGANIZATIONAL CHART

The high quality of John Robinson Consulting Inc in association with SA Associates' work derives largely from the competence of our individual employees and the blending of their talents to meet each particular project need. To assure this quality, it is our policy to staff each project with employees that have the requisite experience, interest and skills.



Resumes are on the following pages.

JOHN ROBINSON, EIT PROJECT MANAGER

Mr. Robinson has served as both a principal in charge as well as program manager for approximately thirty (30) Urban Water Management Plans. As a principal in charge, he has on numerous occasions successfully led project teams to complete the work within the project budgets and time schedules and with a high degree of responsiveness to the clients. His project experience includes city based UWMP's , water district based UWMP, and San Gabriel Valley Municipal Water District member agency UWMPs.



Mr. Robinson's over 25 years of environmental engineering experience has focused exclusively on water reclamation, wastewater engineering, and wastewater master plan projects for municipalities in California and Arizona . He has been the principal in charge or project manager for infrastructure projects that include feasibility/master studies and planning preliminary and final design, bidding, construction management and commissioning. His project experience includes 15 new water reclamation and wastewater facilities, 4 groundwater treatment projects, 300 miles of sewer, potable water and recycled water pipeline designs, 15 pump stations, 12 groundwater wells and 10 reservoirs and 45 master plans for water, sewer and recycled water.

Key Experience

- Facilitator and technical advisor for multiple Planning and infrastructure Projects
- Assisted clients with over Urban Water Management Plans in 2010 and 2015.
- Worked with a significant amount of MWDOC's member agencies

EDUCATION:
California State
University Long
Beach, CA
B.S., Civil
Engineering

PROJECT EXPERIENCE

- 2015 UWMP, City of Alhambra, CA Project Manager
- 2015 UWMP, City of Azusa, Project Manager
- 2015 and 2020 UWMPs and 2020 Risk & Resilience Assessment, and Emergency Response Plan, Crescenta Valley Water District, Project Manager
- 2015 and 2020 UWMPs and 2020 Risk & Resilience Assessment, and Emergency Response Plan, Foothill Municipal Water District, Project Manager
- 2015 UWMP City of Glendale, Project Manager
- 2015 and 2020 UWMP, 2020 and 2020 Risk & Resilience Assessment, and Emergency Response Plan, Lincoln Avenue Water Company, Project Manager
- 2015 UWMP City of Lomita, Project Manager
- 2015 and 2020 UWMP, 2020 and 2020 Risk & Resilience Assessment, and Emergency Response Plan, Rubio Canyon Land & Water Association, Project Manager
- 2015 UWMP City of San Fernando, Project Manager
- 2015 UWMP City of San Gabriel Valley Municipal Water District, Project Manager
- 2015 UWMP City of Santa Monica, Project Manager
- 2015 UWMP City of Sierra Madre, Project Manager
- 2015 UWMP City of Torrance, Project Manager
- 2015 and 2020 UWMP, 2020 Risk & Resilience Assessment, and Emergency Response Plan, Valley Water Company

REGISTRATION:
Engineer in
Training
California

CRESCENTA VALLEY WATER DISTRICT

Project Manager for a preliminary feasibility study to use recycled water at Los Angeles County's Two-Strike Park.

Prepared plans for Crescenta Valley Water District's Well No. 2 at Ordunio Reservoir. The project consists of a new 150 gpm submersible pump and motor for Well No. 2, onsite piping, a chlorine feed system using sodium hypochlorite (NAOCL), a nitrate removal treatment facility (by APT Water), upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system (SCADA), pavement and other on-site improvements. **This project received awards from American Council of Engineering Companies, American Public Works Association, American Society of Civil Engineers and placed 2nd for the Association for California Water Agencies Clair A. Hill Agency Award for Excellence.**

BOY SCOUTS OF AMERICA – GREATER LOS ANGELES AREA COUNCIL

- Project Manager for the Trask Scout Reservation surface water treatment plan. Coordination of the development of the plans, estimate, and specifications for the Trask Scout Reservation (Monrovia, CA) Water System Rehabilitation and Enhancement Project to satisfy stringent water treatment regulations and standards. The project includes implementation of a new Water Treatment Plant (WTP) along with other significant improvements such as pumps, cartridge filters, UV system, chlorine/disinfection, new treatment housing, backup generator, grading, two (2) – 50,000 steel tanks, fire hydrants, environmental health, creek restoration, hiking trails, landscaping, others

ROSE HILLS MEMORIAL PARK

- Design of the recycled water retrofit for 600 acres of Rose Hills Memorial Park and Cemetery. The design included approximately 4,500 LF of 8" potable water/fire protection pipeline, 8,000 LF of 4" and 8" potable water pipeline, and modifications to the four (4) on-site wells and four (4) reservoirs. The project team is coordinating with Rose Hills staff, Upper San Gabriel Valley Municipal Water District, Los Angeles County Sanitation Districts, San Gabriel Valley Water Company, Los Angeles County Department of Public Health, and the Los Angeles County Fire Department. This project is funded by DWR Proposition 84, Round 3 – Drought Grant and MWD On-Site Recycled Water Retrofit.

Program Manager, Groundwater Reliability Improvement Program (GRIP) Conceptual Level Study, Water Replenishment District (WRD), Upper San Gabriel Valley Municipal Water District (USGVMWD), County Sanitation District of Los Angeles County (CSDLAC), CA.

- Mr. Robinson served as project manager and was responsible for the development of a Conceptual Level Study on the \$50M Advanced Water Treatment Plant (AWTP) and distribution of product water to spreading basins. The Conceptual Level Study evaluated San Jose Creek Water Reclamation Plant design flows, effluent withdrawal, site constraints. The study also evaluated property ownership and coordination, project water distribution, and a financial analysis. Mr. Robinson's responsibilities included overall project management, meeting coordination, budget, and Partnership coordination. Mr. Robinson's responsibilities also included the evaluation of multiple technologies, including microfiltration (MF), reverse osmosis (RO), and ultraviolet (UV) for further treatment of Title 22 recycled water for discharge into the San Gabriel River.

Program Manager, San Jose Creek Water Reclamation Facility Effluent Treatment Feasibility Study, Upper San Gabriel Valley Municipal Water District (USGVMWD), El Monte, CA.

- Mr. Robinson served as project manager for this \$25M project. Responsibilities included the evaluation of applicable regulations, pollutant identification, and project feasibility, which included cost components, cost estimate, cost analysis, and Triple Bottom Line cost-benefit analysis. Mr. Robinson's responsibilities also included the evaluation of multiple technologies, including microfiltration (MF), reverse osmosis (RO), and ultraviolet (UV) for further treatment of Title 22 recycled water for discharge into the San Gabriel River. The AWTF evaluation included evaluation of pollution prevention program and layout of a 12-mgd facility on limited space at the San Jose Creek Water Reclamation Facility.

Technical Advisor, Clearwater Master Facilities Plan, CSDLAC, Los Angeles, CA.

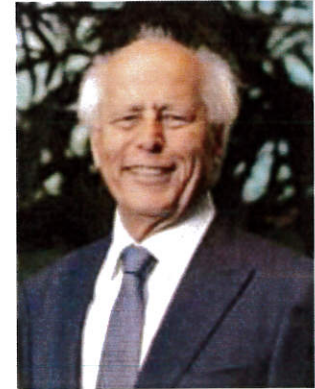
- Mr. Robinson reviewed the permitting, regulations, and recycled water discussions prepared under the \$0.5B Clearwater Program. The CSDLAC will prepare the Master Facilities Plan (MFP), an associated Environmental Impact Report/Environmental Impact Statement (EIR/ EIS), design facilities recommended by the MFP, and ultimately construct these facilities. The project is currently in the alternatives formulation and evaluation phase. When the Draft Facilities Plan document is completed, the content will be familiar to the CSDLAC stakeholders that have actively participated in the consideration of key planning issues.

SHAHNAWAZ AHMAD, P.E., QSD QA/QC

Mr. Ahmad established SA Associates in 1989, creating a civil engineering firm focused on city, county and municipal agencies. Mr. Ahmad has over 40 years of experience.

Mr. Ahmad serves as principal-in-charge and/or project manager for projects related to water and sewer system master planning; water resources; water supply and treatment; water reuse; wastewater collection, treatment, and disposal; storm drainage; design of water and wastewater treatment plants, water pipelines, sewers, pumping stations, wells, storage reservoirs, and water reclamation systems; studies of water and wastewater treatment processes; and industrial waste problems.

Mr. Ahmad has prepared or is currently preparing Urban Water Management Plans and Urban Water Shortage Contingency Plans as listed in the Project Experience table.



PROJECT EXPERIENCE

City/Agency	Urban Water Management Plan							Urban Water Shortage Contingency Plan			
	Year→	1990	1995	2000	2005	2010	2015	2020	1990	1995	2000
Arcadia	√								√		
Alhambra							√				
Azusa					√	√					
Beverly Hills					√	√					
Covina			√								√
Crescenta Valley Water District							√	√			
Foothill Municipal Water District							√	√			
Glendale							√				
La Palma	√	√	√	√					√	√	√
Lincoln Avenue Water Company							√	√			
Lomita						√	√				
Lynwood						√					
Pomona	√	√							√	√	
Rialto						√					
Rubio Cañon Land and Water Association							√	√			
San Fernando			√	√	√	√					√
San Gabriel Valley Water Municipal District							√				
Santa Monica						√	√				
Sierra Madre							√				
Torrance		√				√	√			√	
Valley Water Company							√	√			
Castaic Lake Water Agency/Newhall County Water District, Santa Clarita Water Company/Valencia Water Company			√								√

EDUCATION:

University of Karachi, Pakistan,
B.E., Civil Engineering
University of California,
Berkeley, M.S., Sanitary
Engineering

REGISTRATION:

Registered Civil Engineer,
California, No. 23712

MEMBER:

American Academy of
Environmental Engineers,
Diplomate
American Public Works
Association
American Society of Civil
Engineers
American Water Works
Association
California Water Environment
Association
Southern California Water
Utilities Association
Water Environment Fed

BOY SCOUTS OF AMERICA – GREATER LOS ANGELES AREA COUNCIL

Currently preparing plans, estimate, and specifications for the Trask Scout Reservation (Monrovia, CA) Water System Rehabilitation and Enhancement Project to satisfy stringent water treatment regulations and standards. The project includes implementation of a new Water Treatment Plant (WTP) along with other significant improvements such as pumps, cartridge filters, UV system, chlorine/disinfection, new treatment housing, backup generator, grading, two (2) – 50,000 steel tanks, fire hydrants, environmental health, creek restoration, hiking trails, landscaping, others.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

Prepared plans, specifications, and cost estimates for The Recycled Water System Extension in the City of South Gate, CA. This Project consists of the construction of approximately 24,600 LF of recycled pipeline varying in diameter between 8" & 20". In addition, approximately 3,400 LF of pipeline will be constructed in California Avenue north from Southern Avenue to South Gate City Hall and then to South Gate High School.

CRESCENTA VALLEY WATER DISTRICT

Prepared plans for Crescenta Valley Water District's Well No. 2 at Ordunio Reservoir. The project consists of a new 150 gpm submersible pump and motor for Well No. 2, onsite piping, a chlorine feed system using sodium hypochlorite (NAOCL), a nitrate removal treatment facility (by APT Water), upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system (SCADA), pavement and other on-site improvements. **This project received multiple awards which include: the American Council of Engineering Companies Project of the Year Award in February, 2019; second place for the 2019 Clair A. Hill Agency Award for Excellence by the Association of California Water Agencies; ASCE MLAB LA Section Award; and APWA Southern California BEST Award in 2019.**

CITY OF INGLEWOOD

Prepared plans for the Water Main Pipeline Improvement Plans Phase V Project. The project involved the installation of new 8-inch ductile iron pipe main in 2nd Avenue, 3rd Avenue, 4th Avenue, and 5th Avenue from Arbor Vitae Street to Manchester Boulevard. The total length of pipe installed was 9,994 linear feet.

KINNELOA IRRIGATION DISTRICT

Prepared plans for the East-West Tank Connector Pipeline Project. The project involves improving the reliability and service of the District's water distribution system by connecting the distribution system of its East Tank and West Tank Reservoirs with a 12-inch water line. The project also involved the installation of a 4" DIP main alongside the 12" DIP main in order to abandon an existing 4-inch waterline that runs through private properties. Mr. Roesch Also performed the utility research, coordinated with utility companies within the project vicinity.

CITY OF MONTEREY PARK

Prepared plans and specifications for the water and sewer mains along Atlantic Boulevard. The proposed sewer main is from W. Hellman Avenue to Garvey Avenue with a length of approximately 2,700 LF and shall be 12" Vitrified Clay pipe (VCP).

ROSE HILLS MEMORIAL PARK

Design of the recycled water retrofit for 600 acres of Rose Hills Memorial Park and Cemetery. The design included approximately 4,500 LF of 8" potable water/fire protection pipeline, 8,000 LF of 4" and 8" potable water pipeline, and modifications to the four (4) on-site wells and four (4) reservoirs. The project team is coordinating with Rose Hills staff, Upper San Gabriel Valley Municipal Water District, Los Angeles County Sanitation Districts, San Gabriel Valley Water Company, Los Angeles County Department of Public Health, and the Los Angeles County Fire Department. This project is funded by DWR Proposition 84, Round 3 – Drought Grant and MWD On-Site Recycled Water Retrofit.

CITY OF SIERRA MADRE

Currently preparing plan and specifications for the City's 2020 Water Main Design Program to replace 21 segments of approximately 20,300 ft. of steel pipes with PVC pipe.

JORGE LOVO, P.E., LEED G.A., QSD/QSP Engineer

Mr. Lovo has over 19 years of experience designing and managing a variety of water-related projects and programs ranging from water, wastewater, recycled water, and storm water facilities including conveyance, water quality & treatment, pump stations, and storage. Providing technical leadership on small to large sized projects; supporting teams winning new business; interacting with clients, agencies and other consulting firms; preparing detailed engineering calculations, CAD drawings, estimates, master planning, facilities condition assessment, construction support, preparation of plans, specifications and others documents for permitting and construction.



PROJECT EXPERIENCE

2020 URBAN WATER MANAGEMENT PLANS

Currently conducting research and preparing data for the 2020 Urban Water Management Plans for the following agencies:

- Crescenta Valley Water District
- Foothill Municipal Water District
- Lincoln Avenue Water Company
- Rubio Canon Land and Water Assn.
- Valley Water Company

2015 URBAN WATER MANAGEMENT PLANS

Prepared the 2015 Urban Water Management Plan for the City of Glendale.

CITY OF ALHAMBRA

Prepared PS&E documents for the construction of the Main Street Sewer Replacement Project. The City of Alhambra's replaced approximately 1,900 linear feet of existing 8-inch sewer main in Main Street (Bushnell Ave. to Atlantic Blvd.) with 12-inch diameter extra strength vitrified clay pipe (VCP) sewer, thereby eliminating existing deficiencies in hydraulic capacity in these reaches of sewer and providing adequate capacity for ultimate flows based on the City's Sewer Master Plan.

BOY SCOUTS OF AMERICA – GREATER LOS ANGELES AREA COUNCIL

Currently preparing plans, estimate, and specifications for the Trask Scout Reservation (Monrovia, CA) Water System Rehabilitation and Enhancement Project to satisfy stringent water treatment regulations and standards. The project includes implementation of a new Water Treatment Plant (WTP) along with other significant improvements such as pumps, cartridge filters, UV system, chlorine/disinfection, new treatment housing, backup generator, grading, two (2) – 50,000 steel tanks, fire hydrants, environmental health, creek restoration, hiking trails, landscaping, others.

CITY OF ANAHEIM

Prepared plans and specifications for Water Main Replacement Projects on Pepper Creek Way, Fern Haven Lane, and Hadrians Crescent to replace approximately 1,500 ft. of existing cast iron pipe (CIP) to polyvinyl chloride (PVC) pipe along various streets within Anaheim Hills. The pipes were installed between 1960s and 1970s and are in need of replacement due to external corrosion of the pipeline. As a result, the corrosion causes numerous main breaks rendering water loss.

Prepared plans and specifications for an 8" PVC Water Main Replacement in Baja Dr. between Palo Alto Dr. & Pueblo Pl., and Solomon Dr. between Arno Crescent St. & Camino Pinzon, with an approximate length of 1,557 ft.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

Prepared plans, specifications, and cost estimates for The Recycled Water System Extension in the City of South Gate, CA. This Project consists of the construction of approximately 24,600 LF of recycled pipeline varying in diameter between 8" & 20". In addition, approximately 3,400 LF of pipeline will be constructed in California Avenue

EDUCATION:

University of Hawaii,
B.S. Civil Engineering

REGISTRATION:

Registered Civil Engineer,
California
No. C75632
Registered Civil Engineer,
Canada
Board of Professional
Engineers

CERTIFICATION:

LEED Green Associates –
Green Building Certification
Institute,
ID No. 10779963
Construction Management,
University of Quebec,
Canada
Professional Studies in
Technique of
Architecture, College of Old
Montreal

Qualified SWPPP Developer
(QSD), Qualified SWPPP
Practitioner (QSP)
Certificate No. 25596

north from Southern Avenue to South Gate City Hall and then to South Gate High School. Shorter segments on Tweedy Blvd. (1,900 FL) and Sequoia Dr (495 LF) are also included. The proposed Recycled Water main will be crossing the Alameda Corridor (ACTA) at Southern Ave/Alameda St. and at Alameda St./Tweedy Blvd. This new system extension will serve South Gate Park, State Street Park, South Gate Middle School, Stanford Avenue Park, American Apparel, Koos Manufacturing Co., South Gate City Hall, South Gate High School, and South East High School.

CRESCENTA VALLEY WATER DISTRICT

- Conducted a preliminary feasibility study to use recycled water at Los Angeles County's Two-Strike Park.
- Prepared plans for Crescenta Valley Water District's Well No. 2 at Ordunio Reservoir. The project consists of a new 150 gpm submersible pump and motor for Well No. 2, onsite piping, a chlorine feed system using sodium hypochlorite (NAOCL), a nitrate removal treatment facility (by APT Water), upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system (SCADA), pavement and other on-site improvements. **This project received multiple awards which include: the American Council of Engineering Companies Project of the Year Award in February, 2019; second place for the 2019 Clair A. Hill Agency Award for Excellence by the Association of California Water Agencies; ASCE MLAB LA Section Award; and APWA Southern California BEST Award in 2019.**

CITY OF HUNTINGTON BEACH

- Provided design services for the replacement of water valves in approximately 50 separate locations throughout the City's water system. Over 50% of those locations are expected to be closer to the coast, in area of low elevations where groundwater may be encountered and the other 50% will be located inland. In addition to restoring valve operation, the City will require the construction contractor to carefully remove and bag asbestos cement pipe from each of these valve locations, to collect field data, to collect soil samples, and to store at a location identified by the City for future analysis to determine remaining useful life of ACP as part of the City's Asset Management Program. The valve sizes will be 6" to 12" and will be in-line valves with no vaults.

CITY OF MONTEREY PARK

- Currently preparing plans and specifications for the water and sewer mains along Atlantic Boulevard. The proposed sewer main is from W. Hellman Avenue to Garvey Avenue with a length of approximately 2,700 LF and shall be 12" Vitrified Clay pipe (VCP).

ROSE HILLS MEMORIAL PARK

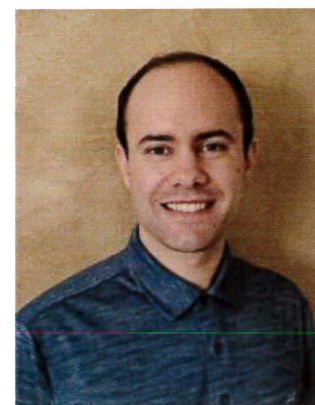
- Designed the recycled water retrofit for 600 acres of Rose Hills Memorial Park and Cemetery. The design included approximately 4,500 LF of 8" potable water/fire to the four (4) on-site wells and four (4) reservoirs. The project team is coordinating with Rose Hills staff, Upper San Gabriel Valley Municipal Water District, Los Angeles County Sanitation Districts, San Gabriel Valley Water Company, Los Angeles County Fire Department. This project is funded by DWR Proposition 84, Round 3 – Drought Grant and MWD On-Site Recycled Water Retrofit.

CITY OF WHITTIER

- Designed the replacement of a water main in the uptown business district, along Comstock Avenue between Hadley Avenue and Wardman Avenue, for an approximate length of 2,000 ft., upgrading a 6" cast iron line to the 12" ductile iron pipe to provide sufficient flow within the area as well as for future improvements.
- Designed the replacement of a water main along Beverly Boulevard between Palm Avenue and Citrus Avenue to replace an aging water main with an approximate length of 4,450 ft. The existing 6" cast iron water main will be replaced with an 8" ductile iron pipe. The suggested design will minimize construction and maintenance costs by protecting the existing parkway and pine trees, and providing better access for maintenance of the proposed main.

ADAM ROESCH, E.I.T., CPSWQ, QSD/QSP Engineer

Mr. Roesch serves as an engineer for various projects, including water main, wells, sewer, storm, & street projects. Due to his knowledge of engineering principles, Mr. Roesch provides valuable engineering assistance to SA Associates. Also, due to his past and part-time experience in environmental engineering/water quality, Mr. Roesch provides valuable technical assistance, especially in areas related to NPDES permitting.



PROJECT EXPERIENCE

2020 URBAN WATER MANAGEMENT PLANS

Currently conducting research and preparing data for the 2020 Urban Water Management Plans for the following agencies:

- Crescenta Valley Water District
- Foothill Municipal Water District
- Lincoln Avenue Water Company
- Rubio Canon Land and Water Assn.
- Valley Water Company

2015 URBAN WATER MANAGEMENT PLANS

Prepared the 2015 Urban Water Management Plans for the following agencies:

- | | |
|-------------------------------------|--|
| • City of Alhambra | • City of San Fernando |
| • City of Azusa | • San Gabriel Valley Municipal Water Dist. |
| • Crescenta Valley Water District | • City of Santa Monica |
| • Foothill Municipal Water District | • City of Sierra Madre |
| • Lincoln Avenue Water Company | • City of Torrance |
| • City of Lomita | • Valley Water Company |
| • Rubio Canon Land & Water Assn | |

EDUCATION:

California State University, Long Beach, B.S. Civil Engineering

REGISTRATION:

Engineer in Training, California

Certified Professional in Storm Water Quality (CPSWQ), Certificate No. 1022

Qualified SWPPP Developer (QSD), Qualified SWPPP Practitioner (QSP), Certificate No. 25508

SOFTWARE:

Microsoft Office
Adobe
Autodesk (AutoCAD)

CITY OF ANAHEIM

Prepared plans and specifications for Water Main Replacement Projects on (1) Pepper Creek Way, (2) Fern Haven Lane, and Hadrians Crescent (Project) to replace approximately 1,500 ft. of existing cast iron pipe (CIP) to polyvinyl chloride (PVC) pipe along various streets within Anaheim Hills. The pipes were installed between 1960s and 1970s and are in need of replacement due to external corrosion of the pipeline. As a result, the corrosion causes numerous main breaks rendering water loss.

Prepared plans and specifications for the 8" Water Main Replacement in Country Glen Way for the replacement of 5,300 ft. of 6 & 8-inch ductile iron pipe and 6 & 8-inch polyvinyl chloride (PVC) pipe. Prepared the as-built plans.

CITY OF ARCADIA

Assisted with preparing plans for the Orange Grove Disinfection System Upgrade Project. The project involved the installation of new DIP to connect the existing piping with three existing reservoirs. The project also involved the installation of a chlorine injector assembly, nitrate analyzers, drainage pipes, and concrete removal and replacement.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

Provided design services for the construction of approximately 24,600 ft. of new 8" to 20" recycled water main located in segments of Southern Avenue, Alameda St., Hildreth Ave and California Ave. to South Gate City Hall, and State St. The new pipeline will connect to an existing 12-inch recycled water pipeline in Southern Ave., in the vicinity of Park Ave., west of Atlantic Ave. The system extension will allow for the supply of recycled water to four schools, three parks, two manufacturing companies, a recreation center, & South Gate City Hall.

CITY OF CHINO

Prepared plans & specifications for the Quadrant I Water Main Replacement Project which consisted of 10,940 ft. of 8" PVC pipe to improve the existing water system. In addition, the project consisted of the replacement or reconnection of existing service laterals and reconnections to the existing water mains

CRESCENTA VALLEY WATER DISTRICT

- Assisted with preparing plans for Crescenta Valley Water District's Well No. 2 at Ordunio Reservoir. The project consists of a new 150 gpm submersible pump and motor for Well No. 2, onsite piping, a chlorine feed system using sodium hypochlorite (NAOCL), a nitrate removal treatment facility (by APT Water), upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system (SCADA), pavement and other on-site improvements. **This project received multiple awards which include: the American Council of Engineering Companies Project of the Year Award in February, 2019; second place for the 2019 Clair A. Hill Agency Award for Excellence by the Association of California Water Agencies; ASCE MLAB LA Section Award; and APWA Southern California BEST Award in 2019.**

CITY OF INGLEWOOD

- Prepared plans for the Water Main Pipeline Improvement Plans Phase V Project. The project involved the installation of new 8-inch ductile iron pipe main in 2nd Avenue, 3rd Avenue, 4th Avenue, and 5th Avenue from Arbor Vitae Street to Manchester Boulevard. The total length of pipe installed is 9,994 linear feet.

KINNELOA IRRIGATION DISTRICT

- Prepared plans for the East-West Tank Connector Pipeline Project. The project involves improving the reliability and service of the District's water distribution system by connecting the distribution system of its East Tank and West Tank Reservoirs with a 12-inch water line. The project also involved the installation of a 4" DIP main alongside the 12" DIP main in order to abandon an existing 4-inch waterline that runs through private properties. Mr. Roesch Also performed the utility research, coordinated with utility companies within the project vicinity.

LONG BEACH WATER DEPARTMENT

- Prepared plans and specifications for the East 27th Street and Via Passilo Cast Iron Water Main Replacement Project which consists of the replacement of approximately 4,000 feet of 6 & 8 inch cast iron & ductile pipe.
- Provided inspection for the Groundwater Treatment Plant Chemical Tank Replacement Project – Phase I. The project involved the replacement of three existing polyethylene chemical storage tanks located within LBWD's Groundwater Treatment Plant, along with chemical piping, vent piping, liquid level indicators, and SCADA equipment.

CITY OF MONTEREY PARK

- Currently preparing plans and specifications for the water and sewer mains along Atlantic Boulevard. The proposed sewer main is from W. Hellman Avenue to Garvey Avenue with a length of approximately 2,700 LF and shall be 12" Vitrified Clay pipe (VCP).

ROSE HILLS MEMORIAL PARK

- Assisted with the design of the recycled water retrofit for 600 acres of Rose Hills Memorial Park and Cemetery. The design included approximately 4,500 LF of 8" potable water/fire protection pipeline, 8,000 LF of 4" and 8" potable water pipeline, and modifications to the four (4) on-site wells and four (4) reservoirs. The project team is coordinating with Rose Hills staff, Upper San Gabriel Valley Municipal Water District, Los Angeles County Sanitation Districts, San Gabriel Valley Water Company, Los Angeles County Department of Public Health, and the Los Angeles County Fire Department. This project is funded by DWR Proposition 84, Round 3 – Drought Grant and MWD On-Site Recycled Water Retrofit.

CITY OF WHITTIER

- Prepared technical specifications for the Comstock Avenue Water Main Improvements Project. The project involved the removal and replacement of approximately 2,000 linear feet of 6-inch CIP with 12-inch ductile iron pipe along Comstock Avenue from Hadley Avenue to Wardman Avenue. The project also involved the repair of the existing concrete pavement.
- Designed the replacement of a water main along Beverly Boulevard between Palm Avenue and Citrus Avenue to replace an aging water main with an approximate length of 4,450 ft. The existing 6" cast iron main was replaced with 8" ductile iron pipe. The design minimizes construction and maintenance costs by protecting the existing parkway and pine trees, and provides better access for maintenance of the proposed main.

PHONG TRAN Engineer

Mr. Tran is an engineer who received his B.S. in Civil Engineering with an emphasis in hydraulic and traffic engineering. He is well versed in the use of AutoCAD and GIS software. He has gained valuable experience by assisting the senior engineers with design calculations and researching information. He is participating in the assembly of proposals and statements of qualifications. He has worked on various projects, including water mains, storm, & street projects.



PROJECT EXPERIENCE

2020 URBAN WATER MANAGEMENT PLANS

Currently conducting research and preparing data for the 2020 Urban Water Management Plans for the following agencies:

- Crescenta Valley Water District
- Foothill Municipal Water District
- Lincoln Avenue Water Company
- Rubio Canon Land and Water Assn.
- Valley Water Company

2015 URBAN WATER MANAGEMENT PLANS

Prepared the 2015 Urban Water Management Plans for the following agencies:

- | | |
|-------------------------------------|--|
| • City of Alhambra | • City of San Fernando |
| • City of Azusa | • San Gabriel Valley Municipal Water Dist. |
| • Crescenta Valley Water District | • City of Santa Monica |
| • Foothill Municipal Water District | • City of Sierra Madre |
| • Lincoln Avenue Water Company | • City of Torrance |
| • City of Lomita | • Valley Water Company |
| • Rubio Canon Land & Water Assn | |

EDUCATION:

California State University, Long Beach, B.S. Civil Engineering
California State University, Pomona, Candidate for M.S. Civil Engineering with emphasis in Environmental and Water Resources
Anticipated completion date, summer 2020

CITY OF ANAHEIM

Conducted utilities research and preparing plans for the Solomon and Baja Drives Water Main Replacement project. The work included replacement of approximately 1,557 ft. of corroded 6" & 8" cast iron pipe with 8" PVC pipe. The project also consisted of replacing fire hydrants, valves, service lines, and appurtenances.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

Provided design services for the construction of approximately 24,600 ft. of new 8" to 20" recycled water main located in segments of Southern Avenue, Alameda St., Hildreth Ave and California Ave. to South Gate City Hall, and State St. The new pipeline will connect to an existing 12-inch recycled water pipeline in Southern Ave., in the vicinity of Park Ave., west of Atlantic Ave. The system extension will allow for the supply of recycled water to four schools, three parks, two manufacturing companies, a recreation center, & South Gate City Hall.

CITY OF CHINO

Prepared plans & specifications for the Quadrant I Water Main Replacement Project which consists of 10,940 ft. of 8" PVC pipe to improve the existing water system. In addition, the project consists of the replacement or reconnection of existing service laterals and reconnections to the existing water mains.

CRESCENTA VALLEY WATER DISTRICT

Assisted with preparing plans for Crescenta Valley Water District's Well No. 2 at Ordunio Reservoir. The project consists of a new 150 gpm submersible pump and motor for Well No. 2, onsite piping, a chlorine feed system using sodium hypochlorite (NAOCL), a nitrate removal treatment facility (by APT Water), upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system (SCADA), pavement and other on-site improvements. **This project received multiple awards which include: the American Council of Engineering Companies Project of the Year Award in February, 2019; second place for the 2019 Clair A. Hill Agency Award for Excellence by the**

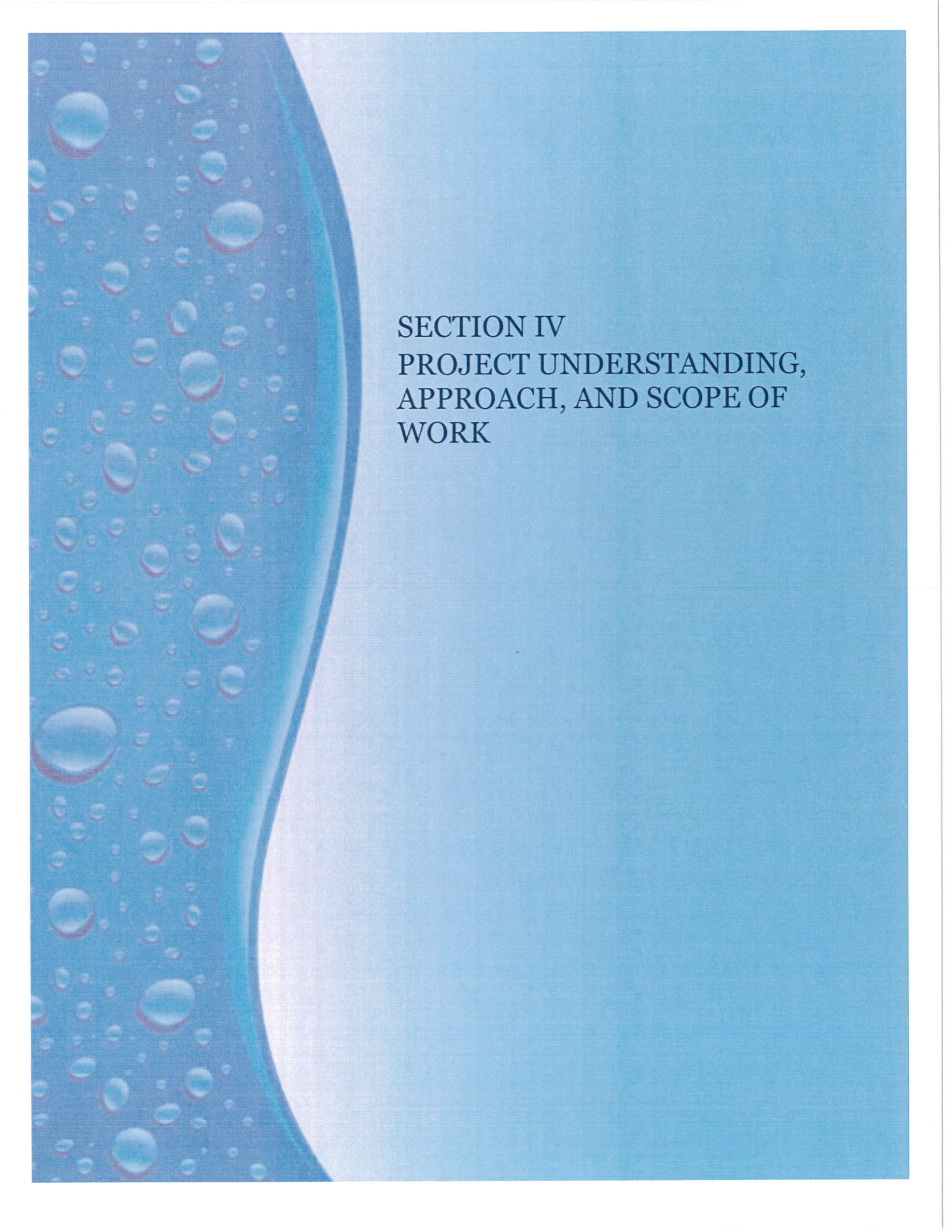
Association of California Water Agencies; ASCE MLAB LA Section Award; and APWA Southern California BEST Award in 2019.

CITY OF TORRANCE

- Van Ness Water Wells Transmission Water Main. Provided CAD Drafting, utility research and pipeline alignment of the 4-mile pipeline project. This project consisted of connecting two groundwater wells to an outflow reservoir. Utility coordination was between Caltrans, various gas companies and two railroad companies. In addition, aided the research for a CEQA developed for the project.
- Purche Avenue Storm Drain Design. Provided CAD drafting and utility research for an area storm drain system from 185th Street to Purche Avenue. This project was worked parallel with the Van Ness Wells Transmission Main.

CITY OF WHITTIER

- Conducted utilities research and preparing plans for Comstock Avenue Water Replacement Project. The work includes replacement of approximately 2,000 ft. of 6" cast iron pipe with 12" ductile iron pipe on Comstock Avenue and Hadley Avenue and Wardman Avenue. The upgrading of the water to a large size is to provide adequate fire flow and supply within the area to accommodate future developmental projects. The project also consists of replacing service laterals and tie-ins to repair the existing concrete pavement along the trench width.
- Aided in the design for the replacement of a water main along Beverly Boulevard between Palm Avenue and Citrus Avenue to replace an aging water main with an approximate length of 4,450 ft. The existing 6" cast iron water main will be replaced with an 8" ductile iron pipe. The suggested design will minimize construction and maintenance costs by protecting the existing parkway and pine trees, and providing better access for maintenance of the proposed main.



SECTION IV
PROJECT UNDERSTANDING,
APPROACH, AND SCOPE OF
WORK

SECTION IV: PROJECT UNDERSTANDING, APPROACH, AND SCOPE OF WORK

It is our understanding that the San Gabriel Valley Municipal Water District (District) is seeking engineering services for the preparation of the 2020 Urban Water Management Plan (UWMP) Update. As mandated by the State of California's Urban Water Management Planning Act, every urban water supplier providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet of water annually, is required to prepare and adopt an UWMP containing prescribed requirements. The Plan needs to be periodically reviewed at least once every five years. The 2020 UWMP will be in accordance with the 1983 Urban Water Management Planning Act and subsequent amendments, including the passage of SBx7-7 in 2009 (20%x2020 - Steinberg) by presenting water use target data that reflects the water supplier's standing on achieving the 20x2020 mandate.

An UWMP is required in order for a water supplier to be eligible for State grants and loans and drought assistance. An UWMP is considered to be a foundation document and a source of information for Water Supply Assessments (Senate Bill 610) and Written Verifications of Water Supply (SB 221). In addition, an UWMP may serve as a long-range planning document for water supply, a source of data for development of a regional water plan, and a source document for cities and counties as they prepare their General Plans. These planning documents are linked, and their accuracy and usefulness are interdependent.

As with the 2015 UWMPs, the 2020 UWMPs must have a public notification period of 60 days prior to the public hearing and are to be submitted to the California Department of Water Resources (DWR) by July 1, 2021. Per Senate Bill No. 606, Chapter 14, the deadline for submitting the 2020 UWMP has been revised from December 31, 2020 to July 1, 2021 to allow water suppliers sufficient time to incorporate 2020 reporting data required by the 20x2020 water conservation statute. We have reviewed and become familiar with DWR's Draft 2020 UWMP Guidebook that was recently released on DWR's website and have noted all changes from the 2015 UWMP Guidebook. Once the Final 2020 UWMP Guidebook becomes available on DWR's website, we will thoroughly review it and follow the revised guidelines in preparing the District's 2020 UWMP.

DISTRICT WATER SYSTEM UNDERSTANDING

The District was incorporated in 1959 and is one of 29 State Water Contractors who acquire water from the State Water Project (SWP) initiated in 1960. Water from the SWP is channeled through the District's pipelines and aqueducts to spreading grounds operated and maintained by the Los Angeles County Department of Public Works (LACDPW). From 1975 to today, the District has been importing water from Northern California to the Main San Gabriel Basin for groundwater replenishment on behalf of its four member cities: Alhambra, Azusa, Monterey Park, and Sierra Madre. The District's water service area spreads over 27 square miles and is divided into five divisions comprising of the four member cities. Currently, the District serves a population of over 200,000 people and supplies water only for groundwater replenishment. The District's water "sales" are segregated into Replacement Water deliveries under the Main Basin Judgment and cyclic storage deliveries. The District's SWP entitlement is about 28,800 acre-feet (AF), but with a reliable supply of 14,400 AF. According to the District's 2018-19 Annual Report, the District's recent water "consumption" (i.e., deliveries from SWP into Main Basin aquifers) over the past three fiscal years ranged from 24,480 AF to 29,020 AF, for an average of about 26,310 AF.

Since the District is a wholesale supplier, the provisions of SBx7-7 (Water Conservation Act of 2009) do not apply to the District; however, the District is involved in assisting its member agencies to achieve compliance with water reduction targets. Per the provisions of SBx7-7 and DWR guidelines, the target for the District's member agencies is not a strict 20%, but rather 5% from the hydrologic region target of 149 gpcd (141.5 gpcd)*. Although a 20% reduction is likely to occur anyway, we believe that it is important for the District to understand that a strict 20% is not required by SBx7-7** when assessing its member agencies' targets.

*Note: Senate Bill X7-7 requires water agencies in the State to achieve a 20% reduction in urban per capita water use by December 31, 2020. The law requires the State (DWR) to make incremental progress towards this goal by reducing per capita water use by at least 10% on or before December 31, 2015. This requirement varies by agency depending on water use efficiency and may be less than a strict 20% reduction, including a minimum 5% reduction from 5-year baseline, a 5% reduction from the hydrologic region target, or no reduction required for agencies with water use less than 100 gpcd.

**Note: SBx7-7 compliance does not include any other water reduction targets enforceable by the State of California, such as executive order B-29-15 signed by Governor Brown and enforced by the State Water Resources Control Board.

KEY UPDATES TO 2020 UWMPs

Per our recent discussions with DWR staff and our review of the Draft 2020 UWMP Guidebook and latest changes to the California Water Code* enacted by Senate Bill No. 606 and Assembly Bill No. 1668, we understand the following to be some of the key updates to the previous UWMPs:

1. Updates to Water Shortage Contingency Plan
 - Shortage contingency section of UWMP to discuss six water shortage levels corresponding to 10, 20, 30, 40, 50, and greater than 50 percent shortages.
 - New standard for indoor water use of 55 gallons per person per day.
2. Enforcements of SBx7-7
 - Agencies must provide a description in the 2020 UWMP how their water use goals of the 20% x 2020 were met. Beginning in 2021, agencies must comply with 2020 goals to be eligible for State funds. An urban retail water supplier's failure to meet those goals will establish a violation of law for purposes of any state administrative or judicial proceeding.
3. Water Losses
 - Agencies must indicate the quantity of water losses, if not already shown in UWMPs, and show whether the agency met the distribution loss standards enacted by the State Water Resources Control Board (SWRCB).
4. Strategic Planning
 - UWMPs to include a lay description of how much water the agency has on a reliable basis, how much it needs for the foreseeable future, what the agency's strategy is for meeting its water needs, and the challenges facing the agency.
5. Updates to Demand Management Measures (DMMs)
 - Narrative to be included describing the DMMs the supplier plans to use to achieve its water use objective by January 1, 2027.
6. Seismic Risk Assessment
 - UWMPs to include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.
7. Five-Year Drought Risk Assessment
 - Drought risk assessment section of UWMP to discuss reliability of each supply source during a drought lasting five consecutive water years. Drought risk assessment also to include considerations of the historical drought hydrology.
8. Climate Change
 - Description of plausible climate change impacts on projected supplies and demands to be included.
9. Energy Intensity
 - UWMPs must include description of the energy intensity of the water production and delivery system associated with each source of water.

*Note: Further updates and applicable changes to the Water Code will be incorporated upon review of DWR's Final 2020 UWMP Guidebook.

PROJECT APPROACH

Due to our past experience, we will prepare the 2020 UWMP in accordance with a work plan we have developed for preparing 2020 UWMPs. This work plan divides the project work into distinct categories, most of which can be performed simultaneously by different project team members to provide greater efficiency and value for the District. These categories are listed below:

1. Collect and Review Available Data from the District.
2. Collect and Review Available Data from Outside Agencies as necessary. Establish Personal Contacts between Outside Agencies and the District as necessary.
3. Per SBx7-7, evaluate the 2015 Calculated Baseline Water Use (previous Mid-Term Goals) and 2020 Goals*.
4. Evaluate Current Drought conditions, Current 20x2020 Standing, and Impacts of SBx7-7 on the District. Determine Requirements for meeting 2020 Goals*.
5. Prepare Draft and Final UWMP.
6. Assist the District with Advertisement, Public Outreach, Public Hearing, Board Relations (Including Attending Board Meeting).
7. Submit Adopted UWMP to DWR**.

The work involved with categories 1, 2, and 6 involve District staff assistance; however, SA Associates will attempt to minimize District staff time involvement for this work in order to create additional value for the District.

*Note: The District is a wholesale agency and as such is not directly responsible for, but is to assist in, achieving water reduction goals.

**Note: After submittal to DWR, feedback is expected concerning the content of the District's UWMP as it relates to the legal requirements of the Water Code. It is anticipated that DWR may take up to four years to provide feedback on the District's UWMP.

SCOPE OF WORK

The District's RFP provides a typical scope of services for this project. We will provide the services as described in the RFP and as supplemented below:

A. Preliminary Water System Analysis and Data Collection

Work to be performed under this work item shall include, but not be limited to, gathering all data pertinent to the preparation of the 2020 UWMP, reviewing the 2015 UWMP, conducting a kick-off meeting, establishing internal contacts with District staff, establishing contacts with outside agencies necessary to obtain additional data and assistance as it becomes necessary, and conducting a thorough review of all data received as it relates to the UWMP requirements.

B. Preparation of Draft Urban Water Management Plan/Progress Meetings with the District

This work item shall include the preparation of the 2020 UWMP per the latest requirements, and shall include the following content:

1. Describe the service area of the District. Include current and projected population in five-year increments over a 25-year period. This data will be provided by the District.
2. Identify and quantify the existing and planned sources of water available to the District over the same five-year increments as in Task B1 above.

3. Describe the groundwater basin from which the District extracts groundwater, and provide information such as the static pumping levels, water quality, extraction rate, total storage, and recharge. This data will be provided by the District.
4. Utilize the results of the most recent DWR SWP Delivery Reliability Report to describe and analyze the reliability of the SWP water supply and vulnerability to seasonal or climatic shortages (through 2065), and provide data for an average water year, a single dry water year, and multiple dry water years.
5. Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.
6. Quantify past, current, and projected water use over the same five-year increments as in Task B1, and identify the uses among water use sectors, including:
 - a. Single-family residences
 - b. Multifamily
 - c. Commercial
 - d. Industrial
 - e. Institutional and governmental
 - f. Landscape
 - g. Sales to other agencies
 - h. Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination
 - i. Agricultural
7. Describe the District's water demand management measures (DMMs). This description will include:
 - a. A description of the planned efforts of the water agency in implementing each of the following DMM categories*:
 - (1) Water Waste Prevention Ordinances
 - (2) Metering
 - (3) Conservation Pricing
 - (4) Public Education & Outreach
 - (5) Programs to assess and manage distribution system real loss
 - (6) Water conservation program coordination and staffing support
 - (7) Other DMMs*

**Note: The District is a wholesale agency and thus some of the above DMMs do not apply. Also, per our telephone discussions with DWR staff, there are fewer DMMs required in the 2020 UWMP and the focus of the text on the DMMs in the 2020 UWMPs will be on the extent of the DMMs the District is actually implementing as opposed to the description of the DMMs the District may or may not be implementing.*
 - b. A schedule of implementation for all water demand management measures proposed or described in the Plan.
 - c. A description of the methods that the District will use to evaluate the effectiveness of water demand management measures implemented or described under the Plan.
 - d. An estimate, if available, of existing conservation savings on water use within the District's service area from codes and standards, and the effect of such savings on the District's ability to further reduce demand.
 - e. Water Losses
 - (1) Indicate the quantity of water losses, if not already shown in UWMP, using American Water Works Association (AWWA) calculation method for water loss audits (Senate Bill 555), and show whether the District met the distribution loss standards enacted by the SWRCB.

- (2) Assist the District with the distribution system water loss audit report and submit to DWR along with the 2020 UWMP.
8. Evaluate each water demand management measure that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration will be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do the following:
 - a. Take into account economic and non-economic factors, including environmental, social, health, customer impact, and technological factors.
 - b. Include a cost-benefit analysis, identifying total benefits and total costs.
 - c. Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.
 - d. Include a description of the District's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.
9. Prepare a detailed description of expected future projects and programs, other than the demand management programs, that the District may implement to increase the amount of the water supply available to the District in average, single-dry, and multiple dry water years. Future projects include potential water supply improvements of the Bay Delta Conservation Plan.
10. Describe the opportunities for development of desalinated water, including ocean water, brackish water, and ground water, as a long-term supply.
11. Provide the wholesale agency with water use projections in five-year increments to 20 years or as far as data is available.
12. Prepare an Urban Water Shortage Contingency analysis, which includes the following elements:
 - a. Stages of action to be undertaken in response to water supply shortages, including up to greater than 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.
 - b. An estimate of the minimum SWP water supply available during each of the next five water years based on the driest five-year historic sequence for water supply and evaluation of drought risks based on DWR guidelines for shortage contingency.
 - c. Actions to be undertaken to prepare for, and implement during, a catastrophic interruption of water supplies, including a regional power outage, an earthquake, or other disaster.
 - d. Additional mandatory prohibitions against specific water use practices during water shortages, including prohibiting the use of potable water for street cleaning.
 - e. Consumption reduction methods in the most restrictive stages.
 - f. Penalties or charges for excessive use.
 - g. The revenue and expenditure impacts, and proposed measures to overcome those impacts.
 - h. A draft water shortage contingency resolution or ordinance.
 - i. A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.
13. Evaluate the requirements of Senate Bill No. 7* to achieve a 20% reduction in urban per capita water use by December 31, 2020**.

*Note: The District is a wholesale agency and as such is not directly responsible for, but is to assist in, achieving water reduction goals.

**Note: a 5% reduction from the hydrologic region target of 149 gpcd (141.5 gpcd) is required for District service area.

14. Provide discussion of Making Conservation a California Way of Life (Assembly Bill 1668 and Senate Bill 606) enacted in 2018 by the California State Legislature.
15. Provide information, to the extent available, on recycled water and its potential for use as a water source in the District's service area.
16. Include information, to the extent practicable, relating to the quality of existing sources of water available to the District over five-year increments over the next 25 years and the manner in which water quality affects water management strategies and supply reliability.
17. Provide an assessment of the reliability of the District's water service, which will include an assessment of the reliability of the District's water service to its' customers during normal, dry, and multiple dry water years. This water supply and demand assessment will compare the total water supply sources available to the District with the total projected water use over the next 25 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years.
18. Describe the extension of the SWP water supply contracts to 2085 administered by DWR to 29 local water agencies (SWP Contractors), including the District, for water service from the SWP.
19. Provide discussion of reduced reliance on the Delta, including coordination with other SWP Contractors for a coordinated response to the State.
20. Provide a climate change vulnerability assessment describing how the District will address the impacts of climate change in their water supplies and demands.
21. Describe the current status of endangered species Biological Opinions (BOs) and its effects on the SWP's water delivery capability.
22. Discuss the consistency of Groundwater Sustainability Plans (GSPs), required by the Sustainable Groundwater Management Act (SGMA), and local adjudications.
23. Include, to the extent available, an estimate of the amount of energy used for the following:
 - a. To extract or divert water supplies;
 - b. To convey water supplies to the water treatment plants or distribution system;
 - c. To treat water supplies;
 - d. To distribute water supplies through its distribution systems;
 - e. For treated water supplies in comparison to the amount used for nontreated water supplies;
 - f. To place water into or withdraw from storage; and
 - g. Any other energy-related information deemed appropriate
24. Include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. This will include a description of updated SWP emergency outage scenario risk and vulnerability. According to the Water Code, an agency may comply with this requirement by submitting a copy of their most recent adopted local hazard mitigation plan or multi-hazard mitigation plan to address seismic risk. Work to be performed under this work item does not include development of said mitigation plan.
25. Provide an assessment of planning activities, related to the 2020 UWMP planning effort, that anticipates new policies/regulations and sets up the region for future grant support (State and federal as appropriate).
26. Prepare a report outlining the findings, conclusions, and recommended actions pursuant to the Urban Water Management Planning Act. Two (2) hard copies and electronic copies (PDF and Word) of the Draft UWMP will be submitted to the District for review. A reproducible copy of the Final UWMP,

incorporating the District's comments, will be submitted to the District.

27. Conduct progress review meetings with District staff at the draft and final draft levels. Any additional meetings shall be held at the District's request. Due to the current COVID-19 pandemic and the uncertainty of when social distancing regulations will be lifted, it is anticipated that all meetings shall be virtual.

C. Finalization of UWMP/Coordination with Public/Submission to Department of Water Resources

Work to be performed under this work item shall include, but not be limited to, submission of the final UWMP to District staff, providing assistance to District staff in conducting a public hearing, attending said public hearing, and providing assistance to District staff for the adoption of the 2020 UWMP. Once the 2020 UWMP is adopted, we will provide assistance in submitting the approved plan to DWR and entering water use data using the DWR Water Use Efficiency Data Tool (WUEdata).

DISTRICT FURNISHED SERVICES

It is anticipated that the District will provide the following:

1. Historic and current water demands.
2. Historic and current water production/supply.
3. Information on conservation measures currently adopted and being practiced.
4. Miscellaneous data as-needed for preparation of 2020 UWMP (i.e., official service area boundaries, photographs to be included in UWMP, etc.).

QUALITY CONTROL METHODS

For this project, we have designated a Quality Control position who will thoroughly review internal drafts of the 2020 UWMP. In addition, we utilize computerized Quality Control methods by using Adobe PDF software as opposed to hard copies to check for formatting and marginal errors normally detected after printing has taken place in order to avoid internal paper waste (i.e., being "green").

Our goal is to present the District with a superior 2020 UWMP product and responsive service. To accomplish this, we apply a Project Team policy which emphasizes technical strength, professional conduct, efficiency, and communication. We will accomplish our Quality Assurance goals by adhering to review and checking procedures that correspond to our basic philosophy on quality assurance.

Our basic philosophy is described below:

- The review and checking procedure must be a systematic approach with sufficient flexibility to be workable with a wide variety of projects. The timing and level of review must be consistent with project needs.
- Responsibility for the quality of the final product rests jointly with the Project Manager and the QA/QC reviewer.
- Responsibility for scheduling review and checking rests with the Project Manager.
- All projects must be reviewed by an experienced individual not directly involved in the project, although general familiarity with the project and the client would be desirable.
- All projects must be "signed off" by the checker following review and/or checking.



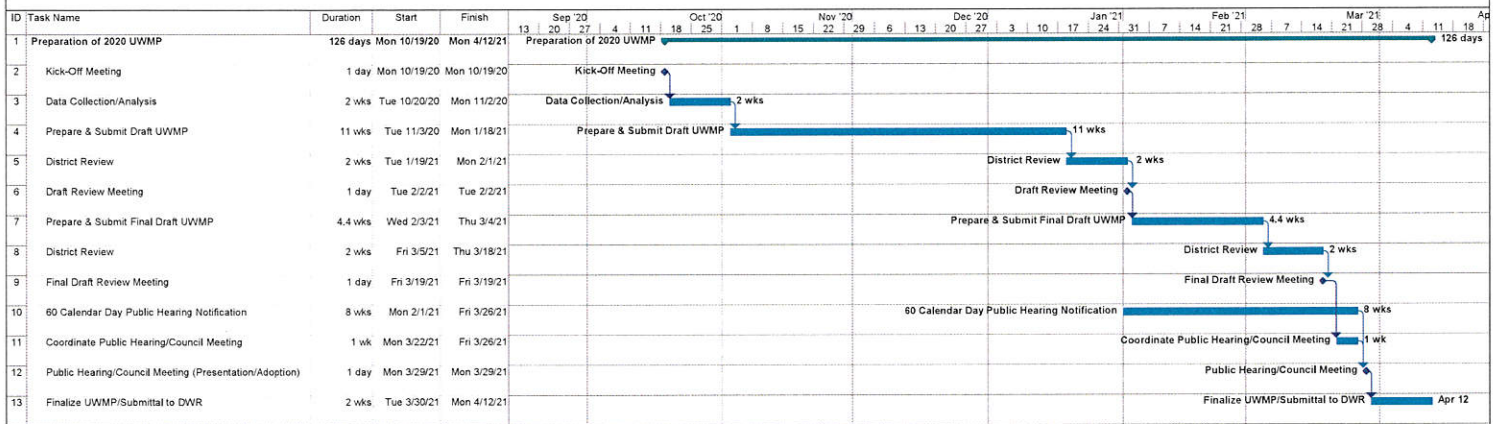
SECTION V
PROJECT SCHEDULE

SECTION V: PROJECT SCHEDULE

The assumed project start date of October 19, 2020 (after the District Board of Directors meeting on October 12, 2020) shown on our schedule coincides with an assumed six week proposal review and contract approval process (with a Notice to Proceed date in mid-October 2020). If the Notice to Proceed is issued at a different date, we will update our schedule accordingly once a kick-off meeting date has been set. Per the California Water Code, all UWMPs must be submitted to DWR no later than July 1, 2021. We understand that the District desires to be early in the 2020 UWMP preparation process in order for its' member agencies to incorporate elements from the District's UWMP into their own UWMPs. By finishing the Final Draft by early-March 2021, the District will have sufficient time to hold the necessary meetings and adopt the plan before preparing a submittal to DWR.

We have included our project schedule in MS Project format for the preparation of the District's 2020 UWMP on the following page.

**San Gabriel Valley Municipal Water District
 2020 Urban Water Management Plan Update
 Project Schedule**



SGVMWD 2020 UWMP Schedule Tue 9/8/20

Note: The above schedule is flexible and can be expedited if requested by the District.

The image features a solid light blue background. On the left side, there is a vertical, curved band containing a pattern of numerous water droplets of varying sizes, rendered in a slightly darker shade of blue. The droplets are scattered across the band, creating a textured, organic appearance. In the center-right area of the page, the text "SECTION VI" and "FEE ESTIMATE" is displayed in a dark blue, serif font, stacked vertically.

SECTION VI
FEE ESTIMATE

SECTION VI: FEE ESTIMATE

2020 URBAN WATER MANAGEMENT PLAN UPDATE FEE ESTIMATE

TASK No.	ITEM	PM	Engr.	QA/QC	Sec.	TOTAL	
						HRS	\$
PREPARE 2020 UWMP							
Internal District Work: Data Collection, Review, & Report Preparation							
1	Data Collection/Analysis	1	6	0	1	8	\$1,178
2	Prepare & Submit 1st Draft UWMP for District Staff Review	6	46	8	4	64	\$10,152
3	Prepare & Submit "FINAL" Draft UWMP for Public Hearing/Adoption	4	24	6	4	38	\$6,032
4	Finalize UWMP, Submit to DWR, Input Data to DWR WUEdata Tool	1	8	2	2	13	\$2,006
Subtotal		12	84	16	11	123	\$19,368
Coordination, Meetings, Customer Relations, Public Outreach							
1	Kick-Off Mtg & Minutes	2	2	2	1	7	\$1,208
2	Progress/Review Meetings (2)	3	3	0	2	8	\$1,196
3	Board Meeting (Public Hearing/Adoption)	3	3	0	0	6	\$1,020
4	Miscellaneous Coordination with Outside Agencies, Public, etc.	1	6	0	2	9	\$1,266
Subtotal		9	14	2	5	30	\$4,690
Direct Costs (printing, reproduction, mileage, etc.)							\$442
TOTAL NOT-TO-EXCEED FEE		21	98	18	16	153	\$24,500

HOURLY CHARGE RATE AND EXPENSE REIMBURSEMENT SCHEDULE

Position	Hourly Rates
Project Manager	\$190.00
Engineer	\$150.00
Quality Assurance/Quality Control	\$220.00
Secretary	\$ 88.00

Reimbursable In-House Costs

Photo Copies	\$ 0.15/each
Blueprints	\$ 0.50/S.F.

Other Reimbursables

Reproduction, special photograph, printing, and any other services performed by subcontractor will be billed at	cost + 15%
Postage Delivery Service, Express Mail	cost + 15%

NOTE: All rates listed above are effective to July 1, 2021



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