

Proposal to provide Interim General Manager Support Services for the Santa Maria Valley Water Conservation District

November 3rd, 2023



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Subject: Proposal to provide Interim General Manager Support Services for the Santa Maria Valley Water Conservation District

Confluence Engineering Solutions, Inc. (ConfluenceES), is pleased to submit the following proposal to provide Interim General Manager Essential Support Services for the Santa Maria Valley Water Conservation District (District). It is our understanding that the District is seeking an interim General Manager to serve as the chief executive and management official to support the Board of Directors (Board) in fulfilling the District's mission to provide enhanced groundwater recharge and flood control for the Santa Maria Groundwater Basin. We believe that our combination of experience providing water system management and operations support for numerous water systems on the Central Coast and collaborative management approach makes ConfluenceES an ideal fit for the role of interim General Manager for the District.

Water Resource/Groundwater Management Expertise – ConfluenceES's President/Principal Engineer Dan Heimel has focused his career on supporting water organizations in developing and managing sustainable water supplies. Dan understands the local water supply challenges facing Central Coast water managers today and can assist the District in leveraging conjunctive use strategies to provide sustainable groundwater supplies.

Municipal Organization Management Experience – As the Executive Director for the Los Osos Basin Management Committee (Los Osos BMC), ConfluenceES understands the requirements of working in a public forum and is knowledgeable of Public Agency transparency and Brown Act Requirements. ConfluenceES will utilize this experience to support updating and maintaining the District's website and ensuring compliance with all other transparency requirements.

Local Knowledge and Relationships – ConfluenceES has extensive relationships and knowledge of the communities and water organizations on the Central Coast and understands the roles that each of the water utilities, regulatory agencies, and governmental organizations have in the regional setting. We can leverage this knowledge and these relationships to effectively assist the District in coordinating with regional stakeholders to fulfill its mission.

Water System Operations Experience – Dan started his career in water systems operations for a groundwater recharge facility for Alameda County Water District and has extensive knowledge of surface water reservoir operations, groundwater recharge monitoring, management and operations and the associated permitting and reporting processes. This experience will allow ConfluenceES to provide informed recommendations for the Board for identifying and delivering cost-effective solutions to address the District's operations and managerial challenges.

Water Resource Implementation Support— ConfluenceES has extensive experience assisting water systems develop strategies to provide more reliable and resilient water supplies. Over the last decade, Dan has supported numerous Central Coast water utilities plan, design, permit, construct, maintain and operate water supply systems and projects to improve the sustainability of surface and groundwater supplies.

Program Management – ConfluenceES has extensive experience providing effective coordination of large multi-disciplinary teams to deliver complex public works infrastructure programs and projects. We can provide continuity amongst a large project team and be a primary point of contact for key stakeholders, funding and regulatory agencies, and SMVCD Board Members to get the current, accurate information on project status needed to make timely, informed decisions.

Grant Funding and Low-Interest Financing Opportunities – ConfluenceES has a long history of success in identifying opportunities, pursuing, and obtaining grant funding for water resource projects. We will bring this experience to assist the District in identifying potential key opportunities that may provide outside funding to offset the costs borne by the local community to provide enhanced groundwater recharge and flood protection activities.

ConfluenceES hopes that this Proposal conveys our interest and the operational and managerial benefits that ConfluenceES can provide the District. If you have any questions about the Proposal, please contact Dan Heimel at (805) 459-8498 or danheimel@ConfluenceES.com.

Sincerely,

Dan Heimel, PE, MS

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President/Principal Engineer Confluence Engineering Solutions



Firm Description

Confluence Engineering Solutions, Inc. (ConfluenceES) is a water resource engineering firm dedicated to helping people and organizations identify and develop sustainable water solutions. ConfluenceES understands the value of bringing people together to create more powerful opportunities than one individual or organization can develop alone.



ConfluenceES focuses on providing water supply resiliency and reliability planning; water, wastewater, and recycled water program management; utility engineering, operations, and regulatory compliance support; regional, multi-agency water supply and infrastructure collaboration facilitation; and groundwater management services for Central Coast water utilities and water resource management agencies. With this water system management and technical engineering experience, we are well equipped to assist water utilities with their management and organizational needs.

Dan Heimel founded ConfluenceES (S Corporation) in November 2021. With its headquarters in Los Osos, California, ConfluenceES is a registered Small Business and Small Business PW with the State of California that employs water resource engineers and specialists and has extensive experience supporting small to mid-size utilities with their water system operations and management challenges.

Team

Dan Heimel is a licensed Civil Engineer, Water Treatment (T2) and Distribution (D4) Certified Operator and is ConfluenceES's proposed Contract Interim General Manager and dedicated resource for the District. Dan has spent his career providing operation, management and engineering services to assist municipalities in support of their water, wastewater, and recycled water facilities, and he will leverage this experience to support the District by providing the essential duties and responsibilities of the Interim General Manager. Here is a photo of Dan investigating Twitchell Reservoir after the 2023's historic rainfall.



As the founder of ConfluenceES, Dan is familiar with the financial, administrative, human resource and regulatory requirements for small organizations and/or businesses. Through his different roles as Program Manager, Executive Director and Employer, Dan is on a daily basis providing direction to staff, consultant teams and contractors, interfacing with regulatory and funding agencies and coordinating with Board Members and the public. Through his extensive work for Central Coast water utilities, Dan has developed a level of trust that will ensure that he can work collaboratively with a diverse group of stakeholders to develop cost-effective, sustainable solutions to challenges the District may be facing.

Supporting Dan will be Jamie Girouard, an Assistant Water Resource Engineer, and Water Treatment (T2) and Distribution (D2) Certified Operator. Jamie has experience supporting water utilities with water system monitoring and regulatory compliance reporting and can leverage this knowledge to assist with the operations and maintenance of the District's facilities. These skills and experience will be useful for operational services tasks such as Twitchell Reservoir operations compliance monitoring and reporting.

Qualifications/Experience

Many of the utilities that ConfluenceES supports on the Central Coast have limited staff and typically rely upon our technical and managerial expertise to support the operations and management of their water systems. To meet the varying needs of our clients, we offer a wide range of administrative, financing, public relations, regulatory compliance, planning, engineering and operational services and can leverage our experience and water system expertise to support the District. To illustrate ConfluenceES's experience providing the duties and responsibilities the District is seeking from a Contract Interim General Manager, we developed the following matrix to outline recent, relevant projects that our team has worked on and the services provided. Additional information on these projects and other project experience is provided in the following section.



Essential Duty/ Responsibility	Project/Task	Relevant Project Experience
Administrative Services	Advise board of activities or problems and conduct annual review of board policies and procedures	 Los Osos Basin Management Committee (BMC) Executive Director Coordinates with staff representatives from each of the BMC parties to develop recommendations for the Board and changes to policies and procedures Prepared update BMC Rules and Regulations document
	Perform personnel actions like recruitment, employment, discipline, termination, and recommending hiring consultants	Confluence Engineering Solutions Manages hiring, performance review and other human resources activities
	Supervise consultants or perform consultant actions	 Los Osos Basin Management Committee Executive Director Manages contract hydrogeologist and other consultants in support of BMC initiatives City of Morro Bay Recycled Water Program Manager Oversee and manage diverse team of consultants supporting the City in implementing their Recycled Water Program
	Prep board meeting materials, attend meetings, and follow up on actions	 City of Morro Bay Recycled Water Program Manager Preparation of Staff Reports and presentation of Action Items at City Council Meetings Los Osos Basin Management Committee Executive Director Prepares meeting agendas, agenda packets, executive director's report, and other materials for Monthly Board Meetings Facilitate Meetings and prepare Meeting Minutes and Action Items Reports progress on previous action items
Finance Services	Annual budget development	 Los Osos Basin Management Committee Executive Director Prepared CY 2020 – 2024 Budget and obtained Board approval Maintains Invoice Register and Budget Tracking City of Morro Bay Recycled Water Program Manager Development and monitoring of Recycled Water Program Budget
	Monthly financial reports and audits	 Los Osos Basin Management Committee Executive Director Prepare monthly reports on expenditures incurred, year-to-date expenses, and amount and percent remaining budget Prepare Quarterly Morro Bay Estuary Match Funding Reports City of Morro Bay Recycled Water Program Manager Review and approval of all Recycled Water Program invoices Recycled Water Program Budget tracking and reporting
	Represent the Board with other government agencies and the public	 Los Osos Basin Management Committee Executive Director Act as a representative of the BMC with other governmental organizations, regulatory agencies and the public City of Morro Bay Recycled Water Program Manager Represents City at meetings with Regulatory and Funding agencies

Essential	Project/Task	Relevant Project Experience
Duty/		
Responsibility		
Public Relations	Supervise public relations efforts in disseminating information about District activities Recommend policy actions to the Board and implement those	 Los Osos Basin Management Committee Regularly engages with the community and addresses public comments at Board Meetings Prepares easily-accessible content with information about the BMC for the public Los Osos Basin Management Committee Executive Director Provides recommendations for action items for the Board's
	actions as approved by the Board	considerations o Fulfills direction provided by the Board and manages BMC Party Staff Coordination activities
	Update and maintain District website	 Los Osos Basin Management Committee Executive Director Currently developing a website for the BMC utilizing the Streamline Platform Familiar with the tools necessary to run a public website
	Hold regular meetings with landowners, including improvement district meetings	 Los Osos Basin Management Committee Executive Director Schedule, facilitate and host BMC Public Meetings City of Morro Bay Recycled Water Program Management Routinely host and participates in Public and Non-Public Meetings with citizens, business owners, regulatory and funding agencies and key project stakeholders
	Organize and host annual public outreach meeting	 Los Osos Basin Management Committee Develop, distribute and facilitate monthly Public Meetings in compliance the Brown Act
Planning Services	Responsible for being fully informed on all District plans, programs, budgets, policies, activities/Review Contractor invoices and financial statements and make recommendations to the Board	 Los Osos Basin Management Committee Executive Director Prepare monthly Executive Director's report on workplan implementation progress Prepare monthly reports on expenditures incurred, year-to-date expenses, and amount and percent remaining budget City of Morro Bay Recycled Water Program Manager Review and approval of all Recycled Water Program invoice Recycled Water Program Budget tracking and reporting
	Develop annual workplan/Update the Strategic Plan on a regular basis	 Los Osos Basin Management Committee Executive Director Prepare annual workplan and budget Prepare monthly Executive Director's report on workplan implementation progress Prepare and updated Strategic Plan for BMC initiatives for Board approval
	Development new groundwater recharge projects	 City of Morro Bay Recycled Water Program Manager Program Manager for implementation of a recycled water groundwater injection project Los Osos Basin Recycled Water/Supplemental Supply Study Applied for and obtain grant funding to complete recycled water/supplemental supply study to enhance groundwater supply and water quality in Los Osos Basin

Essential	Project/Task	Relevant Project Experience
Duty/		
Responsibility		
Regulatory Compliance/ Planning Services	Work closely with legal counsel to ensure compliance with federal and state laws, rules and regulations, administrative orders, and water right conditions and perform complex regulatory compliance and planning functions	 City of Morro Bay Water System Operations Support State Water Resource Control Board Water Rights Permitting and Reporting Support Nitrate Blending Operations, Maintenance, and Monitoring Plan City of Grover Beach Drinking Water Compliance Support DDW Water Quality Compliance Reporting EAR/Consumer Confidence Report Preparation Drinking Water System Water Quality Monitoring
Operational Services	Manage and operate existing groundwater recharge projects	 Alameda County Water District Oversaw operation and maintenance of Niles Cone Groundwater Basin Recharge Project City of Morro Bay Water System Operations Support Provide operations support for City's water, wastewater and recycled water systems City of Grover Beach Water System Operations Support Provide operations support for City's water system including regulatory compliance monitoring Prepared Standard Operations Procedures for the water systems operations

In addition to the services described in the table above, ConfluenceES has provided numerous additional water system support services for other water utilities. These services include but are not limited to: grant application writing; water quality monitoring and reporting; emergency and operational plan development; water supply evaluations; supplemental supply alternatives analysis; and infrastructure planning and implementation. Experience from these projects described below can be leveraged, along with experience on numerous other similar projects, to support the District with their operational and managerial needs.

Los Osos Basin Management Committee Executive Director (2020 – Present)

ConfluenceES provides Executive Director services for the Los Osos Basin Management Committee (BMC). The Executive Director manages the basin under the Los Osos Groundwater Basin Adjudication and facilitates implementation of the Los Osos Basin Plan. In 2015, the Los Osos Community Services District, Golden State Water Company, the County of San Luis Obispo, and the S&T Mutual Water Company (BMC Parties) agreed to a Stipulated Judgment. The judgment called for the formation of the BMC to facilitate the implementation of the Los Osos Basin Plan, which creates a path to sustainability for the Los Osos Basin. As Executive Director, Dan Heimel coordinates the activities of the BMC, including facilitating BMC Meetings, developing and maintaining of BMC budget and finances, overseeing development of the BMC Annual Report and other initiatives, and coordinating BMC Party Staff Meetings. Additionally, as Executive Director, Dan Heimel facilitated the BMC Parties in the development of a Strategic Implementation Plan to build consensus and align the BMC on where to focus its staff and financial resources. In 2021, Dan Heimel led the BMC through an updated evaluation of the Sustainable Yield for the Los Osos Basin and achieved unanimous approval of an updated Sustainable Yield estimate which will inform the Los Osos Community Plan and future development potential for Los Osos.

Morro Bay Recycled Water Program Management (December 2021 – Present)

The City of Morro Bay's (City) Water Reclamation Facility (WRF) Program will provide regulatory required treatment upgrades, relocate the City's WWTP, a critical facility, away from coastal and flood hazards and provide a more reliable and resilient water supply. The WRF Program consists of three primary elements:

- A Water Resources Center (WRC) to provide the City with a new sustainable, drought resistant, and natural disaster resilient water supply.
- Pipelines and pump stations to convey wastewater from the existing WWTP to the WRC, treated effluent to the City's ocean outfall, and advanced purified water for recycled water use.
- Injection wells and recycled water pipelines to recharge the Morro Groundwater Basin with up to 887 acre-feet per year of advanced purified water to increase recharge, create a barrier against seawater intrusion, reduce nitrate contamination, and offset use of potable water for irrigation purposes.

ConfluenceES is the Program Manager for the recycled water component of the WRF Program. Development of this sustainable, drought resistant recycled water supply will provide water security for the City, reduce its reliance on Sacramento-San Joaquin Delta imports, improve local groundwater quality, and increase the City's ability to provide water to other local water utilities to improve regional water supply reliability and resiliency.

As the Recycled Water Program Manager, ConfluenceES is currently assisting in development of the layout for the injection well network to provide optimum water supply benefits, while meeting all the

constraints associated with constructing a large public works project on the coast of California. This includes development of multiple alignment alternatives for the injection wells and pipelines and identification of the preferred alignment that meets the required travel time, allows for cost-effective conveyance, provides for future expansion and addition of more injection wells, avoids environmentally and archeologically sensitive areas, and limits construction impacts for the community.

City of Pismo Beach Central Coast Blue, Program Manager (January 2016 – October 2021)

Dan Heimel managed the Central Coast Blue Recycled Water Program for the planning phases of the \$93 million recycled water program to capture and treat wastewater from the cities of Arroyo Grande, Grover Beach, and Pismo Beach for injection into the Santa Maria Groundwater Basin to prevent seawater intrusion and bolster local water supply resilience. Dan supervised and managed the multidisciplinary team supporting the project implementation including engineering design, hydrogeologic, environmental, and property acquisition consultants. This role required coordination with staff, elected officials, the general public, and all stakeholder agencies where Dan was the primary representative for this critical regional recycled water program.

Morro Bay Long-Term Water Supply Evaluation (August 2022 – October 2023)

The City of Morro Bay (City) currently possesses a water supply portfolio that consists of two primary sources of water for its water system customers. These sources include imported water from the State Water Project (State water) and groundwater pumped from the Lower Morro Valley Groundwater Basin (Morro Basin). The City is in the process of implementing a Recycled Water Program that will include injection of advanced purified recycled water into the Morro Basin to enhance recharge, prevent seawater intrusion, and improve groundwater quality. The advanced purified recycled water will then be pumped from the City's existing extraction wells after complying with Indirect Potable Reuse (IPR) Groundwater Replenishment Reuse Project (GRRP) requirements to improve the reliability and resiliency of its water supply portfolio.

To assist the City in evaluating how to integrate its new recycled water resource into its water supply portfolio, ConfluenceES developed a Water Supply Operations Model (Supply Model) that was utilized to evaluate water management strategies under current and potential future hydrologic and demand conditions. The findings from the water supply scenario analysis, which included evaluation of different options for how the City can utilize its new recycled water supply are intended to help inform the City on potential strategies to leverage its current and/or future water supply portfolio to maximize the benefit of these critical resources for its residents.

The results of the Water Supply Evaluation indicate that the City's current water supply portfolio is vulnerable to extended drought conditions (e.g. drought from 2020 to 2022). However, through implementation of an initial phase of a Recycled Water Program, including IPR and Non-Potable Reuse (NPR) Recycled water use, is anticipated to address this water supply deficiency under current and potential future demands. By utilizing NPR Recycled water to reduce potable water demands and IPR Recycled water during low State Water Project allocation years (i.e. less than 25%) to preserve its State and Stored State water supplies for potential extended drought years, it is predicted that the City can reliably meet its water supply needs under current and future buildout demand conditions. As the City's demands increase with additional development it may be necessary to increase the capacity of the IPR

program to increase the volume of drought proof water that the City has available during future extended drought conditions.

Rancho Colina Mobile Home Community Consolidation Evaluation (2021 – Present)

Rancho Colina Mobile Home Park (Rancho Colina) is a small, disadvantaged community just outside of Morro Bay. The community consists of 69 mobile homes and 57 RVs. Since Rancho Colina is isolated from nearby utilities, it relies upon a privately owned, small T1 wastewater treatment facility. The wastewater treatment facility is failing, and its drinking water supply is contaminated with Nitrate. To address these challenges, the Regional Water Quality Control Board (RWQCB) is assisting Rancho Colina in evaluating potential consolidation with the City of Morro Bay's (City) water and wastewater systems.

To support the consolidation ConfluenceES is working with the City and Rancho Colina to develop Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) Grant Applications. The grants will pay for a feasibility study assessing the connection of Rancho Colina to the City's water and wastewater system, planning, design, permitting and construction of the connection infrastructure, and construction of the necessary upgrades to the City's water and wastewater systems to accommodate the consolidation. For this project, ConfluenceES assisted in developing the funding applications, which included developing maps, figures, cost estimates, schedules, and estimated budgets. Through the process of preparing the applications, ConfluenceES has been communicating extensively with City, Rancho Colina, RWQCB and funding agencies staff and gained familiarity with the complex application submittal process and requirements.

Morro Bay Nitrate Blending Plan (August 2023 – September 2023)

The City of Morro Bay (City) primarily utilizes State Water Project (State) water to meet its water demand but relies upon its local Morro Basin groundwater supplies during planned and unplanned State water outages. Groundwater from the Morro Basin is contaminated with Nitrate and elevated Total Dissolved Solids (TDS) concentrations and requires treatment through the City's Brackish Water Reverse Osmosis (BWRO) facility. To assist the City with operations during State water shutdowns, ConfluenceES developed a thorough and user-friendly Nitrate Blending Operations, Maintenance and Monitoring Plan (Nitrate Blending Plan) that allows the City to blend Morro Basin Groundwater with treated BWRO water to lower Nitrate and TDS contaminants below their Maximum Contaminant Levels (MCL). These blending operations enable the City to reduce operating costs and increase the recovery efficiency by not having to treat all of their water through the BWRO during State water shutdowns.

The Nitrate Blending Plan includes operating procedures, monitoring requirements, field data sheets, and computational analysis templates to assist the City in developing specific blending scenarios for different water supply conditions (i.e. No State water; Limited State water; Full State Water). Each of the scenarios include specific information on Nitrate concentrations and production rates for each water source and the necessary blend ratios to meet water system demands and produce water that does not exceed the Nitrate MCL.

Grover Beach Water Systems Operation Support Services (2021 - Present)

The City of Grover Beach (City) contracts with ConfluenceES for operations and engineering support services for their water system. Under this contract, ConfluenceES provides the following services:

Water Quality Sampling Support – ConfluenceES is currently assisting the City with water quality sampling and monitoring by collecting samples from the distribution system, groundwater wells, and blending/water storage tanks. Following the City's Standard Operating Procedures, ConfluenceES staff is

collecting free and total chlorine, total coliforms, HPC, nitrate, nitrite, general physical, pH, disinfection-by-products, orthophosphate field measurements, and water quality samples. Field measurements are collected and measured using color comparators and colorimeters. Water Quality lab samples are collected and transferred to the lab using proper handling procedures to observe temperature, holding time, and Chain of Custody (COC) requirements.

Water Quality Compliance Reporting - ConfluenceES prepares monthly, quarterly, and annual Division of Drinking Water (DDW) water quality compliance reports for the City. These reports include a combination of water quality field logs, lab water quality results, and computational analysis templates organized into an easily accessible format. Additionally, ConfluenceES developed and maintains a water quality database that includes all water quality sampling and lab results for use in the City's Consumer Confidence and other reports.

SOP/EOP Development – ConfluenceES has developed numerous Standard Operating Procedures (SOPs) and Emergency Operations Procedures (EOPs) for drinking water sampling, water quality monitoring, and water systems operations. These SOP/EOPs include documentation of standard procedures and policies and updated data collecting and recording methods to create more user-friendly monitoring and reporting methodologies.

Bacteriological Sample Siting Plan - ConfluenceES developed an updated Bacteriological Sample Siting Plan (BSSP) to assist the City with maintaining compliance with Division of Drinking Water regulations and to ensure the safety of the distribution system water quality. The BSSP includes locations and frequency information for routine and repeat bacteriological water quality samples, including upstream/downstream sample locations. The upstream/downstream sample locations are used to determine if the original sample was positive due to operator or other error or if there is a larger bacteriological contamination issue. The plan additionally includes water system information, sample collection information, sampling frequency, and maps of the system which identify sample locations and additional resampling locations required after a positive coliform result.



Confluence Engineering Solutions, Inc. -11

Scope of Work

To support the management and operations of the District, ConfluenceES can provide all of the services outlined in the Scope of Work for Contract Interim General Manager provided by the District and listed below.

General Manager Essential Duties and Responsibilities:

Task 1. Administration

- o Supervise consultants and/or personnel of the District
- Consultant and/or personnel recruitment, employment, discipline, and termination
- o Advise the Board of Directors of activities or problems arising relative to admin or operation
- Recommend hiring consultants and personnel necessary to development and operation
- o Prepare meeting materials, attend Board meetings, and follow up on action items
- Conduct annual review of Board Policies and Procedures

Task 2. Finance

- Manage preparation of the annual budget, monthly financial reports, and timely completion of audits by outside auditors
- Provide advice and consultation on the development of District finances, operations, resources, programs, policies, and procedures by recommending and implementing change
- Manage all financial activities of the District with assistance of the outside CPA/bookkeeper

Task 3. Public Relations

- o Represent the Board to the public and other government agencies
- o Supervise public relations and informative efforts such as newsletter production
- o Recommend Board policy actions and implement those actions as approved
- Organize and host the annual public outreach meeting
- Update and maintain the District website
- Hold regular meetings with landowners, including improvement district meetings

Task 4. Regulatory Compliance

 Work closely with legal counsel to ensure compliance with federal and state laws, rules and regulations, administrative orders, and water right conditions affecting the District

Task 5. Planning

- o Develop annual workplan
- Update the Strategic Plan on a regular basis
- o Be fully informed on all District plans, programs, budgets, policies, and activities
- Perform complex regulatory compliance and planning functions
- o Review Contractor invoices and financial statements and make recommendations to the Board
- Development new groundwater recharge projects

Task 6. Operations

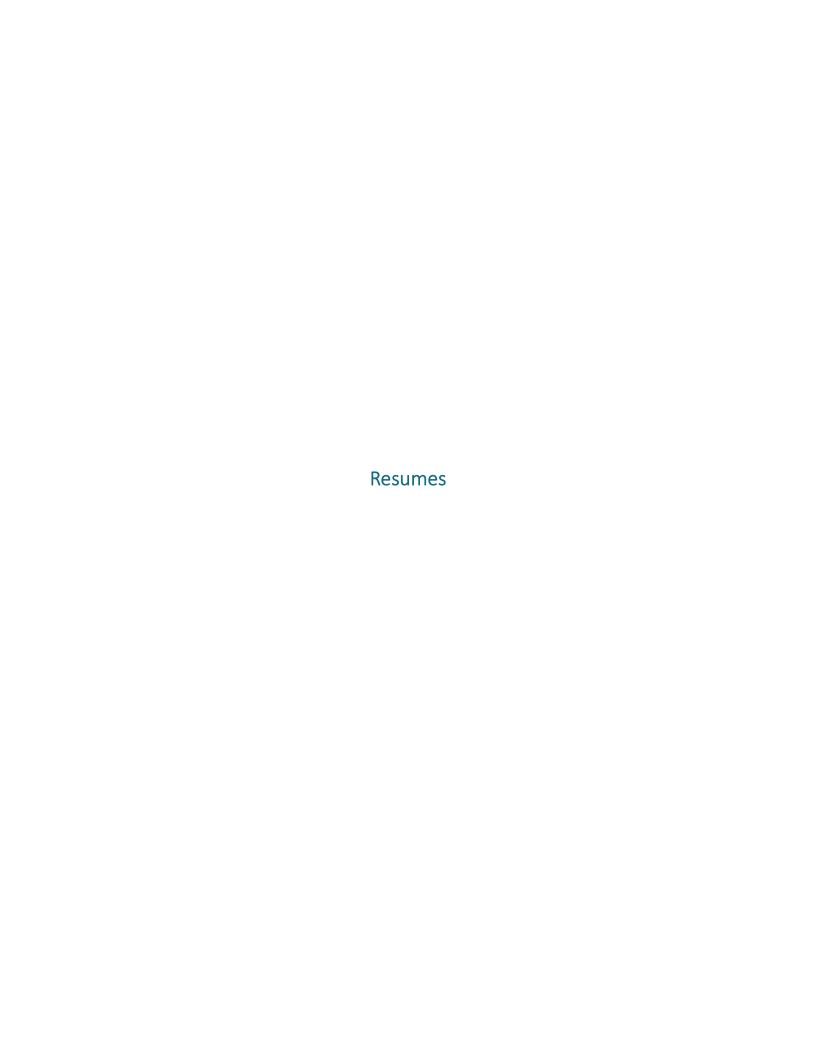
Manage and operate existing groundwater recharge projects

Fee Estimate

Due to the unknown level of effort and duration that the District will need for Contract Interim General Manager services at this time, ConfluenceES proposes to offer interim General Manager support services to the District at the billing rates shown in the rate sheet below. If selected, ConfluenceES proposes to work with the District to develop an anticipated level of effort to provide the specific services that the District is requesting and prepare a Time and Materials, with a not-to-exceed amount, Contract or other contracting mechanism for providing Contract Interim General Manager services.

Classification	Billing Rate (\$/hour)
Principal Engineer	\$200
Project Engineer	\$175
Associate Engineer	\$150
Assistant Engineer	\$135
Engineering Assistant	\$125

Direct expenses (e.g. travel, mileage (per IRS Rates), delivery/copy services, subconsultant services) will be invoiced with a 10% processing fee. ConfluenceES reserves the right to revise our standard billing rates on an annual basis and personnel classifications may be added as necessary.



Dan Heimel, PE, MS Confluence Engineering Solutions



TITLE: PRESIDENT/PRINCIPAL ENGINEER

Education: Master of Science Degree, Civil & Environmental Engineering, California Polytechnic State University, San Luis Obispo, CA; Bachelor of Science Degree, Environmental Science, Chemistry Minor, Chico State University, Chico, CA

License & Certifications: Professional Civil Engineer #C80762, CA; D4 Water Operator #28472, CA; T2 Water Operator #26014, CA

Affiliations: President, Central Coast Branch of Groundwater Resources Association (GRA); Past President, Central Coast Chapter of WateReuse

Qualifications

Dan Heimel is a licensed Professional Engineer (PE) with a Master of Science in Civil and Environmental Engineering and over 20 years' experience demonstrating expertise in water supply, resiliency, and reliability planning; water, wastewater, and recycled water program management; utility engineering, operations, and regulatory compliance support; regional, multi-agency water supply and infrastructure collaboration facilitation; and groundwater management. He is Central Coast water resource specialist who has focused his career toward facilitating collaboration amongst water utilities to develop reliable, resilient surface and groundwater water supplies to combat climate change, unprecedented drought conditions, seawater intrusion and other critical water resource challenges.

Professional Experience

Oct 2021 - Present: President/Principal Engineer, Confluence Engineering Solutions, Inc. (ConfluenceES)

Apr 2010 - Oct 2021: Vice President/Principal Engineer, Water Systems Consulting, Inc. (WSC)

Jul 2005 - Jul 2009: Water Quality Specialist and Consultant, City of Redwood City

Jun 2002 - Jul 2005: Engineering Technician, Alameda County Water District

Relevant Project Experience

Executive Director, Los Osos Basin Management Committee, Los Osos, CA: Executive Director facilitating implementation of the Los Osos Basin Plan, management the annual monitoring program and development of Annual Monitoring Reports for the Los Osos Groundwater Basin to develop a sustainable water supply and prevent seawater intrusion for the community of Los Osos. Coordinate the activities of the BMC, including facilitation of BMC Meetings, development and maintenance of BMC budget and finances. Lead the BMC parties in the development of a Strategic Implementation Plan to build consensus and align focus of staff and financial resources. Completed an updated evaluation of the Sustainable Yield for the Los Osos Basin and achieved unanimous approval of an updated Sustainable Yield estimate for the basin.

Program Manager, Recycled Water Program Implementation, City of Morro Bay, CA: Program Manager for the City of Morro Bay's \$40 million Indirect Potable Reuse (IPR) recycled water program to develop a 1 MGD advanced treatment system and injection well network to treat and inject advanced purified recycled water into the Morro Groundwater Basin to increase recharge, prevent seawater intrusion and reduce nitrate contamination. This project will provide the City with a local, reliable, resilient source of water supply that provides water security and reduces its reliance on Sacramento-San Joaquin Delta imports.

Program Manager, Central Coast Blue, City of Pismo Beach, CA: Program Manager for the planning phases of the \$93 million recycled water program to capture and treat wastewater from the Cities of Arroyo Grande, Grover Beach and Pismo Beach for injection into the Santa Maria Groundwater Basin to prevent seawater intrusion and bolster local water supply resilience. Oversaw the multidisciplinary team that supported project implementation including the engineering design team and hydrogeologic, environmental, and property acquisition consultants. Coordinated with staff, elected officials, the general public, and all stakeholder agencies on this critical regional recycled water program.

Project Engineer, Niles Cone Groundwater Basin Recharge Project, Alameda County Water District, CA: Alameda County Water District's Groundwater Recharge Project recharges the Niles Cone Groundwater Basin through diversion of surface water from Alameda Creek to a series of recharge ponds on both sides of the Hayward Fault. Water is impounded behind three rubber dams to enhance instream recharge and provide sufficient head to divert water to the recharge ponds. Dan Heimel successfully supported the operations, maintenance and monitoring of the diversion and recharge facilities through the development of modernized data collection and tracking platforms, overseeing and implementing Capital Improvement Projects (CIP) to enhance recharge operations and interfacing between the management, engineering, environmental and operations teams.

Project Manager, Regional Water Infrastructure Resiliency Plan, County of San Luis Obispo, CA: Project Manager for the development of a regional water supply plan to assist in identifying and addressing potential water supply reliability and infrastructure resiliency risks for the County of San Luis Obispo and forty partnering water utilities. Assisted the District, Countywide Water Action Team and partnering water utilities in identifying and addressing potential water supply resiliency risks. Performed assessments to identify the agency water supplies potentially vulnerable to extended drought, infrastructure failure, natural disaster, changing requirements, water rights challenges, and other factors. Identified and designed multiple initiatives to improve water supply resiliency and reliability by providing access to additional water supply sources, more reliable water supply sources and/or enhanced conjunctive use opportunities, through intertie and/or transfer/exchange agreements.

Principal Engineer, Master Water Report, County of San Luis Obispo, CA: Water Utility liaison and stakeholder outreach lead for development of the Master Water Report and Data and Information Management System for San Luis Obispo County. Leading outreach to over 40 SLO County Water Utilities, Stakeholder Groups and Governing Boards. Developed updated resiliency evaluation methodology to assist the County in determining how to invest its resources to improve regional water supply reliability and resiliency.

Project Manager, Cayucos Sustainable Water Project, Cayucos, CA: Project Manager for the planning and site selection for the Cayucos Sustainable Water Project, a new greenfield wastewater treatment and recycled water facility to provide a future potable reuse recycled water source for the community of Cayucos. Lead preliminary engineering, siting and treatment process alternatives analysis and technical components of the EIR.

Project Engineer, Coastal Branch Capacity Assessment, San Luis Obispo County Flood Control and Water Conservation District, CA: Project Engineer for development and calibration of the GIS-based hydraulic model for the Coastal Branch, Chorro Valley and Lopez Pipelines and assessment of opportunities to increase State Water Project (SWP) deliveries to SWP subcontractors. Facilitated multiple SWP workshops to review future demand estimates. Identified a potential Chorro Valley pipeline hydraulic anomaly resulting in low pressure at key locations during low demand periods. Revealed impactful ways to increase SWP subcontractor deliveries, especially to those upstream of the energy dissipation valve pressure control structure.

Project Manager, 2020 Urban Water Management Plan, City of Morro Bay, CA: Project Manager supporting the development of the 2020 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan with an updated assessment of the water supply portfolio's anticipated capability to meet demands. Included an updated water system description, current and future water demand assessments, SBX7-7 compliance calculations, existing/future water supply availability, water service reliability and drought risk assessment, Water Shortage Contingency Plan, and Demand Management Measures.

Jamie Girouard

Confluence Engineering Solutions

Title: ASSISTANT WATER RESOURCE ENGINEER

License & Certifications: T2 Water Operator #46022; D2 Water Operator #53930



Qualifications

Jamie Girouard is a California Polytechnic State University graduate with a Bachelor of Science in BioResource and Agricultural Engineering. Her education and experience in engineering allows her to assist in solving water related problems, manage water resources, and support water quality operations.

Professional Experience

July 2023 – Present: Assistant Water Resources Engineer, Confluence Engineering Solutions
June 2019 – December 2020: Research Assistant Engineer, California Polytechnic State University Internship

Relevant Project Experience

Project Engineer, Nitrate Blending Plan, City of Morro Bay, CA: Developed a thorough and user-friendly proposed nitrate blending plan to submit to DDW for use in emergency operations and planned SWP shutdowns. This blend plan consists of clear recommendations for blending contaminated groundwater when the SWP fails. Along with the procedures and recommendations, the blend plan includes spreadsheets for planning, timing, and calculating flows required from each source to meet demands while complying with MCLs. A monitoring plan was developed based on the City's current monitoring procedures, their incomplete emergency blending monitoring procedures, and additional experience working with water utilities who blend to lower nitrates.

Project Engineer, Recycled Water Program Implementation, City of Morro Bay, CA: Assisted in the development of a Water Supply Evaluation Model for use in drought management and planning. The model was used to determine the best timing to implement the City's Indirect Potable Reuse (IPR) recycled water program. Supply vulnerabilities were assessed, and corresponding drought resiliency methods were developed by operating the model to include IPR water in the City's future water supply portfolio. Potential injection well locations were mapped and evaluated, as well as other uses for non-potable water, to create a Recycled Water Program implementation strategy.

Project Engineer, Water Quality Monitoring, City of Grover Beach, CA: Developed standard operating procedures for drinking water sampling and water quality monitoring. Evaluated data collecting and recording methods to create user-friendly procedures and schedules. Followed standard operating procedures for sampling free and total chlorine, total coliforms, HPC, nitrate, nitrite, general physical, pH, and orthophosphate at distribution locations. Collected lab samples and transferred them to the lab using proper handling procedures to observe temperature, holding time, and Chain of Custody (COC) constraints.

Prepared water quality compliance reports for Grover Beach to submit to the Division of Drinking Water. Organized a combination of water quality field logs and lab sampling results into an easily accessible format. Developed a water quality database to include this information, as well as other water quality data, for later use in the City's Consumer Confidence Report.

Research Engineer, CA Denitrification Bioreactor Project, California Polytechnic State University: The project focused on improving a method for capturing and treating nitrate-polluted agricultural wastewater. Designed and implemented eighteen bench scale bioreactors to analyze three different medias as carbon sources for the denitrifying bacteria. Water sampling and lab testing was used to compare the media's effectiveness as a carbon source. This experiment provided results for future use in improving the design for denitrification bioreactors for California climate.