

# NOTICE OF SPECIAL ENVIRONMENTAL COMMITTEE MEETING

Responsible for matters of stewardship of the District's property including: Urban Water Management Plans; Water Conservation Programs; Classis Watershed Education Grants; Watershed Management; Resource Management and other environmental related matter.

**NOTICE IS HEREBY GIVEN** that the San Lorenzo Valley Water District has called a special meeting of the Environmental Committee to be held on **Thursday, October 22, 2020 9:45 am** via videoconference and teleconference.

<u>There will not be a physical location for this meeting.</u> This is a special accommodation being made in light of public health concerns due to COVID-19 and pursuant to the Governor's Executive Order N-29-20 (Order). The Order at Paragraph 3 supersedes a prior Executive Order N-25-20, and it allows local legislative bodies to hold public meetings via teleconference, without any physical meeting location.

To join the meeting click the link below, or type it into your web browser: https://global.gotomeeting.com/join/753737389

You can also dial in using your phone. (For supported devices, tap a one-touch number below to join instantly.)

United States (Toll Free): 1 866 899 4679 - One-touch: tel:+18668994679,,753737389#

United States: +1 (571) 317-3116 - One-touch: tel:+15713173116,,753737389#

Access Code: 753-737-389

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### AGENDA

- 1. Convene Meeting/Roll Call
- 2. Oral Communications

This portion of the agenda is reserved for Oral Communications by the public for items which are not on the Agenda. Please understand that California law (The Brown Act) limits what the Board can do regarding issues raised during Oral Communication. No action or discussion may

occur on issues outside of those already listed on today's agenda. Any person may address the Committee at this time, on any subject that lies within the jurisdiction of the District. Normally, presentations must not exceed five (5) minutes in length, and individuals may only speak once during Oral Communications. Any Director may request that the matter be placed on a future agenda or staff may be directed to provide a brief response.

3. Old Business: None

Members of the public will be given the opportunity to address each scheduled item prior to Committee action. The Chairperson of the Committee may establish a time limit for members of the public to address the Committee on agendized items.

4. New Business:

Members of the public will be given the opportunity to address each scheduled item prior to Committee action. The Chairperson of the Committee may establish a time limit for members of the public to address the Committee on agendized items.

- A. URBAN WATER MANAGEMENT PLAN (UWMP) Discussion and possible action by the Environmental Committee regarding the UWMP responses to the RFP. Here is a link to the 2015 UWMP <u>https://www.slvwd.com/conservation/pages/urban-water-management-plan</u> for you information.
- 5. Written Communication: None
- 6. Informational Material: None.
- 7. Adjournment

In compliance with the requirements of Title II of the American Disabilities Act of 1990, the San Lorenzo Valley Water District requires that any person in need of any type of special equipment, assistance or accommodation(s) in order to communicate at the District's Public Meeting can contact the District Office at (831) 338-2153 a minimum of 72 hours prior to the scheduled meeting.

Agenda documents, including materials related to an item on this agenda submitted to the Committee after distribution of the agenda packet, are available for public inspection and may be reviewed at the office of the District Secretary, 13060 Highway 9, Boulder Creek, CA 95006 during normal business hours. Such documents may also be available on the District website at <u>www.slvwd.com</u> subject to staff's ability to post the documents before the meeting.

### Certification of Posting

I hereby certify that on October 16, 2020 I posted a copy of the foregoing special agenda in the outside display case at the District Office, 13060 Highway 9, Boulder Creek, California, said time being at least 24 hours in advance of the meeting of the Environmental Committee of the San Lorenzo Valley Water District in compliance with California Government Code Section 54956.

Executed at Boulder Creek, California, on October 16, 2020.

Holly B. Hossack, District Secretary San Lorenzo Valley Water District

### EVALUATION SCORESHEET

Evaluator:

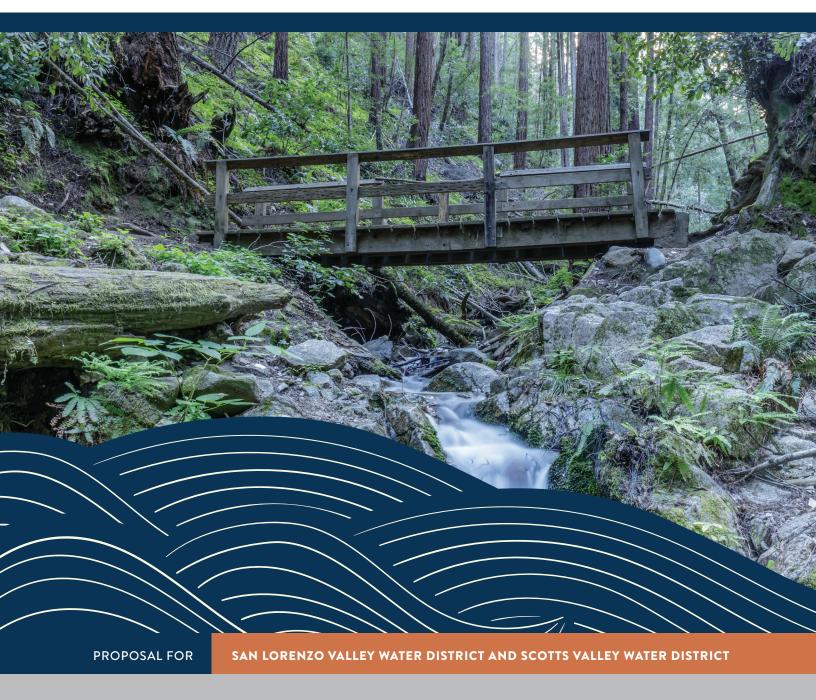
2020 UWMP for SLVWD and SVWD

Firm: Water Systems Consulting

Required Information	Check (Pass/Fail)	Comments	
<ol> <li>Executive Summary Include a brief overview of the specific approach proposed to meet the needs of SLVWD and SVWD. Summarize the contents of the proposal in a clear and concise manner.</li> </ol>			
2. Project Description Explain the objective of the project and how you propose to accomplish the goals. Describe the services and deliverables to be provided. Include a statement on what makes your company uniquely qualified.			
3. Contact Information Legal name and address of the company. Legal form of company and parent company if applicable. Name and title of the contact person. Number of staff and discipline/job title of each. Subconsultants if any.			
4. Organization and Experience of the Team Describe proposed team organization, experience of the personnel, project management approach, responsibilities, lines of communication. Describe a proposed schedule an company's capacity to perform the work within the time limitations.			
5. Experience and Past Performance Include a summary of the past experience and performance of the Project Manager. Describe the company's past experience and performance on similar proejcts.			
<ol> <li>Creative Alternatives Discuss any creative solutions to meet the project objectives.</li> </ol>			
7. Proposed Total Cost and Fee Schedule Proposed fee must be organized into tasks, must include an estimated timeline for completion of each task and subtask, and must include hourly rates fo the all staff.			
8. Contractual Sope of Services showing all faces of work. Provide a certification that it has fully read the RFP and takes no exceptions If the consultant does take exceptions, specify the portion of of the RFP.			
Completeness of the SOQ/Proposal (Score - 1 point for each Pass)			
Evaluation Criteria	Score (Low 1 - High 10)	Comments	Weighted Score
1. Project Description (20%)			
2. Organization and Experience of Project Team (20%)			
3. Past Performance, Including Cost and Schedule Control (25%)			
4. Creative Alternatives (10%)			
5. Proposed Fee (15%)			
6. Overall Quality of the Proposal (10%)			
Evaluation Total Weighted Score			0.00









# 2020 URBAN WATER MANAGEMENT PLAN



### Ms. Piret Harmon

Scotts Valley Water District 2 Civic Center Drive Scott Valley, CA 95066

### WSC Main Office

805 Aerovista Place, Suite 201 San Luis Obispo, CA 93401 Phone: (805) 457-8833

### WSC's Project Manager

Spencer Waterman (805) 457-8833, ext. 102 swaterman@wsc-inc.com

### WSC's Principal in Charge

Kirsten Plonka <sup>PE</sup> (858) 397-2617, ext. 304 kplonka@wsc-inc.com

### Dear Ms. Harmon,

The Scotts Valley Water District (SVWD) and the San Lorenzo Valley Water District (SLVWD) (together, the Districts) have a great opportunity, through the development of the 2020 Urban Water Management Plan (UWMP), to create a compliant UWMP document that clearly establishes and communicates your progress toward a sustainable and resilient water future. Water Systems Consulting, Inc. (WSC) is excited to have the opportunity to present our team and approach that will deliver a compliant UWMP for the Districts. Based on our understanding of the Districts' priorities and objectives, WSC will provide a comprehensive approach that delivers:

**Understanding of Regional Resources and Vision**. We completed SLVWD's 2015 UWMP and are preparing a 2020 UWMP and planning documents for several local water providers, including SVWD's 2020 Consolidated Capital Improvement Plan (CIP), Soquel Creek Water District and the Santa Margarita Groundwater Agency. This relevant regional work, coupled with our strong understanding of your data, resources, and vision enables us to efficiently prepare your joint 2020 UWMP. We will apply our knowledge and familiarity with your resources and systems to deliver a UWMP that accurately reflects both Districts' current and future conditions.

**Trusted Guidance**. WSC is participating in the California Department of Water Resources (DWR) UWMP Guidebook Workgroup to help develop the 2020 UWMP Guidebook. We understand the new requirements because we are helping to create them. Using this expertise, we will guide you through new DWR requirements and help you achieve your objectives and DWR compliance.

**Effective Collaboration and Communication**. WSC will foster effective collaboration and maintain timely communication by leveraging technology, including virtual meetings and online collaboration platforms, to drive efficiency, accountability, and transparency.

We are excited for the opportunity to work alongside the Districts and to help achieve your 2020 UWMP objectives. We welcome the opportunity to discuss our proposal with you in more detail, and to answer any questions you may have. Please contact our Project Manager, Spencer Waterman, or our Principal in Charge, Kirsten Plonka, with any questions. Thank you for this opportunity, and we look forward to your response.

Sincerely, Water Systems Consulting

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Spencer Waterman Project Manager

Kusten Plorku

Kirsten Plonka PE Principal in Charge

### **Executive Summary**

# Innovative, Experienced, & Committed

WSC's team brings unmatched local and statewide experience and expertise based on previous and ongoing local work for the districts, as well as preparation of more than 50 UWMPs across the state.

Based on our understanding of the Districts' priorities and needs, WSC will provide the Districts with:

# 1

UNDERSTANDING OF REGIONAL RESOURCES AND VISION

Our UWMP and planning work with local suppliers will enable us to apply our knowledge and familiarity to your resources and systems to deliver a UWMP that accurately reflects both Districts' current and future conditions.



### TRUSTED GUIDANCE

We will guide you through new DWR requirements and help you achieve your objectives as we update demand, supply, 5-year DRA, and WSCP analyses using our expertise from participating on the 2020 UWMP Guidebook Workgroup.

### EFFECTIVE COLLABORATION AND COMMUNICATION

We will leverage our experience to foster effective collaboration and maintain timely communication by utilizing technology, including virtual meetings and online collaboration, to drive efficiency, accountability and transparency.



### Our Understanding of Your Needs

This joint UWMP signals a renewed partnership between SVWD and SLVWD that will help to create consistency across multiple planning efforts. The Districts are seeking a consultant who can deliver a compliant UWMP that efficiently addresses new requirements while positioning the Districts for future required reporting.

These forthcoming requirements have impacts that need to be identified, analyzed, and understood within a practical range of possibilities to inform the Districts' water use efficiency and supply reliability initiatives policies and management.

### Our Approach to Achieving Your Goals

We will draw upon our extensive experience developing UWMP updates throughout the state to provide you value and efficiency at each step in the process

We will draw upon our previous work in the region to lead an insightful process that easily integrates with your existing and future planning efforts. WSC and Montgomery and Associates can leverage first-hand knowledge of factors driving demand and supply reliability. Our team will collaborate with both Districts' staff to efficiently collect data and minimize staff time.

Our detailed approach and scope of work for the 2020 UWMP are included in the following pages.

# **Collaborative & Efficient 2020 UWMP Compliance**





# Understanding and Approach

# **Project Understanding**

The Districts have a long history of integrated water resources planning that exceeds state mandated requirements. The planning efforts include robust resources and facilities plans for water, sewer, and recycled water systems. The Districts have teamed to hire a consultant to prepare their joint 2020 UWMP. The UWMP will build from, and integrate with, the other important planning efforts to meet DWR's requirements while presenting a cohesive and coherent view of the Districts' 25-year plan for managing water supplies and demand.

## **Project Approach**

WSC will prepare a complete and high-quality joint or coordinated 2020 UWMP that meets DWR's requirements, integrates with the Districts' related planning efforts, and provides a clear and well-communicated view of the Districts' 25-year water resources plan.

# WSC's Approach Delivers:

**Understanding of Regional Resources and Vision.** Through ongoing work with both Districts, WSC understands what has changed since 2015, and we will apply our knowledge and familiarity with your resources and systems to deliver a UWMP that accurately reflects both Districts' current and future conditions. We are preparing a 2020 UWMP and planning documents for several local water providers, including SVWD, Soquel Creek Water District, and the Santa Margarita Groundwater Agency. This relevant regional work, coupled with a strong understanding of your data, resources, and vision, enables us to efficiently prepare your joint 2020 UWMP.

**Trusted Guidance.** WSC is participating in the DWR UWMP Guidebook Workgroup to help develop the 2020 UWMP Guidebook. We understand the new requirements because we are helping to create them. Using this expertise, we will guide you through new DWR requirements and help you achieve your objectives and DWR compliance as we update demand, supply, 5-year Drought Risk Assessment (DRA), and Water Shortage Contingency Plans (WSCP) analyses.

**Effective Collaboration and Communication.** Communication and collaboration are the foundation of our work. Through our relationships with both Districts, WSC will foster effective collaboration and maintain timely communication by leveraging technology, including virtual meetings and online collaboration, to drive efficiency, accountability and transparency. Our integrated engineering and communications teams lead the water industry in outreach and communication and can provide value added services to help the Districts communicate the results of this work to customers, elected officials, executive management, staff, and stakeholders.

### Key Success Factors

Based on our understanding of the District's needs for this project, we have identified the following factors that define project success:



Meet all of DWR's requirements for a 2020 UWMP

Meet internal schedule deadlines and deliver a complete, highquality plan to DWR by July 1, 2021

Engage with both water districts to prepare plans that demonstrate coordination and consistency



V

Demonstrate the value of the Districts' water assets and the resiliency provided to the community

Update demand projections to reflect new data sets and climate conditions



Provide an effective outreach and communication process that meets DWR's requirements and enhances customer relations



Inform and engage both Districts' staff without overburdening their time

# Understanding of Regional Resources & Vision

### An Informed and Engaged Partner You Can Trust

Through our work together on SLVWD's 2015 UWMP and SVWD's 2020 Consolidated CIP, WSC has gained insight into each Districts' infrastructure, resources, and vision. WSC also brings an in-depth understanding of the regional projects and programs the Districts are participating in, and our team members have played significant roles in many regional planning efforts such as the Santa Margarita Groundwater Sustainability Plan (GSP). This knowledge and insight will enable us to efficiently produce the Districts' 2020 UWMP and maintain consistency with related planning efforts.

### Water Resources Management

SVWD and SLVWD produce most of their water from the Santa Margarita Groundwater Basin area, which is shared with other local suppliers including the City of Santa Cruz. SVWD solely uses groundwater for potable supply and provides non-potable recycled water. SLVWD uses a combination of surface water and groundwater supplies. The Districts are both part of the Santa Margarita Groundwater Agency to ensure groundwater compliance is maintained and that supplies are sustainable. Through our current work together on projects such as the GSP, WSC and our partner, Montgomery & Associates, have an in-depth understanding of the Districts' groundwater management activities.

New State regulations necessitate overhauling both Districts' WSCPs as part of the 2020 UWMP. The Districts will need to describe the supply reliability, procedures for annual water supply and demand assessment, six water shortage levels, response actions, communications, enforcement, legal authority, financial consequence, monitoring procedures, and reevaluation procedures.

We have developed an approach to meet the WSCP requirements based on comparisons of relevant work for similar nearby coastal communities, our UWMP Guidebook knowledge, and our review of the Districts' existing documents. The 2015 UWMPs and existing WSCPs provide a framework that can be updated with collaboration and expertise from the Districts' staff and Boards to meet new DWR requirements.

Through our previous WSCP experience, WSC learned the importance of involving key decision-makers and customers early in the development process. Developing and completing the WSCP early in the project schedule is a high priority and will require coordination with the Districts' staff, Board of Directors, neighboring agencies, and the public. To support this effort, we propose to conduct a WSCP Stakeholder Workshop to discuss the implications of potential policies and gain consensus on an approach. WSC will leverage its WSCP regulations guidance insight from our work with Soquel Creek Water District and being in the DWR UWMP Guidebook Workgroup to make sure the Districts can develop a compliant WSCP.

### Trusted Guidance

### We Will Prepare a Seamless Update and Provide Expert UWMP Guidance

WSC has worked on approximately 50 UWMPs since the 2005 cycle, including 17 during the 2020 cycle and 28 during the 2015 cycle. We are UWMP experts, and we apply best practices and DWR insight across every UWMP that we prepare. We will apply this expertise to operate efficiently and complete the Districts' UWMP to meet all statutory requirements on a compact schedule. There have been some significant changes to UWMP requirements since 2015. WSC's Project Manager, Spencer Waterman, is serving on DWR's 2020 UWMP Guidebook Workgroup and WSC staff are participating in DWR's 2020 Data Streamlining Workgroup. WSC will proactively monitor and report back on changes to UWMP requirements through WSC staff's participation on the DWR Workgroups, enabling the team to bring the most up-to-date knowledge to this project and to get a head-start on the process.

### Positioned for Ongoing Compliance

New WSCP requirements will include laying out protocols for future annual reporting. WSC will work with the Districts to develop a plan that sets the framework for these annual reports to be produced efficiently and accurately.

### Partnering with the Districts

Leveraging the Districts' expertise, knowledge, and completed work will allow WSC to target its efforts towards developing only what is necessary. Previous and ongoing work will provide a bulk of the information needed to update the 2020 UWMP.

We will focus most of our efforts to fill in gaps and meet new requirements that haven't already been addressed. WSC intends to review and provide guidance on the Districts' existing WSCP, which can be leveraged to develop the 5-Year DRA. DWR's new DRA methodology offers an opportunity to consider "new normal" supply and demand trends and projections. These methodologies and data can be incorporated with WSC's UWMP toolset to develop the basis for DWR's required new five-year reliability analysis.

The table at the top of the next page shows the level of effort that is expected to meet all major new UWMP requirements, with the WSCP and 5-Year DRA typically requiring the largest effort. DWR is still finalizing guidance for the Water Supply and Demand Assessment (WSDA), but the Districts will need to develop a written decision-making process to make a determination each year about the risk of a shortage.

WSC will work with both Districts to develop the appropriate framework for inclusion in the UWMP and set the foundation for their first required WSDA, which will be due in July 2022.

### New Requirements Increase the Level of Effort to Develop the 2020 UWMP and Allow Water Agencies to Manage Water Resources Locally

UWM	1P	TYPE OF EFFORT	ESTIMATED EFFORT			
1	WSCP with prescriptive elements	Analysis, Description, Policy Decisions & Codification	Significant			
2	5-Year DRA	Analysis, Description, Policy	Significant			
3	Layperson's description of reliability	Description	Limited			
4	Long-term forecast for each water supply source, including climate change and supporting information	Analysis, Description	Potentially Significant			
5	Incorporation of projected land use changes in demand forecasting	Analysis, Description	Potentially Significant			
6	Seismic risk assessment and mitigation plan	Description	Limited to Potentially Significant			
7	Energy analysis now required	Analysis, Description	Limited to Potentially Significant			
8	Water savings from codes/standards/ etc. now required	Analysis, Description	Limited to Potentially Significant			
9	Include 5 previous years of system water losses	Analysis, Description	Limited to Potentially Significant			
10	Include GSP	Description	Limited			

### Effective Collaboration and Communication

# We Build Upon Our Existing Outreach and Communication Success

Timely communication and effective collaboration with the Districts is critical to deliver a high quality document on schedule and on budget.

# Collaboration Tools Drive Efficiency, Transparency, and Accountability

WSC proposes to use Microsoft Teams as an online collaboration tool to collect data, track action items, share updates, review and edit draft documents and collaborate with the entire project team. The Teams site will serve as the hub for project information and status and will facilitate flow of information to keep the project on track. It can be accessed by any team member at any time and will provide efficiency, accountability and transparency.

### Effective Virtual Communication Connects Stakeholders and Team Members

Clients have come to rely on and appreciate our ability to work remotely as an internal team, with client teams and stakeholders. Through the duration of COVID-19 restrictions, WSC will deliver interactive workshops as virtual experiences using meeting platforms like Microsoft Teams, GoToMeeting, or Zoom, and collaboration tools like virtual white-boarding.

# The new requirements provide the opportunity to:

**Define** and plan out short/long-term water shortage scenarios specific to your system. **Opportunity** to define what a water shortage means for your agency, not the State or other agencies.

**Customize** Shortage response actions, demand management measures, and supply projects to address potential supply gaps. **Opportunity** to justify short/longterm demand reduction programs/projects or supply projects.

**Prepare** for required annual reporting or other communication channels. **Opportunity** to connect UWMP data to annual reporting and management actions for customer education.

### WSC Guides Innovative Solutions Through Award-Winning Communications

Many of our clients trust us to help them communicate with their staff, regional stakeholders, elected officials, and the public for their most important projects. We help them build support and understanding through outreach that conveys benefits, opportunities, and value. For example, we are supporting the City of Ventura in the development of its Ventura Water Pure project through the design of effective messages, graphics, and brand. WSC also won the 2019 WateReuse Association Award for Excellence in the category of Outreach and Education for our communications work on the City of Pismo Beach's seawater intrusion prevention project, Central Coast Blue.

### **Creative Alternatives**

# We Support the Collaboration of SVWD and SLVWD on a Joint UWMP

Through our engagement with the Santa Margarita GSP, we understand how the UWMP will influence the GSP project and the two projects dovetail nicely. We have teamed with Montgomery & Associates to ensure seamless data sharing between the two projects, minimizing District staff time.

In addition, since WSC prepared the 2015 UWMP for SLVWD, we can leverage work previously done to update data for the 2020 UWMP. Recognizing that SLVWD staff is extremely busy with recovery efforts from the recent wildfire, this will reduce data requests and staff time.

# Team Qualifications

### Meet Your Team

WSC's team is organized to work collaboratively with the Districts to apply proven approaches, state-of-the-art tools, and knowledge-driven innovation to deliver truly outstanding results.

WSC's proposed Project Manager for the 2020 UWMP Update is Spencer Waterman. Spencer has worked on nearly 40 UWMPs for clients across California. He will be supported by our proposed Lead Author, Heather Freed, and proposed Principal in Charge, Kirsten Plonka. Kirsten is an experienced planner with nearly two decades of experience, the majority of which was spent working for public utilities, including for SVWD and SLVWD. Dan Heimel will provide his extensive regional insight to our team in the role of Quality Control/ Quality Assurance (QA/QC) Lead. Dan has led numerous local water resources and water system planning projects.

Our team includes subject matter experts, planners, engineers, and hydrogeologists who have relevant knowledge and experience working in the region and will support the development of an efficient, defensible, and compliant UWMP. WSC has the capacity to perform the work within the time limitations considering our current and planned workload and our current and planned work force. WSC's proposed staff resumes are included in Appendix A.



Our core team has completed numerous UWMPs together, including San Lorenzo Valley's 2015 UWMP, and we have developed tools, processes, and working relationships that increase quality and efficiency.



### Spencer Waterman, Project Manager

Spencer has worked on UWMPs for more than 40 water utilities and is a member of the Department of Water Resources (DWR)'s 2020 UWMP Guidebook Workgroup, which is responsible for developing guidance to meet new requirements.

- 2015 and 2020 UWMP, Soquel Creek Water District, Project Manager/Demand Projections Lead
- 2015 UWMP, California American Water Company, Monterey County District, Project Manager
- 2015 UWMP, Cities of Arroyo Grande, Grover Beach, and Pismo Beach, Project Manager
- 2015 UWMP, City of Lompoc, Lompoc, CA. Lead Author
- 2020 UWMP, City of Oxnard, Project Manager
- 2020 Enhanced Urban Water Management Plan, City of Santa Barbara, Supply and Demand Lead
- 2020 Regional UWMP, Desert Water Agency, Supply and Demand Lead

### **Contact Information:**

### Water Systems Consulting, Inc.

805 Aerovista Pl. San Luis Obispo, CA 93401

### Type of Corporation:

S-Corporation

### Employees: 50

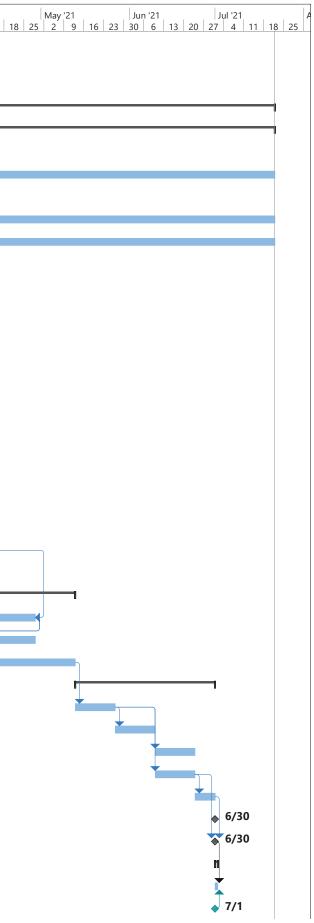
**Contact:** Spencer Waterman (805) 457-8833 ext. 102 swater@wsc-inc.com

\*WSC's staff list and job roles can be found in our hourly rate sheet in Appendix B.

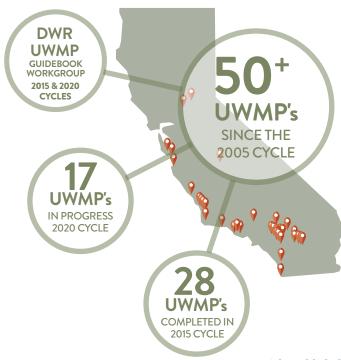
# Proposed Schedule

ID	Task Name	Duration	Start	Finish
1	Assumed Notice to Proceed	0 days	Thu 11/12/20	Thu 11/12/20
2	DWR Guidebook Final Release Estimate	1 mon	Sun 11/15/20	Thu 12/10/20
3				
4	Task 1- Kick-off Meeting/Preliminary Work	180 days	Thu 11/12/20	Wed 7/21/21
5	1.1- Background Documents & Coordination	180 days	Thu 11/12/20	Wed 7/21/21
6	Background Documents	1 mon	Thu 11/12/20	Wed 12/9/20
7	Progress Reporting & Coordination	9 mons	Thu 11/12/20	Wed 7/21/21
8	1.2- Kick-off Meeting	0 days	Wed 11/18/20	Wed 11/18/20
9	1.3- Progress Reporting & Coordination	9 mons	Thu 11/12/20	
10	1.4- Project Invoicing	9 mons	Thu 11/12/20	
11	Task 2- Demand Projections	60 days	Thu 12/10/20	
12	2.1- Demand Projections	-	Thu 12/10/20	
		40 days		
13	2.1.1- Demographic Analysis	2 mons	Thu 12/10/20	
14	Holidays	9 days	Wed 12/23/20	
15	2020 Data Available	0 days	Mon 2/1/21	
16	2.1.2- Water Use Analysis	2 mons	Thu 12/10/20	Wed 2/3/21
17	2.1.3- Passive Water Savings Analysis	2 mons	Thu 12/10/20	Wed 2/3/21
18	2.1.4- Conservation Program Water Savings Analysis	2 mons	Thu 12/10/20	Wed 2/3/21
19	2.1.5- Economic Impacts Analysis	2 mons	Thu 12/10/20	Wed 2/3/21
20	2.2- Demand Meetings	2 wks	Thu 2/4/21	Wed 2/17/21
21	2.3- Revised Demand Meetings	2 wks	Thu 2/18/21	Wed 3/3/21
22	Task 3- Water Shortage Contingency Plan	30 days	Thu 2/18/21	Wed 3/31/21
23	3.1- Supply Reliability and WSCP Chapters	1 mon	Thu 2/18/21	Wed 3/17/21
24	3.2- WSCP Meetings	2 wks	Thu 3/18/21	Wed 3/31/21
25	Task 4- Complete Draft of 2020 UWMP	110 days	Thu 12/10/20	Wed 5/12/21
26	4.1- Draft Report Preparation	5 mons	Thu 12/10/20	
27	4.2- UWMP Notification Coordination	60 days	Thu 2/4/21	Wed 4/28/21
28	4.3- Draft Review Meetings	1 mon	Thu 4/15/21	Wed 5/12/21
29	Task 5- Complete Final 2020 UWMP	35 days	Thu 5/13/21	Wed 6/30/21
30	5.1- Final Draft Report Preparation	2 wks	Thu 5/13/21	Wed 5/26/21
31	2-week Public Hearing Notice and Review Period		Thu 5/27/21	Wed 6/9/21
32	5.2- Public Hearing Meeting	2 wks	Thu 6/10/21	Wed 6/23/21
33	UWMP Adoption	2 wks	Thu 6/10/21	Wed 6/23/21
34	5.3- Final UWMP	1 wk	Thu 6/24/21	Wed 6/30/21
35	Task 6- Plan Submittal	0 days	Wed 6/30/21	Wed 6/30/21
36	6.1- Final UWMP DWR Submittal & Coordination	n O days	Wed 6/30/21	Wed 6/30/21
37	Task 7- Corrections	1 day?	Thu 7/1/21	Thu 7/1/21
38	7.1- Corrections Contingency	1 day?	Thu 7/1/21	Thu 7/1/21
39	DWR Submittal Due	0 days	Thu 7/1/21	Thu 7/1/21

Water Systems Consulting, Inc.



# We are UWMP Experts Demonstrated Expertise, Proven UWMP Qualifications



WSC is an industry leader at preparing UWMPs, especially for coastal municipalities like the Districts. Our team completed 28 UWMPs during the 2015 cycle, and has worked on more than 50 since the 2005 cycle. Our experts continue to support agencies in updating their analytical toolsets to reflect new information about changes in supply and demand assumptions. The tools and lessons learned during previous cycles empower WSC to prepare efficient, cost-effective, and useful UWMPs that integrate well with other water resources planning documents.

### References from WSC's past UWMP projects:

- Shelly Flock | Conservation & Customer Service Field Manager | Soquel Creek Water District | (831) 475-8501 x156 | shelleyf@soquelcreekwater.org
- Mark Reifer | Engineering Manager Project Delivery | California American Water | (626) 614-2517 | mark.reifer@amwater.com
- Benjamin Fine | Public Works Director/City Engineer | City of Pismo Beach | (805) 773-7037 | bfine@pismobeach.org

\*additional references and detailed project descriptions are available upon request.

MPLETED WITHIN DGET AND HEDULE

The table below summarizes WSC's experience providing UWMP and water planning services in recent years.

ER SHORTAGE

We apply our experience to develop clear, forward-looking documents that help our clients to meet regulatory requirements, maintain and operate their facilities, and budget and plan for future resiliency

regulatory requirements, maintain and operate their facilities, and budget and plan for future resiliency and sustainability.	UWMP	RISK & RESILIENC	SUPPLY AND DEM/	CAPITAL IMPROVEMENT PLANNING	WATER SHORTAGE CONTINGENCY PL	DROUGHT RISK ASSESSMENT	COMPLETED WITH BUDGET AND SCHEDULE	STAKEHOLDER COMMUNICATION
SOQUEL CREEK WATER DISTRICT	<		✓		✓	✓	1	
SAN LORENZO VALLEY WATER DISTRICT	<	<	✓		✓	✓	√	
SCOTT'S VALLEY WATER DISTRICT			✓	√	✓	✓	√	
CALIFORNIA AMERICAN WATER (MONTEREY DISTRICT)	<	<	✓	✓	<	<	~	<
CITY OF PISMO BEACH	<	<	✓	~	<	<	~	<
CITY OF ARROYO GRANDE	~	1	✓	~	✓	✓	~	
CITY OF SANTA BARBARA	<	<	✓	✓	✓	✓	√	✓
CITY OF FRESNO	<	<	✓		√	<	~	<
BIG BEAR CITY COMMUNITY SERVICES DISTRICT	<	<	✓	~	<	<ul> <li>✓</li> </ul>	~	<
CITY OF GROVER BEACH	<	<	✓		<	<ul> <li>Image: A second s</li></ul>	~	
CITY OF VICTORVILLE	<	<	✓	√	<	✓	~	
CAMBRIA COMMUNITY SERVICES DISTRICT	<	<	✓	~	✓	<	~	<
CITY OF OXNARD	<	<	✓	~	<	<b>√</b>	~	<
PLACER COUNTY WATER AGENCY	<	<	✓		<	<	~	✓
ANTELOPE VALLEY EAST-KERN WATER AGENCY	<	<	✓	✓	✓	✓	√	✓
EASTERN MUNICIPAL WATER DISTRICT	<	<	✓	✓	✓	✓	√	✓
WESTERN MUNICIPAL WATER DISTRICT	<	<	✓	✓	✓	✓	√	✓

PLY AND DEMAND

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### **Proposed Total Cost and Fee Schedule**

SLVWD & SVWD 2020 UWMPs for SLVWD & SVWD Cost Proposal 10/8/2020



			WSC				Montgomery	sociates	ALL FIRMS									
Task No.	Task Description	PIC	αΑ/ας	M	Supporting Author	Supporting Author	Admin/Clerical	L	WSC abor Fee	Labor Hours	Lał	oor Fee	Total Labor Hours	То	tal Labor Fee	Expenses	т	Fotal Fee
		Kirsten Plonka	Daniel Heimel	Spencer Waterman	Heather Freed	Patricia Olivas	Kay Merrill											
	Billing rates, \$/hr	\$250	\$230	\$190	\$165	\$135	\$145											
1	KICK-OFF MEETING/PRELIMINARY WORK																	
1.1	Background Review			8	8	24		\$	6,080	12	\$	2,967	52	\$	9,047			9,247
1.2	Kick-off Meeting	2		2		8		\$	1,960	6	\$	1,484	18	\$	3,444			3,544
1.3	Progress Reporting & Coordination			9		4.5		\$	2,318				13.5	\$	2,318		\$	2,418
1.4	Project Invoicing			4.5			22	\$	4,045				26.5	\$	4,045		\$	4,245
	SUBTOTAL	2	0	23.5	8	36.5	22	\$	14,403	18	\$	4,451	110	\$	18,853	\$ 600	\$	19,453
2	DEMAND PROJECTIONS																	
2.1	Demand Projections			12		40		\$	7,680	16	\$	3,956	68	\$	11,636		\$	11,936
2.2	Demand Meetings			4		8		\$	1,840				12	\$	1,840		\$	1,940
2.3	Revised Demands Meetings			2		4		\$	920				6	\$	920		\$	920
	SUBTOTAL	0	0	18	0	52	0	\$	10,440	16	\$	3,956	86	\$	14,396	\$ 400	\$	14,796
3	WATER SHORTAGE CONTINGENCY PLAN																	
3.1	Supply Reliability and WSCP Chapters	8		12	8	40		\$	11,000	80	\$	19,780	148	\$	30,780	\$ 400	\$	31,180
3.2	WSCP Meetings			4		8		\$	1,840	12	\$	2,967	24	\$	4,807	\$ 100	\$	4,907
	SUBTOTAL	8	0	16	8	48	0	\$	12,840	92	\$	22,747	172	\$	35,587	\$ 500	\$	36,087
4	COMPLETE DRAFT OF 2020 UWMP																	
4.1	Draft Report Preparation	4	4	12	16	40		\$	12,240	32	\$	7,912	108	\$	20,152			20,652
4.2	UWMP Notification Coordination			2		4		\$	920				6	\$	920		\$	920
4.3	Draft Review Meetings			8		16		\$	3,680				24	\$	3,680		\$	3,780
	SUBTOTAL	4	4	22	16	60	0	\$	16,840	32	\$	7,912	138	\$	24,752	\$ 600	\$	25,352
5	COMPLETE FINAL 2020 UWMP																	
5.1	Final Draft Report Preparation	4	4	8	8	20		\$	7,460	16	\$	3,956	60	\$	11,416		\$	11,716
5.2	Public Hearing Meeting		-	4		8		\$	1,840	6	\$	1,484	18	\$	3,324		\$	3,424
5.3	Final UWMP	2	2	2	4	10		\$	3,350	8	Ş	1,978	28	\$	- /	\$ 100	Ş	5,428
	SUBTOTAL	6	6	14	12	38	0	\$	12,650	30	\$	7,418	106	\$	20,068	\$ 500	\$	20,568
6	PLAN SUBMITTAL																	
6.1	Final UWMP DWR Submittal & Coordination			4		8		\$	1,840				12	\$	1,840	\$ 100	\$	1,940
	SUBTOTAL	0	0	4	0	8	0	\$	1,840	0	\$	-	12	\$	1,840	\$ 100	\$	1,940
7	CORRECTIONS																	
7.1	Corrections Contingency	1	1	1	2	5		\$	1,675				10	\$	1,675	\$ 100	\$	1,775
	SUBTOTAL	1	1	1	2	5	0	\$	1,675	0	\$	-	10	\$	1,675	\$ 100	\$	1,775
	COLUMN TOTALS	21	11	99	46	248	22	\$	70,688	188	\$	46,483	634	\$	117,171	\$ 2,800	\$	119,971

10% mark-up on direct expenses; 15% mark-up for sub-contracted services

Standard mileage rate \$0.57 per mile (or current Federal Mileage Reimbursement Rate)

Airplane mileage rate \$1.27 per mile (or current Federal Airplane Mileage Reimbursement Rate)

Rates are subject to revision as of January 1 each year.



# Scope of Work

Key to Scope of Work
Additional /Augmented Information

WSC has carefully reviewed the Scope of Work in the RFP. We have noted our assumptions, clarifications, and additional recommendations below in **green text** to reflect our proposed approach to complete the tasks outlined in the RFP. Suggested redacted items are <del>crossed out and in red</del>.

### Task 1 – Kickoff Meeting/Preliminary Work

1.1 **Background Review.** Review SLVWD's & SVWD's 2015 UWMP, and any other relevant **data**, reports and documents necessary for preparation of the 2020 UWMP.

1.42 **Kick-off Meeting.** Host a joint meeting with SLVWD and SVWD staff to review the scope of services, develop a detailed work plan and schedule, identify initial data needed to begin work and methods to obtain data, and establish schedule for weekly or biweekly check-in meetings (generally by phone). The meeting may will be done in person or via video conference as appropriate.

**1.3 Progress Reporting & Coordination.** Attend bi-weekly progress reporting conference calls to track data collection, coordination, and project needs. The Budget assumes 18 half-hour meetings for a 9-month duration through July 2021.

**1.4 Project Invoicing.** Prepare monthly invoices and progress reports summarizing work completed in the preceding month. The Budget assumes work for a 9-month duration through July 2021.

### Task 2 - Demand Projections

2.1 **Demand Projections.** Using the following information, develop water demand projections in five-year increments from 2020 through 2040.

2.1.1 **Demographic Analysis.** Demographic data (e.g. population, housing unit and employment projections, etc.) from general plans for the County of Santa Cruz and the 2020 U.S. census, etc.

2.1.2 **Water Use Analysis.** Historical and current water production data and consumption data by user class (singlefamily residential, multifamily residential, commercial, institutional, dedicated irrigation, fire and other). Trends in water use reduction at the district since 2000 should be analyzed and factored into the demand projection update.

2.1.3 **Passive Water Savings Analysis.** Data to estimate impacts of the current and future water use efficiency standards, as well as the impact of on-going behavioral modification/social norming programs.

### 2.1.4 Conservation Program Water Savings Analysis.

Historical and current water savings estimates from on-going conservation and water use efficiency programs.

2.1.5 **Economic Impacts Analysis.** Economic information including historical, current and projected rates in regard to elasticity impacts.

2.1.6 Any other information necessary or beneficial for this task

2.2 **Demand Meetings.** In conjunction with SLVWD and SVWD staff, present the draft water demand projections to SLVWD and SVWD Board of Directors and public either at joint or individual meetings (in person, or via video conference).

2.3 **Revised Demands Meetings.** Incorporate required changes to the demand projections based on Board of Directors feedback and present a revised version of the demand projections (if necessary). Solicit comments from the Boards and public and finalize the corresponding chapters of the 2020 UWMP.

### Task 3 - Water Shortage Contingency Plan

3.1 **Supply Reliability and WSCP Chapters.** Working with SLVWD and SVWD staff and using information supplied by the Districts' hydrogeologist consultants, draft the chapters of the 2020 UWMP related to water supply reliability and water shortage contingency planning. The new Water Shortage Demand Assessment (WSDA) procedures necessary for completing subsequent annual water shortage assessment reports must be included.

3.2 **WSCP Meetings.** In conjunction with SLVWD and SVWD staff, present draft information to the Boards and the public. Make any necessary adjustments/revisions and finalize these chapters. Attend all meetings via video conference.

### Task 4 - Complete Draft of 2020 UWMP

4.1 **Draft Report Preparation.** Identify any remaining data needs and draft the remaining required chapters of the 2020 UWMP and the supporting sections of the plan (e.g., table of contents, list of tables & figures, acronyms & abbreviations, references, appendices, etc.), as well as the <del>optional section on</del> climate change impacts to supply, and the checklist developed by DWR to assist them with their review. (note: SLVWD and SVWD staff may take remaining the chapters to the Boards for feedback as they are developed. However, it is not anticipated that consultant will need to attend). It is assumed that an Administrative Draft will be submitted and reviewed with staff in a staff review meeting described in Task 4.3. A revised Draft will be provided to the Board of Directors. 4.2 **UWMP Notification Coordination.** Send electronic copies of the draft plan (or notify of plan's availability on-line) notification of Urban Water Management Plan Review and Amendment Period to local water agencies and other public agencies designated by SLVWD and SVWD staff, at least 60 days prior to public hearing.

4.3 **Draft Review Meetings.** Present an administrative draft of the 2020 UWMP to staff for review. Present a revised draft of the complete 2020 UWMP to the SLVWD and SVWD Board and the public for review. Attend all meetings via video conference. Make final revisions to the plan.

### Task 5 Complete Final 2020 UWMP

5.1 **Final Draft Report Preparation.** Incorporating all Board of Directors feedback on the draft UWMP from Task 4.3, complete final draft of UWMP.

5.2 **Public Hearing Meeting.** In conjunction with SLVWD and SVWD staff, present the final draft to the Board(s) and the public at a public hearing. After the public hearing the Districts' Board(s) will consider final adoption of this plan. Attend all meeting(s) via video conference.

5.3 **Final UWMP.** Address comments from Task 5.2 and prepare Final UWMP. Provide SLVWD and SVWD with digital copies in Pdf (fully indexed) and Word formats, and (4) bound copies of the final adopted 2020 UWMP by July 1, 2021. The consultant will assure that electronic versions of the plan meet the specifications of section 508 of the rehabilitation act and be fully available to people with disabilities.

### Task 6 - Plan Submittal

6.1 **Final UWMP DWR Submittal & Coordination.** Following adoption of the 2020 UWMP, submit the plan electronically as required/requested by the DWR by the July 1, 2021 submittal date for both agencies.

### Task 7 - Corrections

7.1 **Corrections Contingency.** Make any corrections identified as necessary by DWR after adoption. Provide digital and bound copy of the final report. Consultant assumes the corrections required by DWR will be minor, will not require re-adoption of the UWMP, and will be addressed with errata sheets. Consultant will provide the Districts with an estimated level of effort to address DWR's comments. Consultant will develop corrections as directed by the Districts to perform work on a time and materials basis up to the not to exceed budget shown in the Proposed Total Cost and Fee Schedules section within this proposal.





# Spencer J. Waterman

### Education

BS, City & Regional Planning, California Polytechnic State University, San Luis Obispo

### Certifications

American Water Works Association, California-Nevada Section, Water Use Efficiency Practitioner Grade 1, Certificate # 1714

### **Professional Affiliations** American Water Works

Association, Member

### Additional UWMP Experience

- California American Water

   Monterey, Los Angeles, Ventura, and Coronado Districts
- San Lorenzo Valley Water District
- City of Victorville
- Rincon del Diablo
   Municipal Water District
- City of Colton
- East Valley Water District
- City of Loma Linda
- City of Redlands
- City of Rialto
- City of Riverside Public
   Utilities
- Riverside Highland Water Company
- West Valley Water District
- Yucaipa Valley Water District
- Nipomo Community Services District

### **Professional Experience**

Mr. Waterman is a planner who focuses on Urban Water Management Plans (UWMPs). He has worked on UWMPs for more than 40 water utilities and is a member of the Department of Water Resources (DWR)'s 2020 UWMP Guidebook Workgroup, which is responsible for developing guidance to meet new requirements. His experience includes development of water master plans, wastewater master plans, recycled water master plans, grant funding applications, water use efficiency and conservation services, and state water law compliance documents including UWMPs, AB 1420 Self-Certification Statement materials, and California Urban Water Conservation Council Best Management Practices reports.

### **Representative Projects**

**2020 Regional Urban Water Management Plan, Desert Water Agency, Coachella, CA. Supply and Demand Lead.** Updating the 2020 Regional UWMP for 6 agencies to fulfill revised legislative requirements and the UWMP Act. Building on a regional Integrated Regional Water Management Plan and other planning associated efforts. Developing consistent methodologies for population, demand, and supply projections across agencies and to align WSCPs. The process and analysis will result in a set of tools that facilitate data collection and production of the Regional UWMP to economize efforts and enable the participating agencies to perform additional analysis and reporting.

# **2020 Enhanced Urban Water Management Plan, City of Santa Barbara, Santa Barbara, CA. Supply and Demand Lead.** Working with the City to lead and develop an Enhanced UWMP that: evaluates the adequacy and reliability of the City's water supply in unprecedented drought conditions; provides a long-term view of how the City's water supplies will be managed in the future; incorporates a stakeholder-driven process that reflects community values; and meets State UWMP requirements.

**2020** Urban Water Management Plan, City of Oxnard, Oxnard, CA. Project Manager. Developing a new 5-Year Drought Risk Assessment and Water Shortage Contingency Plan (WSCP) as part of the City's 2020 UWMP based on new legislated requirements. Recent groundwater allocation changes and a shift in the recycled water program have prompted the need to re-evaluate their water supply portfolio options for long-term planning direction.

### Additional Urban Water Management Plan Experience

- Riverside Public Utilities, Riverside, CA. Supporting Author.
- 2015 Regional Urban Water Management Plan, San Bernardino Valley Municipal Water District, San Bernardino, CA. Supporting Author.
- 2015 Urban Water Management Plan, California American Water Company, Los Angeles County, Los Angeles, CA. Lead Author.
- 2015 Urban Water Management Plan, City of Victorville, Victorville, CA. Supporting Author.
- 2015 Urban Water Management Plan, Cities of Pismo Beach and Arroyo Grande, Northern Cities Management Area Technical Group, Pismo Beach and Arroyo Grande, CA. Project Manager.
- 2015 Urban Water Management Plan, Big Bear City Community Services District, Big Bear, CA. Project Manager.



# Kirsten L. Plonka, PE

### Education

BS, Civil Engineering, California Polytechnic State University, San Luis Obispo

MS, Management, Colorado State University, Global Campus (in-process)

MS, Organizational Leadership, Colorado State University, Global Campus (in-process)

### **Professional Registrations**

Professional Engineer – Civil, California, No. C70746

### Professional Affiliations / Certifications

American Society of Engineers American Public Works

American Public woll Association

Engineers Without Borders (former Southern California State Representative)

Potable Reuse Advisory Committee, San Diego County Water Authority

Advanced Water & Wastewater Modeling Certified by Innovyze & Bently

### Publications

"Health Effects Study on Potable Water Reuse", A&WMA

### **Industry Recognition**

2013 Outstanding Water Project of the Year from Region 9 ASCE, Award of merit for San Diego Section ASCE for Pala Mesa Tank

### **Professional Experience**

Ms. Plonka brings more than 18 years of experience in the planning, design, and management of water, wastewater, and recycled water systems. She specializes in project management, hydraulic modeling, feasibility studies, infrastructure and water resource planning studies, and master planning, including Capital Improvement Plans and budgeting. She is well versed in funding alternatives, regulatory compliance, and public policy development. Her experience includes database development and integration of geographic information systems (GIS) with hydraulic models, recycled water customer databases, and asset databases. She also has experience managing public engineering departments, as well as headed up wastewater collections. Her extensive experience in the public sector allows her to approach projects from an owner's perspective and plan and design projects that are implementable and user-friendly.

### **Professional Project Experience**

**2020** Urban Water Management Plan, Big Bear City Community Services District (BBCCSD), CA. Principal in Charge and QA/QC. Preparing 2020 UWMP for BBCCSD, a retail agency for a predominantly residential customer base that experiences an influx of part-time population and vacationers enjoying the summer and winter recreational facilities. BBCCSD's water supply is exclusively groundwater, developed through springs and wells. This plan will address new requirements for 2020 UWMPs, including WSCPs with prescriptive elements, 5-Year DRAs, and regional groundwater efforts and plans related to the Sustainable Groundwater Management Act.

# **2020** Urban Water Management Plan, Soquel Water District, CA. Supporting Author. Preparing 2020 UWMP for the District, a public agency that provides water service within unincorporated Santa Cruz County and portions of the City of Capitola. The District is solely dependent on local groundwater from the Soquel-Aptos Groundwater Basin. Since the mid-1990s, the District has been evaluating multiple alternative water sources to supplement its groundwater supply. The District is pursuing supplemental supply options, namely Pure Water Soquel, a groundwater replenishment and seawater intrusion prevention project. These emerging programs and other changing water conditions will be integrated into the new plan.

### Additional Urban Water Management Plan Experience

- 2015 Urban Water Management Plan, City of Carlsbad, Carlsbad, CA. District Engineer.
- 2015 UWMP, City of Carlsbad, Carlsbad, CA. District Engineer.
- 2010 Urban Water Management Plan, City of Port Hueneme, Port Hueneme, CA. District Engineer.
- 2010 Urban Water Management Plan, Rainbow Municipal Water District, Fallbrook, CA. District Engineer.
- 2010 Urban Water Management Plan, Rainbow Municipal Water District, Fallbrook, CA. District Engineer.
- 2005 Urban Water Management Plan, Rancho California Water District, Temecula, District Engineer.



# Daniel Eric Heimel, MS, PE

### Education

MS, Civil and Environmental Engineering, Cal Poly San Luis Obispo

BS, Environmental Science, California State University Chico

**Professional Registrations** Professional Engineer – Civil, California, No. C80762

### **Operator Certifications**

SWRCB Registered D4 Operator #28472 SWRCB Registered T2 Operator #26014

**Professional Affiliations** American Water Works Association, Member

Air & Waste Management Association, Member

### **Professional Experience**

Mr. Heimel has over 17 years of engineering and operations experience in the water and wastewater industry. He has worked for two public water utilities in an operations capacity, making him knowledgeable of the day-to-day operations that keep water supply, water treatment, and water distribution facilities functioning. His experience includes project and program management, hydraulic modeling, GIS implementation, water quality and drinking water utility regulatory compliance, sampling plan development and implementation, recycled water implementation, pilot studies, water quality and water supply watershed monitoring, groundwater recharge facility operations, and water quality data analysis.

### **Representative Projects**

**California American Water Company, Ventura County District 2010 Urban Water Management Plan. Project Engineer.** Primary author of the UWMP. Prepared the 2010 UWMP to fulfill the requirements of the Urban Water Management Planning Act. Developed 20 year per capita water use projections by census block within the CAW boundary in accordance with California Senate Bill x 7-7. Evaluated supply, supply reliability, demand, supply and demand comparisons, demand management measures, developed a water shortage contingency plan, and a recycled water plan.

**City of Pismo Beach, Central Coast Blue, Pismo Beach, CA. Program Manager.** Providing Program Management, Preliminary Design, Funding, and Environmental Document Support services for the Indirect Potable Reuse project that will recover secondary effluent from the City of Pismo Beach and the South San Luis Obispo County Sanitation District's wastewater treatment plants, a resource currently discharged to the Pacific Ocean. The advanced treatment facility will use microfiltration or ultrafiltration, reverse osmosis, and ultraviolet radiation and advanced oxidation process before being injected into the Santa Maria Groundwater Basin to supplement groundwater supplies and protect the basin from seawater intrusion.

**City of Santa Maria, 2012 Utilities Master Plan Update-Water. Project Engineer.** Developed spatially allocated demands for current and future demands through buildout using GIS for incorporation into a hydraulic model. Calculated land use demand factors based on current development and projected future demands based on zoning. Created and calibrated the water system hydraulic model in InfoWater. Utilized the water model to perform a capacity assessment and develop an updated prioritized CIP to meet present, 5year, 10-year, and buildout conditions.

**City of Arroyo Grande, Water System Master Plan Update. Project Engineer.** Updated water system GIS mapping using record drawings and information provided by City staff. Created a WaterGEMS hydraulic model for the water distribution system from updated GIS mapping. Utilized customer record data to spatially allocate water demands and develop updated land use water demand factors. Utilized the GIS tools and the hydraulic model to perform a condition based assessment of the City's water mains. Developed a comprehensive 20 year CIP plan to guide the City's infrastructure projects.



# Heather Freed, PE, MS

### Education

MS, Civil and Environmental Engineering, Cal Poly, San Luis Obispo

BS, Environmental Engineering, Cal Poly, San Luis Obispo

**Professional Registrations** PE – Civil, CA, No. 89406

### **Professional Experience**

Ms. Freed is a Professional Engineer with experience in water and wastewater treatment and distribution systems. She has experience evaluating various hydraulic measures including headloss through pipes, hydraulic jumps, and groundwater pumping. Her knowledge also includes groundwater contamination, water chemistry and water quality measurements, physio-chemical and biological water and wastewater treatment, and climate change and energy intensity analysis.

### **Representative Projects**

California American Water Company, Multiple Districts, 2015 Urban Water Management Plan. Engineering Support. Developing voluntary analysis of energy intensity in water deliveries and climate change impacts to support 2015 UWMP.

**Soquel Creek Water District, 2015 Urban Water Management Plan, Soquel, CA . Engineering Support.** Developing voluntary analysis of energy intensity in water deliveries and climate change impacts to support 2015 UWMP.

**City of Arroyo Grande, 2015 Urban Water Management Plan, Arroyo Grande, CA . Engineering Support.** Developing demand management recommendations to support 2015 UWMP.

**City of Victorville, 2015 Urban Water Management Plan, Victorville, CA . Engineering Support.** Developing voluntary analysis of energy intensity in water deliveries to support 2015 UWMP.

**Big Bear City Community Services District, 2017 Water Master Plan Update, Big Bear City, CA. Staff Engineer.** Preparing a detailed analysis of the District's infrastructure that will result in a Master Plan which includes a comprehensive Capital Improvement Program. WSC is performing infrastructure condition assessments, developing a defensible Rehabilitation and Replacement Plan, and identifying high-priority projects.

**Casitas Municipal Water District, Ojai System Condition Based Assessment and Water Master Plan, Ojai, CA. Staff Engineer.** Conducted a condition-based assessment and developed a Water Master Plan for the new owner of the Ojai water system. Tasks included developing opinions of probable cost for recommended projects, and evaluating production and consumption data to develop projections and recommend improvements necessary to maintain a safe and reliable level of service. Developed, calibrated, and used hydraulic model of the system in conjunction with GIS datasets to improve system operations and CIP development. Evaluated the capacity of the existing water system and identified improvements to meet demands, including fire flow, of the current and future population.

Water System Hydraulic Model, Casitas Municipal Water District, Ventura, CA. Hydraulic Modeling Lead. Developing and calibrating a hydraulic model of the Casitas Water System and incorporating it into the existing Ojai Water System hydraulic model. Evaluating consumption and production data to determine spatial demand scenarios and evaluate the capacity distribution system.

**California American Water, Monterey District, 2018 Comprehensive Planning Study and Condition Based Assessment, Monterey County, CA. Engineering Support.** Updated the California American Water Monterey County water distribution system Comprehensive Planning Study.



### Georgina King, P.G., C.Hg. Senior Hydrogeologist

**OFFICE:** Oakland

### YEARS OF EXPERIENCE

Total: 28 | M&A: 12

### **EDUCATION**

M.S., Geohydrology, Rhodes University, Grahamstown, South Africa (1997)

B.S., Engineering Geology, University of Natal-Durban, Kwazulu-Natal, South Africa, (1992)

B.S. Geology, University of Natal-Durban, Kwazulu-Natal, South Africa, (1991)

### KEY AREAS OF EXPERTISE

Groundwater basin management

Hydrogeologic characterization

Groundwater recharge

Groundwater quality

Geographical Information Systems and database management

### PROFESSIONAL REGISTRATIONS

Registered Professional Geologist #8023, CA

Certified Professional Hydrogeologist #874, CA

### **ADDITIONAL TRAINING**

Postbaccalaureate Certificate in GIS, Penn State (2016) **Georgina King** was educated in South Africa and spent her early career years with the South African Department of Water Affairs as Assistant Director of groundwater resources for the province of KwaZulu-Natal. She was responsible for technical aspects of managing groundwater, such as establishing a regional monitoring network, enhancing rural water supply, and developing regional hydrogeological maps. Since 2000, Georgina has worked in California and focused on developing, managing, and protecting groundwater resources. She is experienced in managing and conducting technical studies on basin-wide groundwater management, large-capacity public water supply projects, sustainable yield, and groundwater modeling projects. She has extensive experience in developing and managing geographic information systems (GIS) and databases, which she applies to many of her projects.

### **Representative Projects**

### Santa Margarita Groundwater Agency (SMGWA) GSP Development, Santa Margarita Groundwater Basin, Santa Cruz County, CA

Currently project manager responsible for overseeing all aspects of the Santa Margarita Basin GSP to be completed by January 2022; oversees all technical work for the GSP including update and expansion of a groundwater flow model, guiding the SMGWA Board through the process of basin understanding and developing sustainability management criteria, and managing and guiding subconsultants responsible for surface water interactions and projects and management actions.

### Scotts Valley Water District

### Water Year 2016 through 2019 Annual Reports, Santa Margarita Basin, Santa Cruz County, CA

Prepared annual reports ongoing since Water Year 2016. Work included analyzing groundwater level and quality data, preparing groundwater contour maps, and reporting on environmental cleanup operations.

### Santa Cruz Mid-County Groundwater Agency First Annual Report, Santa Cruz Mid-County Groundwater Basin, Santa Cruz County, CA

Assisted preparation of the first Annual Report as a requirement of GSP implementation; including submitting all required monitoring well data and Annual Report to the DWR SGMA Portal.

### Santa Cruz Mid-County Groundwater Agency (MGA) GSP Development, Santa Cruz Mid-County Groundwater Basin, Santa Cruz County, CA

Technical lead developing sustainable management criteria for the GSP; technical presenter at monthly GSP Advisory Committee meetings; assisted MGA staff with scoping, budgeting, and scheduling work required to meet the January 2020 deadline for high priority basin GSPs; assisted MGA staff prepare the draft and final GSP; and submitted all required monitoring well data and GSP documents to the DWR SGMA Portal.

### Seaside Basin Watermaster Seaside Basin, Monterey County, CA

Managed all ad-hoc hydrogeologic studies and annual reports for the Watermaster. Primary author of the following reports: Basin Management Action Plan (2009 and 2018), annual Seawater Intrusion Analysis Report since 2009, and the Seawater Intrusion Freesponse Plan.



# Aaron Morland, EIT

### Education

BS, Environmental Engineering, California Polytechnic University, San Luis Obispo, CA

### **Professional Registrations**

Engineer-in-Training -Environmental, California, No. 166372

### **Professional Experience**

Aaron Morland is an Engineer-in-Training with environmental engineering experience in sewer hydraulic analysis, collection system design, sewer system management, water distribution system planning and design, indirect potable reuse, and funding support. His academic projects focused on wastewater treatment systems and potable and non-potable reuse technologies.

### **Representative Projects**

**City of Paso Robles, Airport Area Infrastructure Improvements, Paso Robles, CA. Assistant Engineer.** Assisted in the design of 7,500 feet of 12-inch and 16-inch water distribution piping, 5,100 feet of 16-inch recycled water distribution piping, 3,400 feet of 6-inch sewer force main, and 8,200 feet of 8-inch to 12-inch sewer main to support future growth around the Paso Robles Airport. Designed segments of gravity sewer, developed cost opinions for sewer and water main replacements, discovered and minimized utilities conflicts, and located existing sewer laterals and water services for plan sets.

**City of Paso Robles, Main West Tank Design, Paso Robles, CA. Assistant Engineer.** Assisted in the preliminary design of a 4 million-gallon (MG) partially buried pre-stressed concrete tank to replace the existing 4 MG reservoir that had reached the end of its useful life. Assisted in drafting the preliminary design report sections on the tank fill and outlet piping network, connections with the existing well field and distribution system, site security, and drainage.

San Lorenzo Valley Water District, Pressure Reducing Valve Replacement Project, Boulder Creek, CA. Assistant Engineer. Designed the replacement of six (6) pressure reducing valve stations throughout the Lompico Service Area of the District to reduce water losses from leaks and upgrade aging infrastructure. Prepared construction specifications and assisted in developing the plan set for the project.

**Big Bear City Community Services District, 2019 Sewer System Management Plan Update, Big Bear City, CA, Staff Engineer.** Primary author of a complete update of Big Bear City Community Services District's existing Sewer System Management Plan (SSMP). Reviewed the District's existing sewer maintenance practices, FOG control program, capacity assurance plan, high-flow operation, overflow response activities, and other sewer management aspects. Prepared updates of the District's existing SSMP and Overflow Emergency Response Plan, and prepared a Water Quality Monitoring Program (WQMP) establishing protocols for monitoring ammonia and *E. coli* in surface waters receiving discharge from sanitary sewer overflows. The SSMP and supporting documents were prepared in accordance with State Water Resource Control Board Orders No. 2006-0003-DWQ and No. WQ 2013-0058-EXEC.

**Cayucos Sanitary District, Sewer System Management Plan Audit, Cayucos, CA. Staff Engineer.** Audited the Cayucos Sanitary District Sewer System Management Plan (SSMP) for compliance with State and Regional Water Board Waste Discharge Requirements. Identified additional areas of the SSMP to update due to construction of a new Water Reclamation Facility. Drafted a Technical Memorandum to summarize the audit and provide guidelines for the District to update their SSMP.



# Patricia Olivas, EIT

### Education

BS, Civil Engineering, California Polytechnic State University, Pomona, CA

### **Professional Registrations**

Engineer-in-Training - Civil, California, No. 167815

### **Professional Experience**

Ms. Olivas is an Engineer-in-Training with civil engineering experience focused on water and sewer hydraulic analysis, distribution and collection system design, and construction management support. Her academic projects focused on water and wastewater treatment systems.

### **Representative Projects**

San Antonio Water Company. Comprehensive System Water Master Plan, Upland, CA. Assistant Engineer. Created a new hydraulic model using InfoWater that combines both the domestic and irrigation system, prepared the fire flow testing plan, and draft report. Created demand scenarios for average and maximum day demands, and minimum and peak hour demands.

Elsinore Valley Municipal Water District. Water Hydraulic Distribution Model and On-Call Hydraulic Modeling Services, Lake Elsinore, CA. Assistant Engineer. Created a new and updated hydraulic model using InfoWater, developed technical memorandums documenting the model development process, existing and future demands approach, and a water system hydraulic model reference manual for District staff. Analyzed historical production and consumption data to develop existing and future demands, loaded demands in model, and created scenarios for steady-state average day demand, steady-state maximum day demand, steady-state peak hour demands, and 72-hour extended period simulation for maximum day demands.

**City of Victorville. Water Supply Assessment for the SCLA Specific Plan, Victorville, CA. Assistant Engineer.** Prepared water supply and demand analyses and assessment report. Developed demands using historical and projected demands using a variety of sources, including past planning documents, proposed project phasing, historical customer usage, and land use. Determined water supply sufficiency and drafted report explaining the project, water consumption, system overview, analyses, supply reliability and sufficiency.

San Juan Water District Retail Master Plan Update, Granite Bay, CA. Assistant Engineer. Assisted in developing water demand projections using GIS. Developed demand projections using data analysis of historical water usage, population growth projections, and land use. Utilized GIS to update existing parcel-level land use estimates and applied calculations to reflect future land use types and demands.

**Otay Water District, As-Needed Hydraulic Modeling, Spring Valley, CA. Assistant Engineer.** Utilizes existing hydraulic model to perform potable water system modeling services. Hydraulic model is used to determine the available supply for fire-flow demands and verify pressure. Created exhibits to depict calculated pressure results.

San Antonio Water Company, System Mapping and GIS Database, Upland, CA. Engineering Intern. Assisted in the creation of a GIS system mapping project. Analyzed and summarized information provided by the client in the form of CAD drawings, system index maps, meter data, and billing information. Researched requirements and potential applications to use for implementing a mobile mapping system and compiled information in a technical memorandum.

# **Rate Schedule and Staff List**



### 2020 Classifications and Rates

Labor Classification	Hourly Rate
Engineers / Project Managers / Planners / Hydrogeologists	
Engineering Intern	\$115
Assistant	\$135
Staff I	\$145
Staff II	\$155
Staff III	\$165
Associate I	\$180
Associate II	\$190
Associate III	\$200
Senior I	\$220
Senior II	\$230
Senior III	\$240
Principal I	\$250
Principal II	\$280
Principal III	\$305
Outreach and Communications	
Communications Support I	\$120
Communications Support II	\$140
Communications Support III	\$160
Outreach Specialist/Facilitator I	\$175
Outreach Specialist/Facilitator II	\$220
Outreach Specialist/Facilitator III	\$265
CAD Design Services	
Technician/Designer I	\$120
Technician/Designer II	\$135
Technician/Designer III	\$155
Inspection Services	
Inspector I	\$125
Inspector II	\$140
Inspector III	\$165
Inspector (Prevailing Wage)	\$170
Administrative Services	
Administration/Clerical I	\$120
Administration/Clerical II	\$130
Administration/Clerical III	\$145

10% mark-up on direct expenses; 15% mark-up for sub-contracted services

Standard mileage rate \$0.57 per mile (or current Federal Mileage Reimbursement Rate)

Airplane mileage rate \$1.27 per mile (or current Federal Airplane Mileage Reimbursement Rate)

Rates are subject to revision as of January 1 each year.

Name	Employee Type
Aaron Morland	Staff I
Adam Donald	Staff III
Amanda Pebler	Communications Support I
Antonia Estevez-Olea	Staff III
Bridgette Vanherweg	Administration/Clerical I
Christopher Deiter	Associate III
Christopher Durbin	Technician/Designer II
Christopher Malejan	Senior II
Daniel Heimel	Senior II
Dianne Lee	Outreach Specialist/Facilitator II
Dylan Wade	Principal II
Erik Cadaret	Staff III
Haley Lehman	Staff III
Heather Freed	Staff III
Heidi Franklin	Outreach Specialist/Facilitator I
Holly Tichenor	Outreach Specialist/Facilitator III
James Gonzales	Associate III
Jannette White	Human Resources Director
Jasmine Diaz	Associate II
Jeffery Lawrence	Principal I
Jeffery Szytel	Principal III
Jeroen Olthof	Principal II
Joseph Kingsbury	Senior II
Joshua Reynolds	Principal II
Justin Pickard	Senior III
Justin Sutton	Associate II
Kay Merrill	Administration/Clerical III
Kaylie Tavenner	Associate I
Kellie Fiant	Administration/Clerical II
Kendall Stahl	Staff III
Kirk Barron	Communications Support II
Kirsten Plonka	Principal I
Laine Carlson	Principal I
Matthew Rodrigues	Associate II
Michael Cruikshank	Senior III
Michael Goymerac	Associate II
Nina Heintz	Communications Support I
Patricia Olivas	Assistant
Paul D'Santi	Technician/Designer III
Rebecca Nissley	Staff III
Robert Morrow	Principal I
Robert Natoli	Senior III
Robin Rice	Inspector III
Sarah Walker	Outreach Specialist/Facilitator I
Scott Duren	Principal I
Spencer Cole	Communications Support I
Spencer Waterman	Associate II
Susan Schlangen	Associate I
Tiffany Meyer	Outreach္ကSအုန္မေချist/Facilitator I

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San Lorenzo Valley Water District and Scotts Valley Water District

# **Proposal for:**

2020 Urban Water Management Plan

October 8, 2020 Submitted by: West & Associates Engineering, Inc.





October 8, 2020

Piret Harmon Scotts Valley Water District 2 Civic Center Drive Scotts Valley, California 95066

Subject: Proposal for: 2020 Urban Water Management Plan

Dear Piret:

West & Associates is pleased to submit our Proposal to prepare the 2020 Urban Water Management Plan (UWMP) for the San Lorenzo Valley Water District and Scotts Valley Water District (Districts).

We are a small firm (CA "S" Corp. - C3986570) with extensive water infrastructure experience, including water mains, pressure regulating stations, and pumping stations. We also have experience providing staffing augmentation services for water agencies throughout California. In this proposal, you will find that our team has extensive UWMP preparation experience. As Project Manager, I have been involved in the preparation of **nearly each page** of twenty-four (24) UWMPs for agencies throughout California.

My goal in starting West & Associates was to provide clients with personalized service and fast responsiveness to their needs. As a firm, our goal is to prepare highly professional UWMPs, of which we have provided a sample in this Proposal (Exhibit A). As is evident by the sample, our goal is to not merely complete the scope of work and be in good standing with DWR, but to provide the Districts with a report that **staff can enjoy reading** and rely on as a quick source of information.

We understand the Districts' needs and have reviewed the Districts' 2015 UWMP to get a head start on this project. We have also reviewed the Draft 2020 UWMP Guidebook and the Water Code (Sections 10630 to 10635), and note the following **key changes to the 2020 UWMPs:** 

- CWC § 10631(a): Include current and projected land uses in addition to population estimates.
- *CWC* § *10631(f):* Identify potential water supply projects during droughts of up to five (5) years.
- CWC § 10631.2(a): UWMPs must report on the energy intensity of water supplies.
- CWC § 10632(a)(3): Water Shortage Contingency Plan must include six (6) Standard Stages.
- CWC § 10632.5(a): Water Shortage Contingency Plan to include Seismic Risk Assessments.
- CWC § 10635 (a): Water reliability projections must project droughts lasting up to five (5) years.
- CWC § 10635 (b)(4): Water reliability projections should account for impacts of climate change.

We plan to maintain contact with the Department of Water Resources (DWR) to keep track of changes affecting the 2020 UWMPs. Ultimately, the 2020 UWMP will be prepared in accordance with the 1983



Urban Water Management Planning Act and subsequent amendments. We have provided an ambitious schedule to submit the UWMP to the DWR by late April 2021, about **two (2) months prior** to the due date assigned by DWR (July 1, 2021).

Thank you for this project opportunity. Please contact me if you have any questions.

Sincerely,

Phillip West

Phillip West, P.E., QSD/QSP Principal/President West & Associates Engineering, Inc. Office: (949) 716-7670 Cell: (714) 728-8082 philw@westaeng.com

### **CONTENTS**

SECTION 1: EXECUTIVE SUMMARY (1 Page)

SECTION 2: PROJECT DESCRIPTION (3 Pages)

SECTION 3: CONTACT INFORMATION (1 Page)

SECTION 4: ORGANIZATION AND EXPERIENCE OF THE PROJECT TEAM (1 Page)

SECTION 5: EXPERIENCE AND PAST PERFORMANCE (1 Page)

SECTION 6: CREATIVE ALTERNATIVES (1 Page)

SECTION 7: PROPOSED TOTAL COST AND FEE SCHEDULES (1 Page)

### SECTION 8: CONTRACTUAL SCOPE OF SERVICES (5 Pages)

Total Pages: 14 Pages [Not Including Exhibits (Schedule, Sample of Work, etc.)]

### <u>Notes</u>:

Redundant or similar contents requested in the RFP are contained <u>only in the most appropriate Section</u>. For example, the RFP under Section IV (Proposal Requirements) requests that the Project Schedule be included in Section 4 and Section 8. Due to the 10-page limit, we have included the Project Schedule only in Section 8. The same methodology is applied for other content requested in the RFP (due to page restrictions).

### **Approach to Meeting the Districts' Needs**

Our goal is to prepare an Urban Water Management Plan (UWMP) of the highly quality possible that meets Department of Water Resources' (DWR) requirements. To accomplish this, we will implement the following quality assurance/control measures:

- The Project Manager, Mr. Phillip West, will be directly involved with this project. Instead of periodic reviews and dictations to engineering staff, he will work alongside engineering staff to ensure the work is done properly. All staff members have access to the same files and can edit as the needs arise without things being "lost-in-translation". This drastically reduces errors during the work process.
- We will keep in touch with the Districts and DWR on a regular basis. This will include phone calls, emails, and conference calls. In fact, we have been in touch with DWR recently in the months of May and July regarding proposed changes to the 2020 UWMPs.
- All work will go through a quality assurance/control process before submittal to the client. We strive to have all projects reviewed by an experienced individual not directly involved with the project, although general familiarity with the project and the client is desirable. During the quality assurance/control process, Adobe PDF software is utilized to review documents as opposed to printing hard copies. Although this is a "green" method, its primary function is to **save time and to keep records of our quality control.** This is also important if any quarantines persist during this project. The review of the construction documents shall focus on the following three key areas: 1) conformance to DWR criteria, 2) accuracy of data, and 3) quality of writing.

To ensure the Final UWMP adheres to DWR requirements, we will complete the UWMP checklist before each submittal. The checklist will provide the Section and/or Page number where the information can be found in the UWMP. This will help the Districts confirm that the UWMP adheres to DWR requirements before it is submitted to DWR.

### **Contents of Proposal**

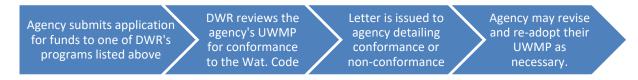
This Proposal provides the Project Understanding, Scope of Work, and Schedule, and Fee to accomplish the Scope of Work. The contents of our Proposal are provided in the Table of Contents.

### **General UWMP Project Understanding**

It is our understanding that the San Lorenzo Valley Water District and Scotts Valley Water District (Districts) is seeking a qualified consultant to prepare the 2020 Urban Water Management Plan. 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 Urban Water Management Plan (UWMP) containing prescribed requirements. The Plan needs to be periodically reviewed every five years. UWMPs are required for a water supplier to be eligible for State grants and loans, including:

- Drinking Water State Revolving Fund Primarily funds to help correct deficiencies
- Proposition 50 Primarily funds for security and treatment technology
- Proposition 84 Primarily funds for supplies and infrastructure

With regard to the funding opportunities listed above, the process typically goes as follows:



From our discussions with DWR, we understand that agencies that submit their UWMPs past the deadline are still eligible for grants or loans, but applications for such funds can be challenged by competing agencies for the same funding.

### **UWMP Significance for the Districts**

UWMPs are 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, a 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.

### **Current Updates to UWMPs (2020)**

To help provide our clients with the best possible service for the 2020 UWMPs, we have recently reached out to the Department of Water Resources (DWR) regarding key updates for the 2020 UWMPs. We have also reviewed the just-released Draft Guidebook for updates to the 2020 UWMPs. The following are **some of the key updates to the water code affecting the 2020 UWMPs:** 

- CWC § 10631 (a): Include current and projected land uses in addition to population estimates.
- CWC § 10631 (f): Identify potential water supply projects during droughts of up to five (5) years.
- CWC § 10631.2 (a): UWMPs must report on the energy intensity of water supplies.
- CWC § 10632 (a)(3): Water Shortage Contingency Plan must include six (6) Standard Stages.
- CWC § 10632.5 (a): Water Shortage Contingency Plan must include Seismic Risk Assessment.
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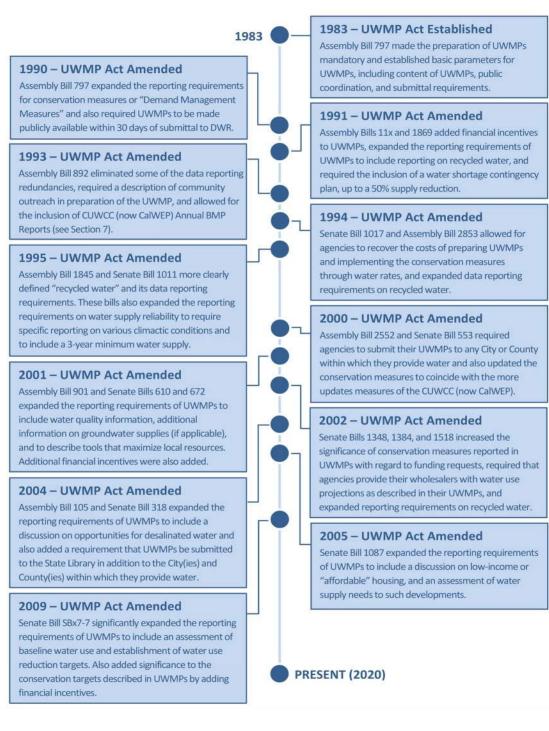
### Guidance on the "60-Day" Notice

Some of our UWMP clients have questions regarding the "60-Day" notice of the Public Hearing. It may appear from first glance that the "60-Day" notice must be contingent on the Draft UWMP being available for review or inspection. However, the "60-Day" notice is simply an alert to neighboring agencies, including the

County, that the UWMP is being updated. Nevertheless, our schedule allows for the Draft UWMP to be available throughout the entire "60-Day" review period.

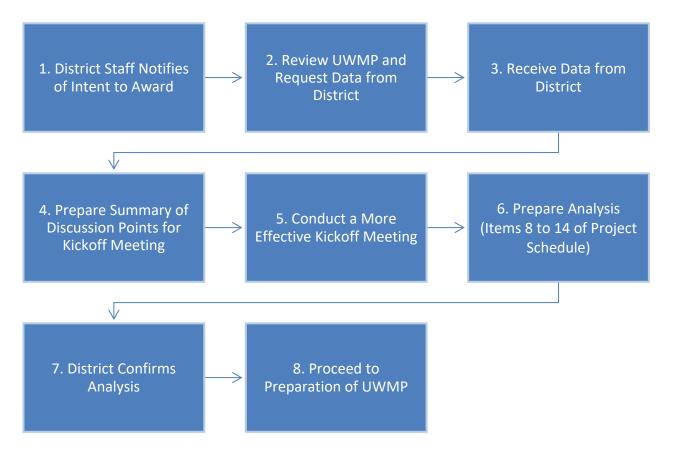
### **UWMP Timeline**

We prepared the graphic below to display our understanding of UWMPs prior to the 2015 UWMPs. The 2015 cycle resulted in less significant changes to the Water Code (UWMPs) than what is shown below:



### **Project Approach**

To accomplish the Scope of Work listed in **Section 8**, we intend to begin preliminary work on this project upon notice of contract award (instead of upon Notice to Proceed). Typically, notice of contract award occurs up to two weeks prior to the Kickoff Meeting. The preliminary work conducted prior to the Kickoff Meeting will include conducting a thorough review of the previous UWMP and requesting data from the Districts in advance of the Kickoff Meeting. This approach will result in a more productive Kickoff Meeting and an accurate analysis of data. Most importantly, **an early start will save time**. Our approach is **illustrated below**.



### **Company Background**

West & Associates Engineering, Inc. was started in 2015 by Mr. Phillip West. We provide technical consulting services to clients throughout California for a broad range of services, including planning, design, and construction management. In particular, we **specialize** in the following types of work:



Services Listed Include <u>ALL</u> Major Phases of Work:

- Planning
- Design
- Construct. Management

### **Other Notable Services:**

- Plan Check
- Staffing Augmentation
- Specialty Studies

Nearly all our company experience has been with public agencies. As such, **our focus is on public clients**. Mr. West and the project team members have experience with nearly **sixty (60)** public agencies throughout California.

### **Company Information**

We are a small **California "S" Corporation**. Our office is located in Foothill Ranch (Lake Forest) in Orange County, California. Mr. Phillip West acts as the Principal/President of the firm.

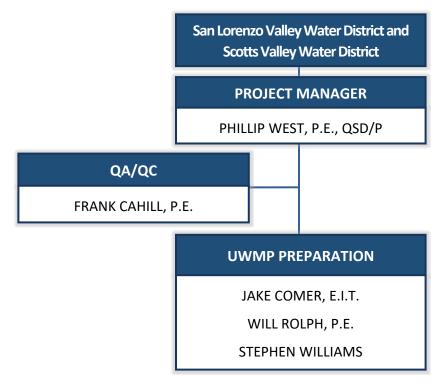


- California "S" Corporation
- Fed I.D. #81-5259524 / CA I.D. # C3986570
- Contact: Phillip West, P.E., QSD/QSP
- Office: (949) 716-7670
- Cell: (714) 728-8082
- philw@westaeng.com

We currently have four (4) W-2 employee staff members and four (4) part-time licensed support staff who assist the project team members. Our project team is listed in **Section IV** of the Proposal.

## **Organizational Chart**

The project team will consist of the individuals below:



Resumes of the above individuals are provided later in this section.

## **Project Management**

The project manager and team will approach the project as shown in Sections I, II, and VI of this Proposal.

## **Project Team Roles**

The Project Manager, Mr. Phillip West, has considerable experience in preparing Urban Water Management Plans. Mr. West has either personally prepared or overseen the preparation of twenty-four (24) UWMPs. He is familiar with DWR Staff and has kept himself updated of the UWMP requirements. Under his guidance, Mr. West will make certain that the project is on schedule and within budget.

The Engineers will assist and receive direction from Mr. West in doing research and obtaining statistics and reports from the Districts to compile all the information necessary to produce a comprehensive, thorough, and understandable UWMP. They will also help Mr. West in the formatting of the final report.

Mr. Cahill will provide necessary quality review and give keen insight to assist with the development of the UWMP. He will assure that the product is accurate and of high quality.

		REGISTRATION:
		Registered Civil Engineer, California
	EDUCATION:	No. 77453
Phillip West, P.E., QSD/QSP	California State University,	Qualified SWPPP Developer (QSD)
	Long Beach	Qualified SWPPP Practitioner (QSP)
Project Manager	B.S. Civil Engineering	Certificate No. 25034

As Principal/President at West & Associates, Mr. West also serves as a Project Manager for all projects. The entirety of Mr. West's career has been **solely focused on public clients**, and he has served **nearly sixty (60) public agency clients** throughout his career. His experience has been very diverse and involves planning, design, construction management, field surveying, and even staffing augmentation. Most importantly for this particular project, Mr. West's background involves a **strong component of water infrastructure planning, design, and construction management**.

#### UWMP PROJECT EXPERIENCE:

Mr. West has a significant amount of UWMP experience as described below:

#### 2015 Urban Water Management Plans

- . Prepared nearly each page of the written report, coordinated with Client staff and outside agencies, assisted with Council/Board Adoption, and coordinated the submittal to the Department of Water Resources (DWR) for <u>a total of sixteen (16) Urban Water Management Plans</u> as follows:
  - City of Alhambra City of Lomita City of Blythe Rubio Canyon Land & Water . City of Azusa Light & Water City of San Fernando . City of Calexico City of Santa Monica Crescenta Valley Water Dist. San Gabriel Valley Municipal Water District . Foothill Municipal Water Dist. City of Sierra Madre Lake Arrowhead CSD City of Torrance Lincoln Avenue Water Com. Valley Water Company

#### 2010 Urban Water Management Plans

. Prepared each page of the written report, coordinated with City staff and outside agencies, assisted with Council/Board Adoption, and coordinated the submittal to the Department of Water Resources (DWR) for a total of eight (8) Urban Water Management Plans for the following agencies:

City of Azusa Light & Water	City of Rialto
City of Beverly Hills	City of San Fernando
City of Lomita	City of Santa Monica
City of Lynwood	City of Torrance Municipal Water

#### **Other (Recent) Experience:**

- . Mesa Water District: On-site staff augmentation for approximately one (1) year time period.
- Assisted with the preparation of the Well Site Selection Technical Memo for the City of Lynwood's Well 22. The Technical Memo evaluated several site alternatives within the City for a new Well 22. The Technical Memo concluded that the City's Lynwood Park Site was the most feasible location for a new well.
- . Assisted with the preparation of the Well Site Selection Technical Memo for the City of Rialto's Well 3A. The Technical Memo evaluated several site alternatives within the City for a new Well 22.

	EDUCATION:	
Frank Cahill, P.E.	University College Dublin,	REGISTRATION:
	Ireland	Registered Civil Engineer, California
Quality Assurance/Control	B.Eng. Civil Engineering	No. 55373

Mr. Cahill has about **twenty-five years** of experience in California with civil engineering management, design and construction for site development, and **municipal projects** in the **water/wastewater** industry. He will be providing quality review of plans prior to submittal to the City.

#### **RELATED PROJECT EXPERIENCE**

Mr. Cahill has been involved with the related projects described below and on the following page. These projects are only a <u>small portion</u> of Mr. Cahill's overall experience:

#### EAST ORANGE COUNTY WATER DISTRICT

Mr. Cahill acted as the District Engineer for East Orange County Water District from 2017 to 2018, for a period of nearly two years. District Engineer duties included oversight of current projects, planning and budgeting of proposed projects, direction of staff and resources. During his tenure, Mr. Cahill oversaw the implementation of the District's Master Plan Update.

#### **IRVINE RANCH WATER DISTRICT**

Project Manager & QA/QC services for the Culver Drive Recycled Water Main Replacement project. The project involved replacement of approximately 1,200 feet of existing recycled water main with a new 12-inch PVC recycled water main, along with new recycled service laterals, air-vacs and a blow-off, and abandonment of existing facilities. The project also involved a complex connection in a busy intersection that required traffic control and the installation of a large 8-inch meter vault to an existing golf course.

#### MOULTON NIGUEL WATER DISTRICT

Project Manager for the Wood Canyon Domestic Water Booster Pump Station which included four 150 HP pumps, suction and discharge piping and valves, LPG standby generator, electrical system and controls, masonry building, grading and miscellaneous site work. Also provided construction management and inspection services.

#### **CITY OF SIMI VALLEY**

Prepared a Water Master Plan for a proposed development in the City. The proposed development included roughly 200 homes, new golf courses, a clubhouse, and club member suites. The master plan included nearly 5 miles of new mains, a booster station, a new reservoir, and revitalization of an existing reservoir.

Quality Assurance/Control services for the design of about 30,000 feet of new streets for a proposed housing development in the City. The street improvements included new street design, curb and gutter, parking pop-outs, and parking lots for a clubhouse at a private golf course. The project also included street rehabilitation work. Mr. Cahill overlooked the design of over 22,000 feet of water mains and over 3,000 feet of sewer improvements within the project vicinity.

#### **UNIVERSAL STUDIOS**

Prepared Domestic and Fire Water Master Plans as a Universal Studios Project Engineer. Recommended modifications to enhance the performance of the existing systems.

	EDUCATION:	
Jake Comer, E.I.T.	California State University,	REGISTRATION:
Jake Comer, E.I.T.	Long Beach	Engineer-In-Training, CA (No. 18-460-16)
Civil Engineer	B.S. Civil Engineering	Licensed Engineer, CA (In Progress)

Mr. Comer serves as an assistant engineer for various projects, including water, sewer, and storm drain projects. **The majority of Mr. Comer's experience has been with public agencies.** 

#### **UWMP PROJECT EXPERIENCE**

#### 2015 Urban Water Management Plans (UWMPS)

Assisted with preparation of a portion of 2015 UWMPs for various agencies, including:

. Crescenta Val	bra . Light & Water . Iley Water Dist cipal Water Dist	Rubio Canyon Land & Water City of San Fernando City of Santa Monica San Gabriel Valley Municipal Water District
. Lake Arrowhe		City of Sierra Madre City of Torrance
. Lincoln Avenu . City of Lomita	ue Water Com	City of Torrance Valley Water Company

#### **OTHER PROJECT EXPERIENCE**

#### USACE LOS ANGELES DISTRICT

Performed field inspections of multiple levee systems using the Levee Inspection System (LIS) tablet and prepared Periodic Inspection Reports (PIR). Used available levee information (previous inspections, design manuals, as-built drawings, O&M manuals, etc.) to compile information that could assess the asbuilt condition of the levee to the current condition of the levee. Periodic Inspections consist of extensive reconnaissance efforts which drew from the afore mentioned available levee information and current field inspections data. Work also included a design criteria review in which the original levee design is evaluated to determine if it meets the current design criteria. The overall integrity of the levee was rated based on the deficiencies observed during the periodic inspection, such as excessive vegetation, erosion, slope instability, seepage, settlement, etc. Jake then presented these ratings to the USACE Los Angeles District and levee sponsor through PowerPoint.

Performed field inspections of over forty channels in both California and Arizona using the Levee Inspection System (LIS) tablet and prepared Continued Eligibility Reports. The previous inspection reports, as-builts, and site locations were reviewed prior to the inspections. Coordination with the local sponsor for each facility was also undertaken. The inspections consisted of walking along each channel, noting deficiencies and anything that may cause a fluctuation in the original design.

#### **ORANGE COUNTY FLOOD CONTROL DISTRICT**

Lead existing utilities research efforts at several bridge and channel intersections within the Westminster and East Garden Grove project vicinity. Aided with the design of proposed culverts and the relocation of conflicting utilities. Was hired by the Orange County Flood Control District to analyze key locations where channel systems intersected bridge crossings. Analyses of the design and cost for improvements would then be used to develop a cost for improving other locations. A feasibility study that revealed possible conflicting utilities was submitted along with a plan set.

		REGISTRATION.
		Licensed Civil Engineer, CA. No. 76698
	EDUCATION:	Licensed Surveyor, CA 9381
Will Polph DE DIS OSD/D	California State University,	Qualified SWPPP Developer (QSD)
Will Rolph, P.E., P.L.S., QSD/P	Long Beach	Qualified SWPPP Practitioner (QSP)
Engineer	B.S. Civil Engineering	Certificate No. 00812

REGISTRATION

#### **OVERVIEW:**

Mr. Rolph assists Mr. West with a portion of West & Associates' projects. In the past several years, he has worked on numerous water/sewer/storm projects throughout Southern California. Mr. Rolph's primary background is related to large residential and commercial development project, but he also has experience working with California State agencies, such as Caltrans and the State Water Resources Control Board (SWRCB). A significant portion of Mr. Rolph's experience is water and water-quality related.

Mr. Rolph's background involves a strong component of water and sewer utility design, including pumping stations, reservoirs, pipelines, etc. Some of the projects that Mr. Rolph has been involved in include:

#### **RECENT UWMP-RELATED PROJECT EXPERIENCE:**

Mr. Rolph has a very strong background in California State water and water-quality documents, including:

- . SWPPPs
- . WQMPS
- . SUSMPS
- . SQUIMP

Mr. Rolph has produced many of the above documents for or on behalf of the following agencies:

- . Contractors
- . Developers
- . Private Commercial or Private Large Residential Properties
- . Caltrans
- . State Water Resources Control Board (SWRCB)

#### **OTHER PROJECT EXPERIENCE**

Mr. Rolph has experience in the projects described below:

New PVC C900 Watermain for Eagle Rock Residential Development

Corona R-3 Potable Water Reservoir.

Plant 224 – New Pump Station in Whittier.

Silver Lake Reservoir Complex.

New PVC C900 Watermain for Eagle Rock Residential Development

San Jose Elementary, Pomona CA

Washington Elementary School, Pomona CA

SR 10 Onramp Improvements, San Bernardino County, CA

Storm Drain Improvements, San Juan Capistrano CA

	EDUCATION:
Stephen Williams	Penn State University,
Assistant Engineer	B.S. Business (Organizational Leadership)

Mr. Williams provides Engineering, Drafting, Surveying, and QA/QC assistance for West & Associates Projects. Prior to his experience in the water/wastewater industry, Mr. Williams had worked in the manufacturing industry for about 10 years, wherein he supervised a team. His skills with the finer details add to the precision of work for the project team. To date, Mr. Williams has experience on the design of over **30,000 feet of water and sewer mains** for four (4) public agencies.

#### **PROJECT EXPERIENCE**

Mr. Williams has been involved with the related projects described below:

#### **CITY OF ALHAMBRA**

Engineering services for the Chapel Avenue Sewer Main Replacement project. The project involved replacing an existing 8-inch sewer main with a 12-inch sewer main, including manhole rehabilitation, connections to existing sewer service laterals, and street rehabilitation. The work also included a Preliminary Design Report (PDR) which evaluated design alternatives and calculated sewer flows and capacity of the existing and new main. Finally, the project also involved street rehabilitation.

Engineering services for the Winchester Avenue and Winthrop Drive Water Main Replacement project. The project involved replacing distribution mains and a transmission main along with new service laterals, hydrants, air-vacs and blow-offs, connections to existing mains, and abandonment of existing facilities. The total length of the project was approximately 10,000 feet.

#### **CITY OF CHINO**

Engineering services for the Baker Avenue Water Main Replacement project. The project involved replacing a distribution main along with new service laterals, hydrants, and connections to existing mains. The project also involved coordination with the Division of Drinking Water for the location of the new water main. The total length of the project was approximately 700 feet.

#### **CITY OF CHINO HILLS**

Engineering services for the Maroon Bell – Winchester Water Main Replacement project. The project involved land surveying, replacing distribution mains along with new service laterals, hydrants, air-vacs and blow-offs, connections to existing mains, and abandonment of existing facilities. The project also involved street rehabilitation. The total length of the project was approximately 3,500 feet.

#### **GOLDEN STATE WATER COMPANY**

Project assistant services for GSWC's Lawndale Area Water Main Replacements – Hawthorne Blvd Project, including review of plans and minor adjustments to Design of Plans per Caltrans' comments.

#### CITY OF SIMI VALLEY

Assistant engineering services for the design of about 30,000 feet of new streets for a proposed housing development in the City. The street improvements included new street design, curb and gutter, parking pop-outs, and parking lots for a clubhouse at a private golf course. The project also included street rehabilitation work. Mr. Cahill overlooked the design of over 22,000 feet of water mains and over 3,000 feet of sewer improvements within the project vicinity.

## **UWMP Project Examples**

As mentioned in our Cover Letter, we have prepared twenty-four (24) UWMPs for public agencies in California. Below are the **three (3) most recent agencies** for which we have prepared a UWMP:



CITY OF BLYTHE – 2015 UWMP DATE OF SERVICES: DECEMBER 2017 – APRIL 2018 Armando Baldizzone, Director of Public Works (760) 922-6611 abaldizzone@cityofblythe.ca.gov



CITY OF CALEXICO – 2015 UWMP DATE OF SERVICES: JANUARY 2017 – MAY 2017 Liliana Falomir, Project Coordinator (760) 768-2160 falomirl@calexico.ca.gov

A sample of our work is provided in Exhibit A on the following page



LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT – 2015 UWMP DATE OF SERVICES: APRIL 2016 – JUNE 2016 Aida Hercules-Dodaro, District Engineer (909) 336-7100 ahercules@lakearrowheadcsd.com

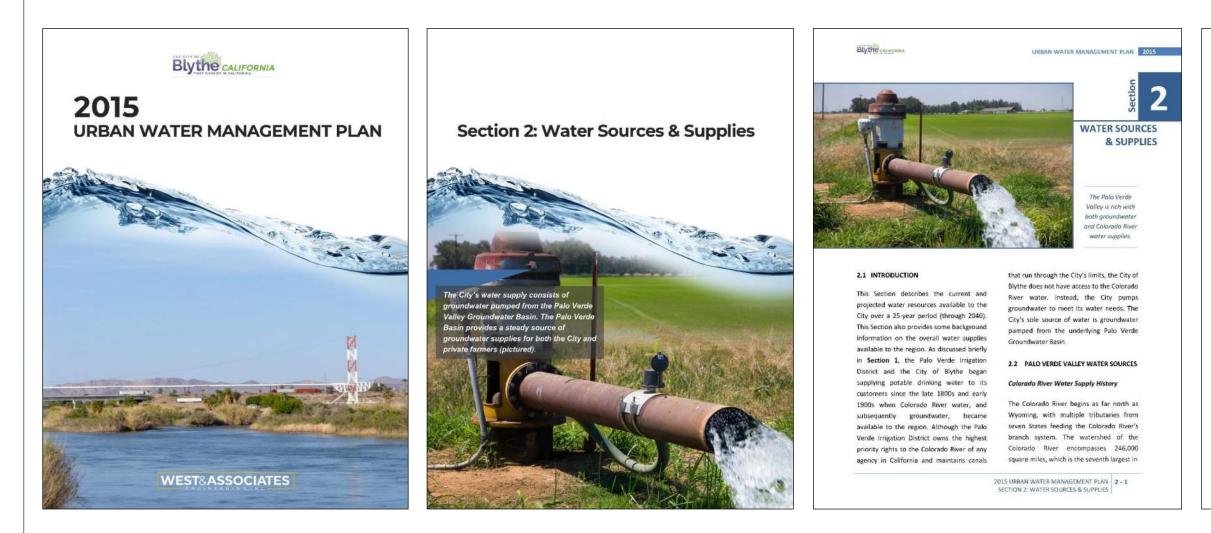
Based on the clients listed above, a few notable highlights include:

- We are capable of providing full UWMP services (including meetings and presentations) to clients despite the distance from our office.
- We are versatile and able to understand all types of hydrologic and water supply conditions in California, and how these conditions affect the preparation of UWMPs.
- > We are capable of fast-tracking the UWMP process with a successful track record (we have completed UWMPs in as **fast as three (3) months).**

## **Total UWMP Experience**

The West & Associates team members have very extensive experience with the UWMP process, having prepared a total of **twenty-four (24) UWMPs** for **nineteen (19) different clients** listed below:

- **Cities (13), including:** Azusa, Beverly Hills, Blythe, Calexico, Glendale, Glendora, La Palma, Lomita, Lynwood, Rialto, San Fernando, Santa Monica, Sierra Madre
- Water Agencies (6), including: Crescenta Valley Water District, Foothill Municipal Water District, Lake Arrowhead Community Services Department, Lincoln Avenue Water Company, San Gabriel Valley Municipal Water District, Valley Water Company



The full 2015 UWMP for the City can be found here: https://wuedata.water.ca.gov/public/uwmp\_attachments/8422467887/City%20of%20Blythe\_Final%202015%20UWMP\_05-07-18\_w%20Appendices.pdf

# **EXHIBIT A – QUALITY OF WORK**



#### Blythe caurona

#### Palo Verde Canal

Located about 9 miles northeast of the City. the Palo Verde Dam diverts about 1,800 cubic feet (about 13,500 gallons) of water per second into PVID's settling basin (the beginning of PVID's canal system). The PVID canal system consists of over 240 miles of main and lateral canals. Likewise, PVID's drainage system consists of over 140 miles of canals. The combined canal and drainage

Unused or PVID's canal system is ultimately returned to the Colorado River.

system is designed to receive water at the overflow water in Palo Verde Dam intake and to carry any unused or overflow water back into the river at the lower end of the valley. This is possible due to the

gradual elevation drop within the valley. The intake and drainage process allows for a more efficient use of water.

Capacities in the canals vary from 2,100 cubic feet per second, at the upper or north end of the District, down to 25 cubic feet per second in various small laterals throughout the Valley. More than 2,500 structures are necessary to operate the canal system, including canal headings, checks, siphons, bridges, flumes, pump plants, and moss racks. A little over 50 miles of these canals are lined with concrete, while nearly 200 miles remain unlined.

#### URBAN WATER MANAGEMENT PLAN

The two prime functions of the PVID are to divert and distribute irrigation water and to provide drainage, PVID also focuses on improving the efficiency of the delivery and drainage system (and thereby lowering the groundwater table). That is, since the river is the primary source of groundwater inflows, groundwater is very much hydraulically connected to the Colorado River. Poor drainage can add to the groundwater inflows, creating undesirably high groundwater levels in portions of the valley. Part of PVID's efforts to improve groundwater drainage conditions includes the lining of canals. PVID currently estimates that over 70% of private canals are now lined with concrete



As a result of PVID's efforts, groundwater drainage conditions and "salt-balance" within the valley continues to show improvement. The valley average depth to groundwater below farmland, as shown by over 200 observation wells throughout the valley, is approximately 10 feet as compared to roughly 5 feet in the 1950s.

2015 URBAN WATER MANAGEMENT PLAN 2 - 5 SECTION 2: WATER SOURCES & SUPPLIES

## **Creative Alternatives**

As stated in Section 2 (Project Description), although UWMPs are required for State funding eligibility, the documents can be of good value for the Districts:

- 1. UWMPs can serve as a foundation document and a source of information for Water Supply Assessments (Senate Bill 610) and Written Verifications of Water Supply (SB 221).
- 2. In addition, a 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.

Therefore, our goal is to not merely complete the scope of work and be in good standing with DWR, but to provide the Districts with a report that staff can enjoy reading and rely on as a quick source of information. To accomplish this, we intend to prepare a UWMP that is highly professional and rich in content. We intend to provide a two-column style with photos and text inserts (to make data "pop"). The photos below present our solution for the Districts. This is also shown in **Exhibit A**.



Figure 1: Two-Column Style with Full-Page Photo

Figure 2: Two-Column Style with Photo and Text Insert

# **SECTION 7: PROPOSED TOTAL COST AND FEE SCHEDULES**

## **Detailed Fee Estimate**

Task	ITEM	PM	ENGR	QA/QC	SEC	٦	TOTAL
No.	IIEW	\$120	\$110	\$112	\$65	HRS.	\$
WORI	( LISTED IN PROPOSED SCOPE						
		1	1				
Pt. 1 -	PROJECT MANAGEMENT & MEETINGS						
1	Kickoff Meeting with District Staff Including Agenda & Minutes	5	5		2	12	\$1,280
2	Coordination & Support for 60-day Notice	4	6			10	\$1,140
3	Coordination & Support for the 2-week Notice and 1-week Notice	4	6			10	\$1,140
4	Progress Meetings (3)	12	12		4	28	\$3,020
Subto	tal	25	29	0	6	60	\$6,580
Pt. 2 -	DATA COLLECTION & REVIEW						
1	Data Collection and Review	2	8			10	\$1,120
2	Technical Analysis (Population, Supply/Demand, Water Quality, etc.)	8	36			44	\$4,920
Subto	tal	10	44	0	0	54	\$6,040
Pt. 3 -	OUTREACH & COORDINATION WITH OTHER AGENCIES & STAKEHOLDERS						
1	Coordination with Local Agencies Including County	4	8			12	\$1,360
2	2 Coordination with Department of Water Resources					12	\$1,360
Subtotal			16	0	0	24	\$2,720
Pt. 4 -	UWMP PREPARATION & SUBMITTAL						
1	Prepare & Submit First Draft UWMP	20	80	14	8	122	\$13,288
2	Prepare & Submit Final Draft UWMP	8	40	8	8	64	\$6,776
3	Finalize UWMP (After Board/Council Adoption) & Submit to DWR	4	8	4	4	20	\$2,068
4	Assist with Final UWMP Distribution to County, State Library, etc.	2	4		6	12	\$1,070
Subto	tal	34	132	26	26	218	\$23,202
Pt. 5 -	PRESENTATIONS						
1	Preparation of PowerPoint Presentation (Slides for Board)	3	3			6	\$690
2	Two (2) Board Meetings /Public Hearings for UWMP (Help With Presentation)	10	10		4	24	\$2,560
Subto	tal	13	13	0	4	30	\$3,250
Direct	Costs (printing, reproduction, shipping, mileage, etc.)					N/A	\$1,108
ΤΟΤΑ		90	234	26	36	386	\$42,900

Total Cost to Prepare 2020 UWMP: \$42,900

#### HOURLY RATE CHART AND EXPENSE REIMBURSEMENT SCHEDULE (FOR UWMPS)

Position	Hourly Rates
Project Manager	\$120
Engineer	\$110
Quality Assurance/Control	\$112
Secretary	\$65

#### **Reimbursable In-House Costs**

Vehicle mileage	\$ 0.58/mile
Reproduction, printing, and other services	cost + 15%
Postage Delivery Service, Express Mail	cost + 15%

NOTE: All rates are effective until December 31, 2020 or until the end of this contract.

## **Scope of Services**

This Section provides the Scope of Services as listed below. The sequence of tasks is presented in our **project schedule**, contained later in this Section.

### A. Project Management & Meetings

Work to be performed under this category shall commence by conducting a Kick-Off meeting with the Districts staff to form internal contacts and to lay out the agenda and schedule. Following the kickoff meeting, this category will include the following tasks:

- 1. Establishing quality assurance and control standards.
- 2. Establishing contacts with outside agencies to obtain additional data and assistance.
- 3. Schedule monitoring and updating as necessary.
- 4. Coordination with the Districts to clarify data and to schedule deliverables and meetings.
- 5. Coordination with the Districts staff to issue the 60-day notice.
- 6. Coordination with the Districts Staff to issue the 2-week notice and the 1-week notice.
- 7. Progress meetings with the Districts staff, general public, and Board of Directors at the Draft of Demand Projections, Draft of the Water Shortage Contingency Plan, and First Draft of the UWMP (three meetings).
- 8. Coordination with the Districts Staff prior to the public hearing.
- 9. Other meetings as necessary.
- 10. Preparation of meeting agendas and minutes.
- 11. Printing, packaging, and delivery of documents.
- 12. Invoicing at Draft and Final Levels of UWMP.

### B. Data Collection & Analysis

- Projected Population & Commercial/Industrial/Institutional (CII) Growth
   Prepare population and CII projections based on the 2015 UWMP for compliance with the
   Water Code and Guidebook. Projections will address permanent and transient populations.
- <u>Projected Demand</u>
   Prepare a complete demand forecast, including permanent and transient populations, distribution system water loss, CALGreen Codes, and water savings from demand management measures as well as state and municipal codes and standards for a minimum 25-year horizon.
- 3. Projected Supply

Prepare an update of current and potential water sources for a minimum 25-year horizon. Include supply use targets in GPCD as well as acre feet (AF), based on the baseline developed in projected demand. Consider all data available including the hydrological model, Replenish reports, Technical Review Team agenda items, and historic documents.

- 4. <u>Water-Energy Intensity Analysis</u> Calculate energy intensity of groundwater, conveyance, treatment, storage, and distribution.
- <u>Drought Risk Assessment and Climate Assessment</u>
   These assessments will be a part of the UWMP. Quantify the impact of climate change and drought risk on supplies. Evaluate plausible worst-case conditions for a period of at least ten years. Consider reviewing the Drought and Water Shortage Risk Explorer Tool for Small Water Suppliers and Rural Communities for local risk scores and indicators.
- 6. Water Shortage Contingency Plan

The Water Shortage Contingency Plan (WSCP) will be part of the UWMP. The WSCP must demonstrate the ability of the Districts to meet demands under a supply shortage up to 50

percent, with levels of shortage and response actions. The Consultant shall work with the Districts staff to develop:

- a. An annual water budget forecast process and assessment.
- b. A list of indicators that should be reviewed annually to determine if a water supply shortage is anticipated.
- c. A worksheet that can be used to compare supply and demand, including available supply mitigation options.
- d. A calendar indicating the months or seasons when the water budget shall be developed and when indicators of a potential shortage should be evaluated.
- e. A description of revenue impacts in water shortage periods. Potential water rate adjustments may be developed in collaboration with the Districts.
- f. A process flow chart to document implementation actions to be taken.
- g. An organizational chart showing which the Districts staff are responsible for tracking and implementing the WSCP.
- h. A Public Outreach plan based on WSCP implementation.
- 7. <u>Seismic Risk Assessment and Mitigation Plan</u>

The seismic risk assessment must include a description of the vulnerability of each of its water system(s) facilities as follows:

- a. Evaluate seismic risk zone for the water supplier.
- b. Identify best practices to reduce seismic risk at critical water facilities (e.g. tie tanks to foundations, flex couplings at tanks, anchoring at pump stations, and treatment plants).
- c. Inventory major equipment at pump stations (including wells), treatment plants, and most critical facilities.
- d. Confirm best practices are implemented by the water supplier at the facilities.
- e. Identify facilities that are most at-risk and the relative impact of that facility on water delivery. Develop a plan to reduce the risk at these facilities.

### C. Outreach & Coordination with Other Agencies and Stakeholders

This work item will include contacts with outside agencies necessary to obtain additional data and assistance.

- 1. Coordination with local water agencies to provide data for use in preparing the UWMP; to obtain water supply forecasts, reliability assessments, and water shortage contingency planning for the region; and for discussion of imported water quality.
- 2. Coordination with DWR as necessary.
  - 3. Prepare public notices for the Districts staff's review and approval prior to issuance of public hearing.
  - 4. Draft the 60-day notice for the Districts use in sending out to agencies.
  - 5. Draft the 2-week and the 1-week notices for the Districts use in publishing to the local press.

### D. Preparation of Urban Water Management Plan

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

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

- 3. Describe the groundwater basin from which the Districts 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 Districts.
- 4. Describe the reliability of the water supply and vulnerability to seasonal or climatic shortages. 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 in the same five-year increments over a 25-year period. Identify the uses among water use sectors, including:
  - a. Single-family residential
  - b. Multi-family residential
  - c. Commercial
  - d. Industrial
  - e. Institutional and Governmental
  - f. Landscape
  - g. Sales to other agencies
  - h. Agricultural
- 7. Describe the Districts water demand management measures (DMMs), including:
  - a. A schedule of implementation for all water demand management measures proposed or described in the UWMP.
  - b. A description of the methods that the Districts will use to evaluate the effectiveness of water demand management measures implemented or described in the UWMP.
  - c. An estimate, if available, of existing conservation savings on water use within the Districts service area, and the effect of such savings on the Districts ability to further reduce demand.
- 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 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 Districts 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 Districts may implement to increase the amount of the water supply available to the Districts in average, single-dry, and multiple dry water years.
  - 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 over a 25year period, or as far as data is available.
  - 12. Prepare an Urban Water Shortage Contingency Plan (WSCP), which includes the following items:
    - a. Stages of action to be undertaken by the Districts in response to water supply shortages, including up to a 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 water supply available during each of the next three water years based on the driest three-year historic sequence for the Districts water supply.
- c. Actions to be undertaken by the Districts to prepare for and implement during a catastrophic interruption of water supplies, including a regional power outage, an earthquake, or other disasters.
- 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 revenues and expenditures of the Districts, 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 (SBx7-7) to achieve a 20% reduction in urban per capita water use by December 31, 2020. Since this date is approaching, this requirement will be reevaluated with DWR upon project kickoff.
- 14. Provide, to the extent available, information on recycled water and its potential for use as a water source in the Districts service area.
- 15. Include information, to a practicable extent, on the quality of existing sources of water available to the Districts in five-year increments over a 25-year period. Identify how the quality of these sources affect water management strategies and supply reliability.
- 16. Provide an assessment of the reliability of the Districts water service, which will include an assessment of the reliability of the Districts water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the Districts, with the total projected water use in five-year increments over a 25-year period for a normal water year, a single dry water year, and multiple dry water years.
- 17. Prepare a report outlining the findings, conclusions, and recommended actions pursuant to the Urban Water Management Planning Act.

### E. Presentation of UWMP

Work to be performed under this work item shall include preparation of presentation documents and presentation of the UWMP as follows:

- 1. Preparation of documents including exhibits, agenda, and PowerPoint files.
- 2. Presentation to the Districts staff, general public, and Board of Directors during progress meetings.
- 3. Provide assistance to the Districts staff in scheduling public hearing.
- 4. Presentation of 2020 UWMP to the Districts Board at the Public Hearing (Board Meeting).
- Provide assistance to the Districts staff for the adoption and resolution of the Districts 2020 UWMP

### F. Submission to Department of Water Resources

Once the Districts adopts its 2020 UWMP, we will finalize the entire document (including appendices) submit the FINAL UWMP to DWR electronically via their "WUE" tool. We will also assist

Districts staff in providing CD copies of the FINAL UWMP to the County and the State Library, as required by DWR.

#### G. Project Deliverables

We will provide the following deliverables for the Districts during the course of this project:

- 1. Initial Data Request Memo upon Notice of Contract Award (to Kick-Start Task B above)
- 2. Technical Analysis (Spreadsheets, Tables, and/or Graphs) for:
  - a. Population Analysis
  - b. Supply/Demand
  - c. Other Analysis (Water Quality, Energy, Drought, Contingency)
- 3. Three (3) Hard Copies of the First Draft of the UWMP
- 4. Three (3) Hard Copies of the Final Draft of the UWMP
- 5. Three (3) Hard Copies of the Final Record (Adopted) 2020 UWMP
- 6. Electronic Copies of the following:
  - a. PDF and Microsoft Word version of the Draft of Demand Projections, Draft of the Water Shortage Contingency Plan, First Draft, Final Draft, and Final Record 2020 UWMP
  - b. 60-day notice letter (template for Districts use)
  - c. 2-week notice and 1-week notices (template for Districts use)
  - d. Agenda for the Public Hearing
  - e. PowerPoint Presentation at the Public Hearing
  - f. Districts Board Resolution (Included in the UWMP; Districts to provide)
  - g. PDF version of Final Record 2020 UWMP with Appendices to Outside Agencies
- 7. Other deliverables as necessary.

## **Project Schedule**

We have included our project schedule on the following page in MS Project format. The schedule is based on an assumed start date (Kickoff Meeting) of November 20, 2020. The schedule shows submittal of the 2020 UWMP to DWR by **late April 2021**, which is about **two (2) months prior** to the DWR-assigned due date of July 1, 2020.

<u>Note:</u> The schedule provides sufficient time for the 60-day notification period prior to the Board of Directors Adoption/Public Hearing.

## Statement

We have read and understood all contents of the RFP. At this time, we have <u>no exceptions</u> to the terms or conditions of the RFP. Our insurance coverage meets the minimum insurance requirements outlined in many standard Contract Agreements.

## San Lorenzo Valley Water District and Scotts Valley Water District 2020 Urban Water Management Plan Project Schedule

ID	Task Name	Duration	Start	Finish	
					st 2020 September 2020 October 2020 November 2020 December 2020 January 2021
1	Preparation of 2020 UWMP	120 days	Гhu 11/12/20	Wed 4/28/21	14 19 24 29 3 8 13 18 23 28 3 8 13 18 23 28 2 7 12 17 22 27 2 7 12 17 22 27 1 6 11 16 21 Preparation of 2020 UWMP
2	Contract Award	1 day	Thu 11/12/20	Thu 11/12/20	Contract Award
3	Kickoff Meeting	1 day	Fri 11/20/20	Fri 11/20/20	Kickoff Meeting
4	Data Collection/Analysis	27 days	Fri 11/13/20	Mon 12/21/20	Data Collection/Analysis 27 days
5	Collection and Review of Data from District	1 wk	Fri 11/13/20	Thu 11/19/20	Collection and Review of Data from District
6	Review and Analysis of Draft 2020 UWMP Guidebook from DWR	1 wk	Mon 11/23/20	Fri 11/27/20	Review and Analysis of Draft 2020 UWMP Guidebook from DWR
7	Review and Analysis of Final 2020 UWMP Guidebook from DWR	2 wks	Mon 11/30/20	Fri 12/11/20	Review and Analysis of Final 2020 UWMP Guidebook from DWR
8	Demographic Analysis	2 wks	Fri 11/20/20	Thu 12/3/20	Demographic Analysis 2 wks
9	Demand Analysis	2 wks	Fri 11/20/20	Thu 12/3/20	Demand Analysis 2 wks
10	Water Supply Analysis	2 wks	Fri 11/20/20	Thu 12/3/20	Water Supply Analysis 2 wks
11	Water Quality Analysis	2 wks	Fri 11/20/20	Thu 12/3/20	Water Quality Analysis 2-wks
12	Water Energy Analysis	2 wks	Fri 11/20/20	Thu 12/3/20	Water Energy Analysis 💆 🛶 2 wks
13	Conservation Measure Analysis	2 wks	Fri 11/20/20	Thu 12/3/20	Conservation Measure Analysis 🔽
14	Seismic Risk, Mitigation, and Contingency Plan Analysis	1 wk	Fri 12/4/20	Thu 12/10/20	Seismic Risk, Mitigation, and Contingency Plan Analysis 🛨 1 wk
15	District Review	1 wk	Fri 12/11/20	Thu 12/17/20	District Review 1 wk
16	RFP Task 2: Meeting with District Staff, General Public, and Board of Directors	1 day	Fri 12/18/20	Fri 12/18/20	RFP Task 2: Meeting with District Staff, General Public, and Board of Directors Tec 18
17	RFP Task 3: Meeting with District Staff, General Public, and Board of Directors	1 day	Mon 12/21/20	Mon 12/21/20	RFP Task 3: Meeting with District Staff, General Public, and Board of Directors 🕇 Dec 21
18	Prepare & Submit 2020 UWMP	92 days	Гue 12/22/20	Wed 4/28/21	Prepare & Submit 2020 UWMP
19	Prepare & Submit Draft (75%) UWMP	8 wks	Tue 12/22/20	Mon 2/15/21	Prepare & Submit Draft (75%) UWMP
20	District Review	2 wks	Tue 2/16/21	Mon 3/1/21	Di
21	Presentation of Draft UWMP to SLVWD and SVWD Board (Public Hearing)	1 day	Tue 3/2/21	Tue 3/2/21	Presentation of Draft UWMP to SLVWD and SVWD B
22	Prepare & Submit Final Draft (100%) UWMP	4 wks	Wed 3/3/21	Tue 3/30/21	Prepare & Submit Fi
23	Assist District with Preparing for Advertisement of Final Draft (100%) UWMP	2 wks	Wed 3/31/21	Tue 4/13/21	Assist District with Preparing for A
24	"60-Day" Public Notification/Advertisement to Agencies	8 wks	Wed 2/17/21	Tue 4/13/21	"60-Day" Public Notification/Advertisemer
25	2wk & 1wk notices of Public Hearing/Council Mtg	2 wks	Wed 3/31/21	Tue 4/13/21	2wk & 1
26	Presentation of Final UWMP to SLVWD and SVWD Board (Public Hearing)	1 day	Wed 4/14/21	Wed 4/14/21	Presentation of Final U
27	Finalize UWMP and Submit to DWR	2 wks	Thu 4/15/21	Wed 4/28/21	

