CITY OF FOLSOM

REQUEST FOR PROPOSAL

CITY OF FOLSOM

2025 Urban Water Management Plan

APRIL 29, 2025

BLACK WATER CONSULTING ENGINEERS

SUBMITTED BY:
Black Water Consulting Engineers
602 Lyell Drive, Modesto, CA 95356
209.322.1820 | www.blackwater-eng.com

BLACK WATER

April 29, 2025

Marcus Yasutake
City of Folsom - Environmental and Water Resources Department
50 Natoma Street
Folsom, CA 95630

Subject: Proposal Submission for the 2025 Urban Water Management Plan

Dear Mr. Yasutake,

Black Water Consulting Engineers (Black Water) is pleased to submit our proposal for the preparation of the City of Folsom's (City) 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). We recognize the critical importance of this effort in supporting the City's long-term water supply reliability, regulatory compliance, and eligibility for State funding.

Our team brings extensive experience in urban water planning, demand forecasting, and drought contingency planning, having prepared and submitted UWMPs and WSCPs for agencies similar to the City of Folsom. We understand the evolving requirements of the Urban Water Management Planning Act and the forthcoming 2025 DWR Guidebook, and are prepared to deliver a thorough, timely, and DWR-compliant UWMP that aligns with the City's growth and water resource strategy.

Under the leadership of Aja Verburg, P.E., and Assistant Project Manager Bao Cha, E.I.T., our team will provide clear project coordination, technical expertise, and responsive communication throughout the assignment. We have carefully allocated staff hours by task to ensure an efficient and balanced approach, as outlined in our enclosed proposal.

We are excited about the opportunity to collaborate with City staff, engage stakeholders, and support the City of Folsom's commitment to sustainable water management. Please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

Aja Verburg, P.E.
Vice President
(209) 753-0078 | aja@blackwater-eng.com

Bao Cha, E.I.T.
Assistant Project Manager
(209) 694-4766 | bao@blackwater-eng.com

Table of Contents

INTRODUCTION

Black Water Consulting Engineers (Black Water) is a S-Corporation, incorporated in California, with offices in Central California. We provide professional engineering services in water, wastewater, drainage, and construction management. Black Water was formed in 2012 and is comprised of talented professionals who endeavor to maintain an outstanding reputation for delivering responsive service, technical expertise, and value to our clients.

Our firm is staffed with experts in the fields of planning and design of water supply, treatment, and distribution systems; wastewater collection, conveyance, and treatment works; storm water analysis and drainage facilities and construction management. We continually participate in the evaluation, design, and review of water and wastewater infrastructure projects and technologies in order to maintain a sound knowledge base of current design standards and construction methods. We have a solid track record in identifying and securing project financing, regulatory compliance, permitting, and reporting requirements for the water and wastewater industries.

OUR FIRM'S CAPABILITIES & SERVICES

WATER

- Urban Water Management Plans
- Water Master Planning
- Demand Analysis
- Hydraulic Modeling of Distribution Systems
- Regulatory Compliance
- Pumping & Booster Station Design
- Pipeline Design
- Well Design
- Water Treatment Design
- Water Rate Studies
- Technical Report Preparation
- System Permitting
- Storage Tank Design
- Financing Evaluations
- Construction Management

WASTEWATER

- Sewer Master Planning & Asset Management
- Sanitary Sewer Management Plans
- Regulatory Compliance & Permitting
- Compliance Reporting
- Pump Station & Force Main Design
- Corrosion & Odor Control
- Pipeline Rehabilitation
- Inverted Siphon Design
- Collection System Modeling
- Sewer & Storm System Rate Studies
- Collection System Evaluation & Design
- Wastewater Treatment & Process Design
- Trenchless Construction
- Wastewater Recycling & Reuse
- Financing Alternatives
- Construction Management

STORMWATER

- Storm Drainage Analysis & Master Planning
- Pump Station Design
- Hydrologic Modeling
- Capital Project Planning
- Condition Assessment
- Detention & Retention Facilities
- Open Channel & Culvert Design
- NPDES Compliance
- Rate Studies
- Low Impact Development (LID)

SCOPE OF WORK

OVERVIEW AND SUMMARY

In accordance with California Water Code (CWC) Section 10620(a), the City of Folsom (City) is required to prepare and adopt an Urban Water Management Plan (UWMP) that complies with the provisions of CWC Section 10640. The UWMP must be updated and submitted to the California Department of Water Resources (DWR) every five (5) years. The City's 2025 UWMP must be developed in alignment with the forthcoming 2025 UWMP Guidebook and submitted to DWR no later than July 1, 2026.

The primary objective of the City's 2025 UWMP is to ensure long-term water supply reliability and sustainability through a comprehensive planning process that aligns with the requirements of the California Urban Water Management Planning Act. The UWMP is not only a foundational planning document, but also a critical compliance tool that enables the City to qualify for State funding, including grants, loans, and drought assistance programs administered by the California DWR. The UWMP will provide DWR, City stakeholders, and the public with essential information related to:

- Current and projected water supply and demand
- Implementation and effectiveness of water conservation programs
- Water shortage contingency planning and drought response strategies
- Water supply reliability under various scenarios and planning horizons

The Water Shortage Contingency Plan (WSCP) will be updated and incorporated into the UWMP. The WSCP will outline the City's formalized response and preparedness framework for managing water shortages.

Black Water recognizes that the development of the 2025 UWMP presents several key challenges, each of which requires careful planning, coordination, and technical expertise. Our team is committed to ensuring that all data used in the plan is accurate, thoroughly documented, and consistent across all relevant planning documents. We will facilitate clear and transparent communication with City staff, the City Council, the Utility Commission, the public, and regional partner agencies. Most importantly, Black Water will adhere to a disciplined project schedule, ensuring that all deliverables are completed efficiently and that the final UWMP is adopted and submitted to DWR by the July 1, 2026 deadline.

PROJECT APPROACH

Black Water understands the critical role of the UWMP in supporting sustainable water resource planning and compliance with the California Urban Water Management Planning Act. Our approach to completing the 2025 UWMP is centered on accuracy, transparency, and timely delivery.

Black Water will prepare the UWMP in full alignment with the forthcoming 2025 Guidebook issued by the California DWR. Our team is committed to ongoing coordination with the City to ensure all relevant data is integrated, public engagement is supported, and the final document meets DWR submittal requirements through the WUEdata portal by July 1, 2026.

The scope of work and tasks outlined in Section X of the City's Request for Proposal (RFP) will be fully addressed as part of our scope of services. In addition to the RFP-defined tasks, the following provides a summary of supplemental tasks that Black Water will implement to support the successful completion of the City's 2025 UWMP.

Task 1 – Progress Meetings and Project Management

Black Water will actively participate in meetings and coordinate with stakeholders to ensure the project is completed on time. The following will be addressed:

- Meetings
  - Conduct one (1) kick-off meeting. Our team will discuss the roles and responsibilities of the City and Black Water team members, the process for preparing for the 2025 UWMP, project schedule, and data requirements.
  - Includes ten (10) additional meetings with the City. All meetings will be virtual via Microsoft Teams.
- Project Management and Administration
  - Internal management of the project including staff scheduling, monthly project updates to City, budget oversight, project correspondence, document production, review of work, and other general overhead items.

Task 2 – Prepare 2025 UWMP

Black Water will review the 2025 Guidebook and prepare the 2025 UWMP to meet all requirements. Additionally, Black Water will respond to any questions or comments from the DWR. The following will be addressed:

- Data Collection and Analysis
  - Black Water will coordinate with the City staff to obtain and review existing data and previous reports to update the existing UWMP and WSCP.
  - Review the 2025 UWMP Guidebook when published.
  - Black Water will coordinate with other agencies and DWR as needed.
- Prepare the 2025 UWMP
  - Prepare the draft 2025 UWMP in accordance with the 2025 UWMP Guidebook. The 2025 UWMP will address the following items:
    - Unit demand analysis
    - System description
    - Water use characterization
    - Water supply characterization
    - Water reliability and drought risk assessment
    - Water shortage contingency plan
    - Demand management measures
  - Prepare the final 2025 UWMP, incorporating comments from City Council.
  - Submit to DWR.
- Respond to Questions/Comments from DWR
  - Provide support for responding to DWR's questions and comments after submittal of the 2025 UWMP.

Task 3 - Public Hearing, Adoption, and Submission

Black Water will attend and participate in presentations at publicly scheduled meetings for the 2025 UWMP.

- Attend two (2) public workshops (in-person for two hours)
- Prepare two (2) presentations to the Utility Commission (in-person for two hours)
- Prepare two (2) presentations to the City Council (in-person for two hours)
- Public Hearing and adoption of 2025 UWMP and WSCP (in-person for two hours)

Deliverable(s):

- Draft UWMP
  - Hard copies sent to regional agencies for comments
  - Five (5) hard copies submitted to the City
  - Electronic PDF copy
- Final UWMP
  - Two (2) hard copies submitted to the City
  - Electronic Word copy
  - Electronic PDF copy
  - DWR tables and UWMP checklist
- Electronic PDF, GIS, database, and other data management files, supporting documentation/ methodology for analyses/calculations, and all other data/information used to develop the UWMP for City distribution and use.

PROJECT TEAM

Our team is organized to efficiently deliver the 2025 UWMP and WSCP through clear leadership, specialized technical expertise, and structured collaboration. Each task outlined in the Scope of Work is assigned to key personnel based on their technical strengths and past experience preparing UWMPs for similar agencies. The accompanying Staff Hours by Task Table details the projected effort by individual and role across all tasks, providing a transparent view of our resource allocation.

Task Activity	Principal	Asst. PM	Asst. Eng.	Design/ Drafting	QAQC/ Admin	Total Hours
1. Progress Mtgs and PM	17	21	11	0	17	**66**
2. Prepare 2025 UWMP	18	50	84	10	12	**174**
3. Public Hearing, Adoption, and Submission	6	32	8	0	12	**58**
Total	**41**	**103**	**103**	**10**	**41**	**298**
Percent Contribution	*14%*	*35%*	*35%*	*3%*	*14%*	*100%*

PROJECT SCHEDULE

Black Water will prepare the 2025 UWMP to ensure timely submission to the State. Work will commence upon issuance of the Notice to Proceed and after the 2025 DWR Guidebook is released. The Guidebook is anticipated to be released in June 2025. The table below outlines a schedule for completing the project.

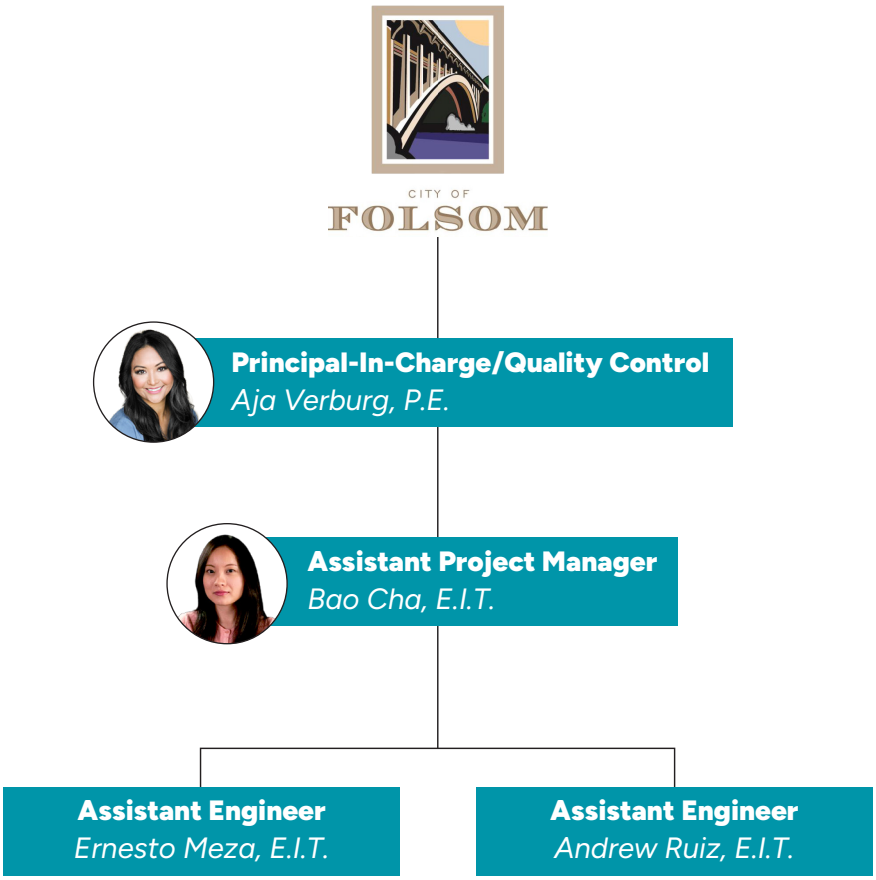
Project Schedule

Task	Description	Date
	DWR Guidebook Release	Anticipated June 2025
	Notice to Proceed	July 8, 2025
1	**Progress Meetings and Project Management**	
	Kickoff Meetings	July 22, 2025
	Progress Meetings - Monthly (Assume 10)	August 2025 - June 2026
	Project Management and Administration	July 8, 2025 – August 31, 2026
2	**Prepare 2025 UWMP**	
	Collect and Review Data	July 8, 2025 – August 11, 2025
	Prepare the Draft 2025 UWMP	August 11, 2025 – January 26, 2026
	Draft UWMP City Review Period	January 26, 2026 – February 23, 2026
	Prepare the Final 2025 UWMP	February 23, 2026 – April 13, 2026
	Final UWMP City Review Period	April 13, 2026 – May 11, 2026
	Submit Final 2025 UWMP	June 22, 2026
	Submit Final Adopted 2025 UWMP	June 24, 2026
	2025 UWMP due	July 1, 2026
	Respond to Questions/Comments from DWR	July 1, 2026 – August 1, 2026
3	**Public Hearing, Adoption, and Submission Assistance**	
	Public Workshop 1	January 28, 2026
	Presentation to the Utility Commission 1	February 4, 2026
	Presentation to the City Council 1	February 11, 2026
	Public Workshop 2	April 15, 2026
	Presentation to the Utility Commission 2	April 22, 2026
	Presentation to the City Council 2	April 29, 2026
	Public Hearing and Adoption	June 23, 2026

CONSULTANT STAFF

The strength of our project team lies in its expertise, extensive experience, and collaborative approach, which make us the ideal choice for delivering the 2025 Urban Water Management Plan. Led by Aja Verburg, P.E., with 22 years of experience managing public infrastructure projects, and Bao Cha, E.I.T., with over 8 years of expertise in water and wastewater systems, our team has a proven track record of executing similar projects successfully. Our team's expertise, supported by years of working with municipalities and public agencies across California, enables us to address project-specific challenges effectively. With a commitment to precision, regulatory compliance, and delivering actionable insights, we are confident in our ability to exceed expectations and contribute significantly to the City of Folsom's 2025 Urban Water Management Plan.

Resumes can be found in **Appendix A**.



QUALIFICATIONS AND REFERENCES

2020 Urban Water Management Plans

Black Water recently assisted several agency owners with the preparation of their 2020 UWMPs by updating the 2015 UWMP to satisfy the requirements of the Urban Water Management Planning Act (UWMPA) and all amendments since 2015. Preparation for the 2020 UWMPs follows the California DWR Guidebook, ensuring full compliance with UWMPA requirements and specific agency policies. Each UWMP was developed in collaboration with DWR and agency staff, distributed for public review and adoption, and then electronically submitted to DWR. The UWMPs are due every five years, with the next major submission deadline being July 1, 2025.

Black Water has successfully assisted several urban water suppliers in developing their Water Shortage Contingency Plans (WSCP) as part of the 2020 UWMP. The WSCPs detail strategies for responding to varying levels of water shortages, incorporating input from agency staff to ensure practicality and effectiveness. By proactively addressing potential water shortages, these contingency plans support each agency's commitment to water sustainability and resilience. The WSCP is required to be updated and submitted alongside the UWMP every five years.

Team Members: Aja Verburg, Bao Cha

Annual Water Supply and Demand Assessments

Black Water has conducted several Annual Water Supply and Demand Assessments (Annual Assessment) and Annual Water Shortage Assessment Reports (AWSAR) in compliance with the California Water Code (CWC). The purpose of the Annual Assessment and AWSAR is to forecast near-term water supply conditions (for the current year) and ensure appropriate shortage response actions are triggered in a timely manner. The California DWR requires each urban water supplier to prepare the annual assessment and submit the AWSAR to the DWR online WUEdata portal on or before July 1 of each year.

Team Members: Aja Verburg, Bao Cha, Ernesto Meza, Andrew Ruiz

REFERENCE:
City of Ceres
Samir Royal, *Director of Public Works*
P: 209.538.5732
2220 Hackett Road, Ceres, CA 95307
Dates: Sep 2020 - Aug 2021

REFERENCE:
City of Oakdale
Jeff Gravel, *Public Services Director*
P: 209.845.3600
455 South Fifth Avenue, Oakdale, CA 95361
Dates: Feb 2021 - Dec 2021

REFERENCE:
City of Merced
Ken Elwin, P.E., *Public Works Director*
P: 209.385.6803
1776 Grogan Avenue, Merced, CA 95341
Dates: Jan 2021 - Aug 2021

REFERENCE:
City of Atwater
Justin Vinson, P.E., *Public Works Superintendent*
P: 209.777.0273
750 Bellevure Rd, Atwater, CA 95301
Dates: May 2021 - Aug 2021

Santa Nella Water Master Plan | Santa Nella County Water District

REFERENCE: Amy Montgomery, General Manager | P: 209.826.0920
12931 S Hwy 33, Santa Nella, CA 95322

Black Water prepared a Water Master Plan document to evaluate the existing water supply, treatment, distribution and storage systems to ensure that the District has adequate facilities to support future growth, goals, and policies. The planning document provides design guidelines for water infrastructure to serve future developments and guidelines for future policy documents. Black Water collected and reviewed previous reports, studies, GIS data, record drawings, and other pertinent planning documents to develop a detailed description of the District's existing water facilities. A hydraulic model was developed to analyze the capacity of the systems and to identify current and future system deficiencies. (Dates: Jan 2017 - Feb 2019)

Team Members: Aja Verburg, Bao Cha

Escalon Water System Evaluation | City of Escalon

REFERENCE: Juston Collins, Public Works Superintendent | P: 209.691.7400
2060 McHenry Avenue, Escalon, CA 95320

The water system evaluation included a review of the City's water system and operations to address the requirements of a State citation to provide a plan and schedule for a Well No. 1 to address water quality and supply issues. The evaluation also prioritized supply and capacity improvements to comply with SWRCB Permit requirements, made recommendations to improve operations and increase efficiency of the system, provided budget cost for recommended improvements and identified potential funding sources. (Dates: Oct 2015 - Mar 2016)

Team Members: Aja Verburg, Bao Cha

Oakdale Water Master Plan Update | City of Oakdale

REFERENCE: Jeff Gravel, *Public Services Director* | P: 209.845.3600
455 South Fifth Avenue, Oakdale, CA 95361

Black Water prepared the Oakdale Water Master Plan to evaluate the existing water supply, treatment, distribution, and storage systems, and to ensure that the City has adequate facilities to support future growth, goals, and policies, as defined in the Oakdale 2030 General Plan. The Water Master Plan included an analysis of existing water demands and development of future demand projections, and development of a GIS-based hydraulic model to evaluate the water supply and distribution system. A capital improvement plan recommending improvements to the existing and future potable water system was included in the document and will be used by the City for establishing budgets and implementing future projects. (Dates: Jul 2020 - Sep 2022)

Team Members: Bao Cha

APPENDIX A
RESUMES

BLACK WATER

Aja J. Verburg, P.E.
VICE PRESIDENT

education

B.S., Civil Engineering, California Polytechnic State University, San Luis Obispo

years with Black Water

11

years with others

11

registrations

Professional Engineer:
Arizona #72561
California #73020
Nevada #028296

affiliations

Modesto Engineers Club, Past President

Aja Verburg has 22 years of experience in public infrastructure and water/wastewater project management and design. Ms. Verburg has a strong understanding of delivering projects from a public agency's perspective. She is experienced with of all aspects of project management, which includes application for funding, public outreach, preliminary engineering, environmental approval, right-of-way acquisition, utility coordination, permitting, project approval and design, and project advertisement, for federal, state, and locally-funded projects. This broad range of experience is a benefit to clients, as her approach for each project is to act as an extension of the agency staff and deliver the most cost efficient and innovative design, on schedule, from the planning stage through construction, to serve the client and public. Throughout her career she has served as a project manager and engineering designer for various public and private water and wastewater projects. Ms. Verburg also has extensive experience using Geographical Information System (GIS) software and Innovyze InfoWater and InfoSewer hydraulic network modeling software.

Project Experience

2020 Urban Water Management Plan, City of Merced - CA. Project Manager. Black Water is currently updating the urban water management plan since its last preparation in 2015 to update the understanding of past, current, and future water conditions and management.

2020 Urban Water Management Plan, City of Ceres - CA. Project Manager. The Ceres water service area encompasses about 9.4 square miles and serves a population of about 48,430 people through 13 active wells. Black Water is currently updating their urban water management plan since its last preparation in 2015 to update the understanding of past, current, and future water conditions and management.

Water System Evaluation and Recommendations - DWSRF, City of Escalon - CA. Project Manager. Evaluated the performance of the City's water system, specifically at the Well #1 site, and provided recommendations for supply and capacity improvements.

Water Master Plan, Santa Nella County Water District - Santa Nella, CA. Project Manager. Managed the preparation of a water master plan to evaluate the existing water supply, treatment distribution and storage systems to ensure that SNCWD has adequate facilities to support future growth, goals, and policies. The water master plan will provide design guidelines for water infrastructure to serve future developments and guidelines for future policy documents.

Annual Water Supply and Demand Assessments, Multiple Agencies - CA. Project Manager. Conducted Annual Water Supply and Demand Assessments and Annual Water Shortage Assessment Reports in compliance with the California Water Code.

On-Call Water Analyses, City of Tracy - CA. Project Manager. Maintained and updated the City's hydraulic water model, and conducted various analyses to verify the condition and capacity of the existing water system to serve planned development and connections to the water system.

BLACK WATER

Bao Cha, E.I.T.
ASSISTANT PROJECT MANAGER

education

M.S., Civil Engineering, University of the Pacific

B.S., Civil Engineering, University of the Pacific

years with Black Water

8

years with others

0

registrations

Engineer-in-Training:
California #157507

affiliations

Order of the Engineer

Bao Cha has over eight years of experience in civil engineering specializing on water and wastewater systems. Prior to joining Black Water Consulting Engineers, she completed an internship at a wastewater treatment plant. During her time at the wastewater agency, she worked on various projects which involved providing recycled water to the community and updating the recycled water system. At Black Water, Ms. Cha has been involved in a wide variety of water and wastewater projects assisting in analyses, report production, hydraulic models, and application processes for securing state revolving funds.

Project Experience

2020 Urban Water Management Plan, City of Oakdale - CA. Assistant Engineer. Updated the urban water management plan since its last preparation in 2015 to update the understanding of past, current, and future water conditions and management.

2020 Urban Water Management Plan, City of Atwater - CA. Assistant Engineer. Updated the urban water management plan since its last preparation in 2015 to update the understanding of past, current, and future water conditions and management.

Oakdale Water Master Plan, City of Oakdale - CA. Assistant Engineer. Preparing the water master plan to evaluate the existing water supply, treatment, distribution, and storage systems to ensure that the City has adequate facilities to support future growth, goals, and policies.

Water Master Plan, Santa Nella County Water District - Santa Nella, CA. Assistant Engineer. Assisted with the preparation of a water master plan to evaluate the existing water supply, treatment distribution and storage systems to ensure that SNCWD has adequate facilities to support future growth, goals, and policies. The water master plan will provide design guidelines for water infrastructure to serve future developments and guidelines for future policy documents.

Water System Evaluation and Recommendations - DWSRF, City of Escalon - CA. Assistant Engineer. Evaluated the performance of the City's water system, specifically at the Well #1 site, and provided recommendations for supply and capacity improvements.

On-Call Water Analyses, City of Tracy - CA. Assistant Engineer. Conducted various analyses to verify the condition and capacity of the existing water system to serve planned development and connections to the water system. Responsibilities included developing hydraulic models and preparing the technical memoranda.

Annual Water Supply and Demand Assessments, Multiple Agencies - CA. Assistant Engineer. Conducted Annual Water Supply and Demand Assessments and Annual Water Shortage Assessment Reports in compliance with the California Water Code.

Well 1A Improvements - DWSRF, City of Escalon - CA. Assistant Engineer. Funding assistance and the design for the new Well 1A, site improvements to connect the new well to the existing site infrastructure, and demolition of on-site inactive granular activated carbon treatment filters and existing well. Assisted with the construction funding application.

BLACK WATER

Ernesto Meza, E.I.T.
ASSISTANT ENGINEER

education

B.S., Civil Engineering,
University of California - Davis

years with Black Water

1

years with others

1

registrations

Engineer-in-Training:
California #179868

Ernesto Meza is a recent civil engineer graduate with a Bachelor's degree from the University of California, Davis. Over the course of his career, he has gained extensive experience in both technical and field-based aspects of civil engineering. His expertise includes reviewing and analyzing construction documents, conducting thorough project inspections, and performing detailed plan reviews. Mr. Meza is also proficient in utilizing GIS applications for project planning and management, enhancing his ability to contribute to complex infrastructure projects. Additionally, Mr. Meza has a strong background in working on capital improvement projects, collaborating with various stakeholders, and ensuring projects are executed efficiently and within regulatory standards. His well-rounded experience enables him to navigate both the design and implementation phases of civil engineering projects.

Project Experience

Water System Improvements - DWSRF, Sierra Park Water Company - Tuolumne County, CA. Assistant Engineer. Provided detailed design services for improvements to the Sierra Park Water System. Improvements include construction of a water treatment plant, SCADA upgrades, replacement of existing groundwater well pump and well head discharge piping, installation of tank level monitoring and associated ancillary improvements for the purposes of treating groundwater to comply with water quality standards. Currently providing bidding assistance for the construction of the project.

Santa Nella/Volta Water Quality Improvement Project - DWSRF, Santa Nella County Water District - Merced County, CA. Assistant Engineer. The project involves improvements to the water supply facilities of SNCWD and Volta Community Services District and consolidation of the two systems. Improvements include a new well, trunk lines delivering water to the distribution systems, water storage, blending, and pumping facilities, and distribution improvements to the VCSD system. Responsibilities include assisting with the contract documents preparation.

2024 Annual Water Shortage Assessment Report, City of Merced - CA. Assistant Engineer. Conducted the 2024 Annual Water Supply and Demand Assessment and prepared the Annual Water Shortage Assessment Report compliant with the California Water Code and as described in the 2021 City of Merced Water Shortage Contingency Plan.

CVMWC Water System Improvements, Cedar Valley Mutual Water Company - Oakhurst, CA. Assistant Engineer. This project consisted of the preparation of a feasibility study to evaluate the existing water system and identify system deficiencies and evaluate improvements to provide the CVMWC community with safe and reliable drinking water. The study recommended construction of a new production well. Currently providing engineering services for the design and bidding assistance of the test well. Responsibilities included assisting with the preparation of the contract documents for bidding the construction of the test well.

Tracy Hindu Temple Water System, Schack & Company, Inc. - Tracy, CA. Assistant Engineer. Providing engineering services to evaluate the feasibility of consolidation with a nearby water system. Preparation of a preliminary technical report to submit to the SWRCB DDW for approval for the water system to apply for a permit to operate a small public water system.

BLACK WATER

Andrew Ruiz, E.I.T.
ASSISTANT ENGINEER

education

B.S., Civil Engineering, Environmental, and Sustainable Engineering, Santa Clara University

years with Black Water

Joined in 2024

years with others

0

registrations

Engineer-in-Training:
California #181498

Andrew Ruiz is a recent graduate of Santa Clara University with a Bachelor of Science in Civil, Environmental, and Sustainable Engineering. His academic foundation includes coursework in structural analysis, wastewater treatment, reinforced concrete design, and land surveying. Prior to joining Black Water, Mr. Ruiz gained experience in construction project management at a general contracting and design-build firm, where he worked as a Field Engineer. His work included project scheduling, cost estimation, contract management, and site logistics planning, providing him with valuable insight into large-scale civil projects.

At Black Water, Mr. Ruiz has contributed to various water and wastewater projects, including hydraulic modeling, infrastructure assessments, and technical feasibility studies. He has assisted with preparing engineering reports, system improvement plans, and cost estimates to support municipal and private-sector projects. His work includes pipeline evaluations, stormwater management planning, and regulatory compliance support, ensuring projects meet state and federal requirements. Additionally, Mr. Ruiz has played a key role in drafting technical memoranda, reviewing project specifications, and assisting with contract document development.

Project Experience

2024 Annual Water Shortage Assessment Report, City of Atwater, CA. Assistant Engineer. Development and preparation of the 2024 Annual Water Shortage Assessment Report, evaluating water supply conditions and assessing system vulnerabilities. Assisted in data analysis, demand projections, and compliance with regulatory reporting requirements to support informed water resource planning.

ABF Freight Treatment System Engineering Technical Report, Calaveras Water Quality & Compliance – San Joaquin County, CA. Assistant Engineer. Reviewed and formatted the engineering technical report for an arsenic treatment system to ensure compliance with San Joaquin County Environmental Health Department regulations. The project included technical review, documentation refinement, and professional engineering certification to support regulatory approval.

Water System Improvements - DWSRF, Sierra Park Water Company - Tuolumne County, CA. Assistant Engineer. This project involved funding application services and detailed design services for improvements to the Sierra Park Water System. Improvements include construction of a water treatment plant, SCADA upgrades, replacement of existing groundwater well pump and well head discharge piping, installation of tank level monitoring and associated ancillary improvements for the purposes of treating groundwater to comply with water quality standards. Currently providing bidding assistance for the construction of the project. Responsibilities include assisting with preparation of cost estimates and addenda and reviewing RFIs during the bidding process.

Sanitary Sewer Management Plan Update and Audit, City of Pittsburg - CA. Assistant Engineer. Assisted in the audit and currently updating the City's SSMP to ensure compliance with SWRCB Order No. 2022-0103-DWQ. The project involves reviewing existing policies, evaluating sanitary sewer overflow (SSO) data, updating regulatory compliance measures, and preparing the final SSMP report to support the City's wastewater management program.

APPENDIX B
RATE SCHEDULE

BLACK WATER
CONSULTING ENGINEERS

2025 Rate Schedule

	Hourly Rate
ENGINEERING:	
ENGINEERING INTERN	$118.00
ENGINEER TECHNICIAN	$181.00
ASSISTANT ENGINEER	$193.00
ASSOCIATE ENGINEER/ASSISTANT PROJECT MANAGER	$239.00
PROJECT MANAGER	$275.00
PRINCIPAL	$302.00
TECHNICAL STAFF:	
CAD TECHNICIAN	$155.00
SENIOR CAD TECHNICIAN	$178.00
SENIOR CAD DESIGNER	$213.00
FIELD SERVICES:	
CONSTRUCTION INTERN	$118.00
CONSTRUCTION INSPECTOR	$222.00
CONSTRUCTION MANAGER	$275.00
ADMINISTRATION:	
ADMINISTRATION	$118.00
EXPERT WITNESS:	$392.00

DIRECT COSTS:	COST PLUS 10 PERCENT
SUBCONSULTANTS:	COST PLUS 10 PERCENT
MILEAGE:	IRS RATE

The above rate schedule is valid for the duration of the contract.