Statement of Qualifications for

Cascade Supply Program, Program and Engineering Support

SUBMITTED TO

Cascade Water Alliance

June 6, 2025

Jacobs

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Reinventing tomorrow.

1.

Cover Letter

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Jacobs Project Management Co. (JPMCo.)
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Phone: 425.453.5000
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June 6, 2025

Attn.: Brian Bartle
Cascade Water Alliance
11400 SE 8th Street, Suite 400
Bellevue, WA 98004

Subject: Statement of Qualifications for Cascade Supply Program, Program and Engineering Support

Dear Mr. Bartle and Selection Committee Members,

Cascade Water Alliance (CWA) is taking the next step in delivering the historic Cascade Supply Program (CSP) to redefine the way water is provided in the region. To deliver this critical infrastructure program and provide resilient water supply to its member agencies, CWA is establishing a programmatic approach by creating the Program and Engineering Support (PES) contract. The PES team will play a crucial role collaboratively working with the CWA team to manage the delivery of the $1B program, which includes 25-30 miles of pipeline, a terminal storage facility, and a re-chlorination station.

Jacobs Project Management Co. (Jacobs) brings a proven method of program delivery to benefit CWA through established program initiation and management, regional conveyance project facility planning, right-of-way (ROW) and permitting strategies, Phase 1/2 assessments, technical reviews, resource allocation, interested parties communication, and sophisticated risk mitigation. Specifically, the key benefits we bring to this important program include:

A trusted and experienced Project Manager who understands the vital role planning, engineering and constructability play in program delivery. Makarand Pendse (Project Manager) will draw on his experience and lessons learned delivering large conveyance programs around the world, including his leadership experience on the San Mateo Clean Water Program, Cargill MSS Processing and Brine Discharge Pipeline Program and the Haweswater Aqueduct Resilience Program (UK). As the single point of contact for our CSP PES team, Makarand will lead our Bellevue-based team with effective communication, responsiveness, and the trust of CWA staff.

Proven program management acumen as Engineering News Record's #1 Program Management firm. Program initiation is critical to the long-term success of a program. Jacobs' proven program initiation process from, mobilization, leadership alignment, strategy development, governance establishment, plan and tool deployment, to CWA staff training, will lay the foundations for successful program implementation and continuity into CWA's future operations. Ken Durbin (Global Program Initiation Lead) will guide our leadership team that includes Makarand Pendse (Project Manager) and Emma McGowan (Deputy Project Manager), along with key strategic program advisors: Mike Reimbold (Program Manager for Ship Canal Water Quality Project), Petra Liskova (Program Manager for King County Wastewater Treatment Division's South Treatment Plant Facility Program), and Keoki Sears (Jacobs' Global Major Programs Delivery Director). Ken and Emma will work with the CSP team to define program needs, establish program implementation steps and schedule, and tailor processes and tools with your existing systems and practices. They will develop CSP governance, program management plans, and establish a program dashboard to report program KPIs. Through these processes, our program controls team will work with CSP to develop program schedules, cost estimates, and manage risks and change. Our strategic advisors will support the team with strategy and best practices, providing unique experience to navigate any challenge or issue.

Comprehensive facilities planning and conveyance design experts led by Andrew Behnke. With 30 years of Northwest conveyance expertise, Andrew will guide our team through the critical facilities planning task. Given the program's critical path timeline, comprehensive evaluations including hydraulic and surge analyses, route studies, and operations plans will be required during the planning stage to set the program up for success. Andrew has developed evaluation tools to help

clients site, align, and optimize routes. He understands the critical details needed to drive decision-making and stay on schedule. He will bring the lessons learned from the Brightwater Conveyance System which offered critical insights into the complexities of planning and executing large-scale conveyance alignments across diverse and densely developed landscapes. One of the most significant lessons was the importance of early and comprehensive route evaluation. Thorough alignment planning that considered constructability, environmental impact, and long-term operational efficiency was required to meet the needs of the conveyance tunnel. This process helped identify alignments that minimized surface disruption while optimizing hydraulic performance. Coordination with local agencies and interested parties was essential to navigate ROW challenges and secure necessary easements, particularly in areas with limited public corridors.

Leadership staff continuity and access to a deep bench of subject matter experts will be paramount to enable a team structure that maximizes knowledge transfer and sharing between various program phases to maintain the critical CSP implementation schedule. The planning stage support staff will continue into the design support stage, reducing the need to transfer knowledge and onboarding new staff. James Chae (Design Support Task Lead), who will have worked with Andrew Behnke on the planning task, will lead the design support task leveraging his decades of experience in engineering design and quality management. James has worked on several of the region's largest pipeline projects including North Mercer Island Interceptor and Enatai Interceptor Upgrades (Mercer Enatai). His expertise with ROW, permitting, and environmental conditions will allow him to lead the team in identifying creative solutions for any identified obstacles. Our team, including program planning, facility planning and design leads, will be supported by a robust technical team of experts to provide a wide range of technical and program support. These resources are available to support your program management, engineering, construction support, and operations staff.

Operations & Maintenance (O&M) expertise resulting from decades of experience operating and maintaining infrastructure facilities. By leaning on our experience O&M staff and the construction management team, we will bring in constructability experience during the planning and design phase reducing the risk of constructability surprise during construction.

Collaborative program delivery leveraged by our proven program management experience in Seattle and globally highlights our ability to work seamlessly with CWA to deliver the CSP program on time, within budget, and aligned with interested parties expectations, while also creating valuable opportunities for CWA staff to collaborate with and learn from leading program management professionals.

Team commitment to delivering CSP. Jacobs has over 40,000 staff worldwide, 2,300 in the Northwest, and over 200 staff in Puget Sound to support the CSP program. As needs fluctuate and change to deliver the program, Jacobs, along with our teaming partners, are ready to provide the staff to manage and execute this program. Bellevue-based Project Manager, Makarand Pendse and Deputy Project Manager, Emma McGowan have committed to be fully available to deliver your program. Other key team members, as presented in the organization chart and Appendix B, have committed at least 50% of their time to this program.

We acknowledge that we have received all addenda issued to the RFQ. We look forward to continuing this productive relationship to achieve substantial environmental, social, and economic benefits for our region.

Sincerely,
Jacobs Project Management Co.

Mr. Makarand Pendse, PMP
Project Manager
1100 112th Avenue NE
Suite 500
Bellevue, WA 98004
makarand.pendse@jacobs.com
M: 925.998.5753
For any questions on our SOQ
please contact Makarand Pendse.

Mr. Court Harris, PE, PMP
Principal-in-Charge
Court.Harris@jacobs.com
M: 425.223.1305

Ms. Kristie Casarez
Contract signing Authority:
Senior Vice President Operations

2.

Background of Firm

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Jacobs is your partner to deliver the CSP on budget and on schedule at the level of excellence and quality you expect.

Proven **Partner**

 # 1 Program Management Water Transmission

 # 3 Water Supply Water Treatment

Engineering News Record (ENR)

Jacobs is the premier program management firm in the world, bringing CWA our Northwest program management team that is backed by world-class expertise. Our local team has delivered major programs and pipeline infrastructure projects in the Puget Sound and possesses **decades of experience working with your member agencies**, Tacoma and SPU; South King County/Pierce County cities; major utilities, and regional transportation agencies.

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75 year history in **water conveyance planning, design, construction and operation**

Our global track record of executing hundreds of pipeline projects and programs has allowed us to develop proven practices for program management and cost-efficient planning and design using cutting-edge technology, such as Intelligent O&M, digital twins, 4-D design, and robust asset management. **This will set Cascade up as a future-proof regional water supplier from Day 1.**

90%

Of our team members are based out of our Bellevue office just one mile north of Cascade's office. We will be proactive in addressing CWA's needs, and efficiently and cost-effectively deliver this program as a trusted partner and advisor.

$15B+ in **major water and conveyance programs delivered** by the Jacobs program team members, including some of the largest capital programs in Puget Sound. Our successful track record of completing **over 300 water conveyance projects** brings CWA lessons learned, best standards and practices, comprehensive understanding of technical elements, and thorough resources to meet every program need.

100% **committed through the duration of this program.** Our Jacobs staff and subconsultant team members will prioritize the CSP and demonstrate our ability to oversee and deliver multiple concurrent projects. As the program transitions to design, construction and ultimately to operations, **our team can transition to meet current program needs and stay engaged until the final valve is turned to deliver clean water to CWA customers.**

10 partners that bring **expertise and proven results** for community outreach and engagement, right of way/ real property, environmental due diligence, project and construction management, water quality testing, start up and commissioning, and owner advisory services. **We have proven working relationships with each of our partners and are committed to their growth and success through this program.**

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Jacobs
Years in Business: 78 **No. of Employees:** 45,000 + **Office Locations:** Bellevue, Seattle, WA; Portland, OR; Boise, ID **Areas of Specialization:** Comprehensive program and construction management, water conveyance. **Additional Services Offered:** All services.

Commonstreet Consulting, LLC
Years in Business: 7 **No. of Employees:** About 60 **Office Locations:** Seattle, Tacoma, Olympia, Spokane, Portland, and Salem, WA **Areas of Specialization:** Turn-key ROW program management for infrastructure development **Additional Services Offered:** Title, acquisition, relocation planning and relocation, administrative offer summaries (AOS)/appraisal waiver valuations, property management, homelessness response and prevention, and project controls.

Confluence Engineering Group, LLC
Years in Business: 18 **No. of Employees:** 8 **Office Locations:** Seattle, WA **Areas of Specialization:** Drinking water quality and regulatory compliance. **Additional Services Offered:** Engineering, operations planning, and applied research services.

EnviroIssues (DBE/MWBE)
Years in Business: 30 **No. of Employees:** Nearly 80 **Office Locations:** Seattle, WA; Portland, OR **Areas of Specialization:** Leading outreach and communications programs.

Farallon Consulting, LLC
Years in Business: 27 **No. of Employees:** 100+ **Office Locations:** Bellevue, Seattle, Bellingham, Gig Harbor, and Wenatchee, WA; Portland and Baker City, OR; and Oakland and Irvine, CA **Areas of Specialization:** Environmental due diligence and contaminated site investigation. **Additional Services Offered:** Site development and cleanup.

The Formation Lab (DBE/MWBE)
Years in Business: 6 **No. of Employees:** 7 **Office Locations:** Portland, OR **Areas of Specialization:** Integrating community benefits into the planning, design, and management of water infrastructure programs. **Additional Services Offered:** Public communications, workforce strategy and development programs.

KBA, Inc.
Years in Business: 30 **No. of Employees:** 100+ **Office Locations:** Seattle, Bellevue, and Mount Vernon, WA **Areas of Specialization:** Construction management (CM) services. **Additional Services Offered:** Project review committee (PRC)/capital projects advisory review board (CPARB), owner advisory services.

EGM Inc., dba MENG Analysis
Years in Business: 40 **No. of Employees:** 6 **Office Locations:** Seattle, WA **Areas of Specialization:** Value engineering or value analysis. **Additional Services Offered:** Constructability review, commissioning, facility condition assessment, cost analysis/cost estimating, and performance engineering.

MPERA, LLC (DBE/MWBE)
Years in Business: 1 **No. of Employees:** 1 **Office Locations:** Woodinville, WA **Areas of Specialization:** Geotechnical engineering, subsurface exploration, and seismic design. **Additional Services Offered:** Seismic evaluations and retrofit.

MPM Consulting, LLC (DBE/MBE/SBE/CSC)
Years in Business: 10 **No. of Employees:** 8 **Office Locations:** Lake Oswego, OR **Areas of Specialization:** Project controls. **Additional Services Offered:** CM, scheduling, cost estimating, cost engineering and control, change management, risk assessment and analysis, claims support and analysis.

Progressive Design-Build Consulting, LLC (DBE/WBE)
Years in Business: 7 **No. of Employees:** 3 **Office Locations:** Woodinville and Spokane, WA; Walnut Creek, CA **Areas of Specialization:** Guiding owners through alternative delivery procurement, implementation, and risk management. **Additional Services Offered:** Training, contract development, and workflow management.

PRR, Inc. (DBE/WBE)
Years in Business: 43 **No. of Employees:** 117 **Office Locations:** Seattle, Portland, WA; Washington D.C.; Norfolk, VA; and Baltimore, MD **Areas of Specialization:** Integrated communications, leveraging expertise in transportation, health, and environmental sectors to foster informed decision-making and inclusive community development. **Additional Services Offered:** Strategic social marketing and human-centered design solutions to support infrastructure planning and environmental sustainability.

SJ Casla Inc., DBA, Strategic Business Solutions (DBE/WMBE/SCS)
Years in Business: 7 **No. of Employees:** 25 **Office Locations:** Bellevue, WA **Areas of Specialization:** High-end consulting across program and project management, change management, and business analysis, offering tailored solutions for utilities, healthcare, and government sectors. **Additional Services Offered**: PMO assessments, organizational design methodologies, and training programs helping clients navigate transitions and optimize governance structures.

3.

Organization Chart

3. Organization Chart

This organization chart represents the key roles and staff anticipated to support this program. Our team has an additional 200+ local staff across our organizations ready to address any CSP needs. We have engaged trusted MWBE partners for important roles and expect these firms will perform 5-10% of the project by contract value.

Cascade Water Alliance

Task 1: Program Management & Controls

Principal-in-Charge
Court Harris, PE, PMP

Program Management Strategy Advisor
Mike Reimbold, PE **50%**
Keoki Sears
Petra Liskova

Project Manager
Makarand Pendse, PMP **100%**

Deputy Project Manager
Emma McGowan, PE **100%**

Owner's Advisor
Gina Hortillosa, PE, PMP **KBA** **50%**

Task 2: Program Support

Task Lead: Ken Durbin, PE **50%**

Governance & KPIs
Emma McGowan, PE
Paula Bolio, PG, PMP

Project Execution Plan
Mike Reimbold, PE

GIS Mapping
Erik Voight

Project Management Support
Matt Maring, PE, PMP
Andrew Behnke, PE
Pat White, PE, ENV SP
Cathy Arnold, PE
Paola Taylor **SBS**

Collaborative Delivery Strategic Advisors
Michelle Green, PE
Pat Burke, PE, PMP

Contracting Strategy & Development
Robyn Thaxton, JD, FDBIA **PDBC**

CPARB, Procurment Planning
Gina Hortillosa, PE, PMP **KBA**

Program Communications
Natalie Monro

Asset Management
Corinne DeLeon, PE

Program Controls
Ryan Mallory – *Program Controls Lead* **50%**
Christie Gallo, CCP – *Lead Estimator*
Liviu Prisecaru **MPM** – *Lead Scheduler*
Mike Reimbold, PE – *Risk Management*
Luanne Cuttita – *Document and Record Management*

Quality Management
Mike Reimbold, PE

Health and Safety
Tyler Boswell, CSP

Organizational Effectiveness and Change Management
Corinne DeLeon

Financial, Economic Analysis and Funding Strategies
Dan Pitzler

Grants & Funding
Tahne Corcutt
Katie Pekarek

Task 3: Planning

Task Lead: Andrew Behnke, PE **50%**

Task 7: Design Support

Task Lead: James Chae, PE, PMP **50%**

Comprehensive Planning & Design Support Services

Pipeline Design
Roger Beieler, PE **50%**
Matt Maring, PE, PMP

Modeling
Jennifer Henke, PE* **50%**
Lorin Davis, PhD

Design Standards
Pat White, PE, ENV SP

Climate Planning and Resiliency Modeling
Mark Anderson, PE

Pump Stations & Mechanical
Erik Brodahl, PE, PMP

Trenchless Construction
Andrew Finney, PE*, GE

Condition Assessment, Rehabilitation
Dan Buonadonna, PE

Civil Engineering
John Etulain, PE

Structural Engineering
Bin Ge, PE, SE

Instrumentation & Controls
Josh Thompson, PE

Phase 1/2 Due Diligence
Liz Forbes, LG **50%**
Tina Huff, REPA **F**

Electrical Engineering
Jake Dunn, PE

Digital Twin, AI, Optimization
Tyler Nading, PE*

Seismic/Geotechnical Engineering
Marcelo Azevedo, PE
Menzer Pehlivan, PhD, PE **M**

Corrosion Engineering
Patterson Tuttle

Water Quality
Chris McMeen, PE **CF** **25%**
Melinda Friedman, PE **CF**

Hazardous Materials
Annika Seay

Facilities Architecture, Space Planning
Mark Sharp, AIA, LEED AP

Surveying
Doug Howe, PLS

Task 4: Right of Way (ROW)

Task Lead: Kari Lowe, SR/WA **C** **50%**

ROW Strategy
Chris LaBonte

Utilities
Casey Hodges

WSDOT
Jason Motland

Local Agencies
Ted Parry, JD

Homelessness Response
Brendan Perko

Appraisal Lead
Steve Bray **C**
6 Certified Appraisers

Task 5: Permitting

Task Lead: Emilie Wicker **50%**

Environmental/SEPA
Emilie Wicker
Erika Shook
Hans Ehlert, PWS

Local Permitting Compliance
Mark Sharp, AIA, LEED AP

Air Quality Permitting
Stacia Dugan

WSDOT/Sound Transit Liaison
Jason Ruth, PE, SE, PMP

BNSF Liaison
Ryan Blumer, PE

Task 6: Communications & Outreach

Task Lead: Natalie Monro **50%**

Community Outreach & Engagement
Laura LaBissonier Miller **PRR**
Kerri Franklin **EI**

Community Benefits
Nicki Pozo, PhD, PE*, PMP **FL**

Task 8: Construction Support

Task Lead: Jay Heuter, CCM **50%**

Construction Managers
Greg Colzani, CCM
Jeff Mitsopoulos, PE*
Paul Prozinksi, CCM **KBA**
Scott Rzemien, CCM **KBA**

Constructibility Review
Robert Liu, PE*

Inspection Team
Jacobs, KBA and Confluence inspection team (over 60 inspectors in Puget Sound)

Task 9: Operations Support

Task Lead: Chris Catlin, PE* **50%**

O&M Optimization, Startup, Training, Testing/Commissioning
Chris Catlin, PE*
Franisco Martinez
Marc Quijano
Chris McMeen, PE **CF**
Michael Hallett **CF**

Value Engineering
Timothy Buckley, AIA, VMA, LEED AP BD+C **MA**

Legend

Key Personnel — **XX%** Key Staff Availability Percentage — *PE (*from a different sate*)*

Subconsultants

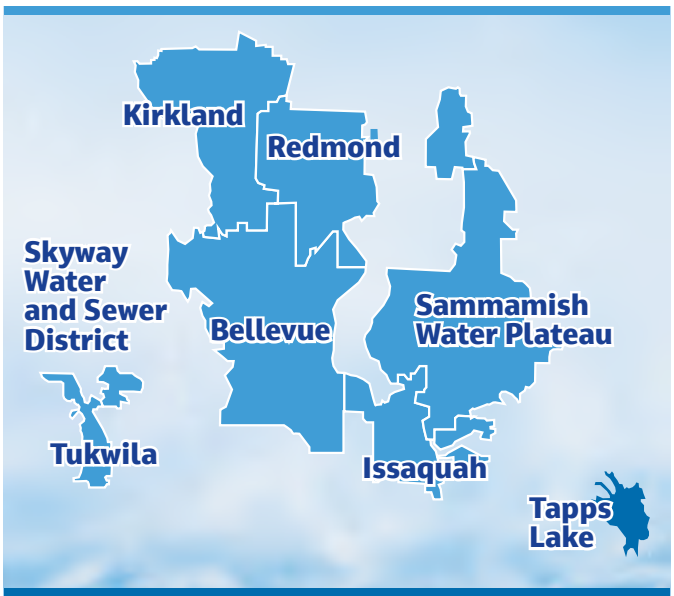
CF	Confluence Engineering Group, LLC	**FL**	The Formation Lab *(DBE/MWBE)*	**MPM**	MPM Consulting, LLC *(DBE/MBE/SBE)*
C	CommonStreet Consulting, LLC	**KBA**	KBA, Inc	**PDBC**	Progressive Design-Build Consulting, LLC *(DBE/WBE)*
EI	EnviroIssues *(DBE/MWBE)*	**M**	MPERA, LLC *(DBE/MWBE)*	**PRR**	PRR, Inc. *(DBE/WBE)*
F	Farallon Consulting, LCC	**MA**	Meng Analysis	**SBS**	Strategic Business Solutions

4.

Relevant Experience of Team

4 Relevant Experience of Team

As the global leader in program management, Jacobs brings unparalleled resources and expertise to support CWA throughout the entire duration of the CSP program. Our team was strategically assembled with this mission in mind—featuring specialized small business partners, nearly all based on the Eastside, who possess deep knowledge of the pipeline corridor and established relationships with your member agencies and local communities. This uniquely qualified team is equipped to drive success from day 1, providing expert support through early program phases such as initiation and facility planning, and seamlessly transitioning into leadership roles during design, construction, startup, and testing.



Our team has experience with **all of the member agencies** involved with the Program

Meet our Leadership Team

Makarand Pendse, PMP, Project Manager, Bellevue, WA | Availability: **100%**

Current workload: *San Mateo Clean Water Program – 40%; Cargill – 10%; Global Integrated Delivery – 10%; Union Sanitary District Pump Station Odor Improvement – 10%; East Bay Municipal Utility District Influent Pump Station Design – 10%*

Makarand is a recognized infrastructure program manager who delivers projects efficiently leading integrated, multidisciplinary teams using collaborative delivery. Having worked on large water conveyance programs across the globe, he has invaluable experience successfully managing large, diverse teams.

His experience includes managing the City of San Mateo Clean Water Program, a 10-year, $1.76B capital improvement plan to replace aging infrastructure and meet the future water needs of San Mateo. Makarand worked closely with the city to initiate this complex program and set up a "best for program" delivery and innovations approach. The original timeline for the Clean Water Program was 20 years; Makarand's leadership and collaboration with the city helped to reduce this timeline to 10 years.

For the Haweswater Aqueduct Resilience Program in the UK, Makarand managed program initiation based on key factors – need, options, cost and customer protection. He set up processes for interested parties engagement, development of options, risk identification and management, cost-benefit assessment, and phasing of construction. This $3B program comprises the construction of 35-mile-long tunnels to improve water supply resiliency. Makarand is excited to bring this expertise to CWA to help you set up and implement your program, while bringing efficiencies in planning and forward thinking for future requirements.

Emma McGowan, PE, Deputy Project Manager, Bellevue, WA | Availability: **100%**

Current workload: *Salt Lake City Department of Public Utilities (SLCDPU) Program – 100%*

Emma has managed the design and construction of capital sewer, stormwater, and drinking water programs that have included many similar and relevant elements to the CSP, including program and project management, scheduling, mapping, route selection and pipeline installation, and managing design consultants and construction contractors.

For the past nine years, Emma has served the $2.5B SLCDPU program. As program manager, she is responsible for the development, prioritization and management of $7M in task orders including roughly 100 sewer, water, and stormwater projects on an annual basis. She has worked with clients to identify, define, and implement project delivery processes, including the automation of processes and approvals to enhance transparency and reporting capabilities.

Ken Durbin, PE, Task 2 Program Support, Bellevue, WA | Availability: **50%**

Current workload: *KC WTD South Plant PMOA – 5%; US Virgin Islands Rebuild Program – 2%; Anchorage WW Utility Capital Works Program – 2%, Jacobs Global Program Initiation – 91%*

Ken leads the critical initiation phase of programs, specializing in the startup of large, complex infrastructure programs, driving strategic planning, team governance/organization, and setup of processes, systems, and tools to deliver program goals and objectives. Ken also brings global insights and best practices that increase efficiency and effectiveness of startup activities.

Ken's program startup experience includes providing initiation leadership for the King County Wastewater Treatment Division (KC WTD) South Plant Program Management/Owner Advisor (PMOA). For this 12-year, $800M program, he led the team in developing the governance framework and program key performance indicators. Through Ken's collaborative efforts with King County, he set the program on the right path, through the development of a comprehensive initiation framework and program management strategies, plans, processes, procedures, systems, and tools to facilitate efficient delivery. Ken will bring the same approach to the CSP and develop an initiation process tailored to CWA that results in the successful startup and execution of the CSP.

Andrew Behnke, PE, Task 3 Planning, Bellevue, WA | Availability: **50%**

Current workload: *KC WTD Eastside Interceptor Section 8 (ESI 8) - 20%; Lake Hills Trunk – 5%; KC Offsite Engineering – 3%; CoB Bogline – 5%; Jacobs Operations – 25%*

Andy works closely with teams and clients to identify and develop the planning documents needed for projects, including operations and facilities plans, and leads the integration of planning and engineering disciplines so that design solutions align with project milestones and budget constraints. As part of the planning process, he also supports geotechnical and hydraulic analyses, route studies, delivery methods, and condition assessments.

For the Seattle Public Utilities (SPU) Ship Canal Water Quality Project (SCWQP), he led the team in analyzing a recommended alternative, optimizing project features, and completing planning documents and environmental reviews. These efforts involved a two-year planning phase to develop a multi-year delivery schedule for design and construction phases and meet consent decree milestones. For the North Mercer Island Interceptor and Enatai Interceptor Upgrades (Mercer Enatai) project, Andy analyzed design and evaluation criteria and delivery methods and planning for the pump station and pipeline facilities. For CSP, Andy will oversee the required planning documents, including the flow allocation plan, many will likely be on the critical path to meet the 2042 CSP operability deadline.

Kari Lowe, SR/WA, Task 4 Right-of-Way (ROW), Seattle, WA (Commonstreet) | Availability: **50%**

Current workload: *Willamette Water Supply Program (WWSP) and Tualatin Valley Water District & City of Hillsboro – 5%; Urban Flood Safety & Water Quality District Levee Program – 15%; ODOT Statewide ADQ Program – 5%*

Kari is Commonstreet's ROW program manager. She has extensive experience working throughout Oregon, Washington, Idaho, and Alaska, and is skilled in communicating effectively and sensitively with clients and property owners regarding property acquisition requirements. Kari has thorough knowledge of the Uniform Relocation Act and ROW procedures and excels at resolving complex acquisition and relocation issues.

Kari provided ROW and real estate support for the WWSP for the Tualatin Valley Water District. For this 30-mile drinking water infrastructure program, Kari oversaw all ROW tasks and managed the acquisition and relocation teams and other ROW teaming agents, project scoping and estimating, and appraisal procurement and management. In addition, she has monitored projects where the ROW was acquired by local public agencies concurrent with road and infrastructure projects.

Emilie Wicker, Task 5 Permitting, Bellevue, WA | Availability: **50%**

Current workload: *Sound Transit BRT Program and Sound Transit WSLE – 30%; KC WTD Elliott West CSO – 10%; KC WTD ESI 8 – 5%*

Emilie specializes in regulatory compliance, development of regulations, and permitting submittals and approvals coordination. She works closely with teams and clients to identify permitting needs and schedules. She is especially familiar with the unique environmental permitting needs in the project area and implements systems to track and report on permitting.

Emilie brings expertise in complex regulatory and permitting requirements for infrastructure projects throughout KC and for Sound Transit and SDOT. As permitting lead for the West Seattle Link Extension (WSLE), she developed the permit implementation framework and identified permits needed to complete the project on a parcel-by-parcel level. She also worked on the environmental permitting application related to geologic and hydrologic issues for Sound Transit's BRT project, involving numerous cities and interested parties.

Natalie Monro, Task 6 Communications & Outreach, Bellevue, WA | Availability: **50%**

Current workload: *KC WTD South Plant PMOA – 30%; KC WTD Mouth of Duwamish CSO (MDCSO) – 50%; Rock Creek Restoration – 5%; CSL- Bellingham – 5%; Rancho California Water District – 5%*

Natalie leads strategic communications, interested parties engagement and outreach, and excels at facilitating communications for diverse groups. As a leader on the Pacific Northwest WaterReuse Board, she advances an interconnected network to effectively communicate and advance water solutions with communities and interested parties.

For the King County South Plant PMOA, Natalie developed a carefully tailored approach to external communications and outreach, based on the unique aspects of neighboring communities and community-based organizations. She has also been involved with educational opportunities to enhance community understanding of the treatment process and criticality of the infrastructure. Similarly, for the CSP, communications will be a critical element to program success. Natalie will lead the communications and outreach team to develop an adaptive strategy for each phase of the CSP lifecycle.

James Chae, PE, PMP, Task 7 Design Support, Bellevue, WA | Availability: **50%**

Current workload: *Jacobs Operations – 50%; KC WTD ESI 8 Pipeline – 5%; KC WTD South Plant PMOA – 5%*

James is a subject matter expert in pipeline evaluation, rehabilitation, and design (opencut and trenchless) for pipelines up to 72 inches in diameter. He leads teams in analyzing routes and crossings, creating pipeline design standards, and evaluating and identifying the most feasible pipeline installation and cathodic protection methods.

For King County's South Plant PMOA, James participated in project chartering, addressing client feedback, conducting monthly reviews with the program team, and overseeing staffing support to meet the needs of King County. For the North Mercer and Enatai Interceptors Upgrade project for King County, he managed the design, condition assessments, hydraulic analyses, and trenchless methods evaluations for over 20,000 linear feet of pipelines.

Jay Hueter, CCM, Task 8 Construction Support, Bellevue, WA | Availability: **50%**

Current workload: *WSDOT Olympic Region GEC – 20%; SDOT On-Call CM Services – 20%; KC WTD South Plant PMOA – 10%*

Jay provides owners with the contractor's perspective as part of his construction support and management services. He conducts constructability reviews during design, coordinates construction activities, reviews contract documents to provide the best value, reviews budgeting, scheduling, and material procurement, and manages contractor negotiations.

Jay established a CM approach for the King County South Plant PMOA. As the construction management director, he led the team in defining the scope and budget for CM services and is managing CM projects. Jay's ability to communicate, add value, find solutions, and work collaboratively will provide construction experience needed from design through construction on the CSP.

Chris Catlin, PE, Task 9 Operations Support, St. Paul, MN | Availability: **50%**

Current workload: *Soquel Creek Advanced Water Purification Plant — 100% through July; AEGIS Risk Review — 10% through August*

Chris has comprehensive experience in water conveyance and distribution, has managed multiple water distribution systems, and is certified as a water treatment and distribution systems operator in several states. He works closely with design and construction teams to develop operation and maintenance strategies and provides startup and training support to O&M staff.

Chris has operated and managed several large distribution and pumping systems. He has assisted water and wastewater utilities in starting up and commissioning pump stations and conveyance facilities using a wide range of treatment technology and system sizes. He has commissioned new equipment, troubleshot and corrected deficiencies, and trained operators and maintenance staff.

Gina Hortillosa, PE, PMP, Owner's Advisor, Seattle, WA (KBA) | Availability: **50%**

Current workload: *Everett Port Gardner Storage Facility CSO – 20%; Lynnwood Wastewater Treatment Plant (WWTP) Owner Advisor Services – 30%*

Gina has served as an owner advisor supporting the delivery of water/wastewater treatment and conveyance projects across Washington, applying a philosophy that values strong performance, continuous improvement, and collaboration. Appointed by the Capital Project Advisory Review Board (CPARB), she serves a three-year term on the State of Washington's Project Review Committee.

Gina served as the development engineering manager for the Alderwood Water and Wastewater District, where she was responsible for facilitating all new privately funded water and sewer infrastructure, valued at approximately $45M. Gina is the owner advisor for the $300M City of Lynnwood WWTP project.

Mike Reimbold, PE, Program Management Strategy Advisor, Bellevue, WA | Availability: **50%**

Current workload: *SPU SCWQP – 20%; KC WTD South Plant PMOA – 10%; KC WTD MDCSO – 5%; Jacobs Operations – 45%*

Mike has served as project manager, quality manager and design manager for water programs and projects. He has served as program manager on the SCWQP for the last 11 years, working closely with SPU staff tailoring approaches and processes for program initiation, governance, cost model forecasting, risk management and analysis from the early planning phase of the program through design and construction. He also prepared and managed risk tools that included a master program-level risk register and project-specific risk registers that were reviewed monthly with SPU management, to minimize and mitigate risk to the program. Mike also worked on the KC WTD South Plant PMOA, leading the program's risk management and providing strategic delivery planning, project oversight, and implementation of various infrastructure projects.

His local knowledge, program experience, and proven leadership will serve as a key resource when inevitable challenges and roadblocks arise on the CSP.

Liz Forbes, Phases 1/2 Due Diligence, Bellevue, WA | Availability: **50%**

Current workload: *Navy CLEAN – El Toro/Tustin PFAS Remedial investigation – 90%; Sound Transit Ballard EIS – 5%; EPA Asarco Ruston Yards – 3%; King County Metro Rapid Ride – 2%*

Liz brings technical and project management expertise. She excels at preparing remediation work plans and schedules and communicating with state and federal regulators and permitting agencies. She has managed environmental investigations, including Phase I and Phase II environmental site assessments, remedial investigations, analyzing and interpreting data, planning and implementing remedial actions, and hazardous materials assessments.

Liz's experience includes leading environmental impact statements, reports, site assessments, and compliance reviews and reporting for clients and agencies throughout Washington, including Sound Transit, King County Metro, and WSDOT. Liz will work closely with the program planning and design support teams to provide the necessary site assessments to make informed decisions on alignment, design, and implementation requirements for the CSP.

Jennifer Henke, PE, Modeling, Bellevue, WA | Availability: **50%**

Current workload: *Albuquerque Bernalillo County Water Utility Authority (ABCWUA) Integrated Infrastructure Plan – 20%; Tulsa Water Comprehensive Plan – 20%; Tulsa 72-inch Water Line Design – 10%*

Jennifer brings experience with water distribution and conveyance planning and hydraulic modeling, potable water treatment, and reliability and redundancy evaluations. She has undertaken hydraulic evaluations of water distribution systems that start with the supply strategy coupled with the overall system operation and customer water delivery to meet operational goals for system performance, reliability, and water quality.

Jennifer has led hydraulics modeling for SPU's water supply system to help maintain reliable service. She coordinated with SPU operations staff to identify facility improvements to maintain water supply service during a potential outage. For the Medford Water Commission, she completed a hydraulic analysis to identify system improvements to meet risk and reliability goals and identify new pipes and operational options to meet future demand while minimizing pumping and energy consumption.

Ryan Mallory, Program Controls Lead, Bellevue, WA | Availability: **50%**

Current workload: *Houston Northeast Water Purification Plant (NEWPP) – 35%; LA Metro RCN – 25%; P6 Admin – 30%; Various Small KC Contracts – 10%*

Ryan has expertise in scheduling, cost control, project analysis, and earned value management. He has successfully led and supported project controls on high-profile programs, consistently aligning project execution with strategic objectives and timelines.

Ryan has led the project controls and database systems activities for the Ship Canal Water Quality project. He has provided schedule, cost, and estimating support, provided training for project staff, and performed schedule analyses and risk mitigation. Ryan has supported multiple aspects of the program, including database management and processes for the Primavera P6 software, and training for SPU project controls and project management staff. Ryan's diverse background in project controls and systems management will allow him to be adaptive and capable of supporting CWA's successful delivery of the CSP.

Roger Beieler, PE, Pipeline Design, Bellevue, WA | Availability: **50%**

Current workload: *Salmon Creek Effluent Pipeline – 15%; Halawa Water Main – 5%; Hawaii DOT Water Main – 2%; Master Specifications Updates – 2%; Tacoma Pipeline 1 Relocation – 5%*

Roger has designed pipeline conveyance systems, led design teams, and served as a senior technical advisor for the design of steel, ductile iron, PVC, and HDPE pipelines with diameters ranging from 4 to 108 -inches.

Roger has an in-depth knowledge of CWA's needs, having served as technical advisor for CWA's effluent pipeline replacement project. He provided review for a 7,000- foot-long, 48-inch-diameter effluent pipeline and outfall and assisted with evaluation of various pipeline materials. For the Tacoma 5 Pipeline project, he supported a multi-disciplined team providing design of a critical pipeline providing redundancy for Tacoma Water. He also served as technical advisor for the Willamette Water Supply Program, providing technical advice for approximately five miles of 66-inch-diameter welded steel pipe and associated appurtenances.

Chris McMeen, PE, Water Quality, Seattle, WA (Confluence) | Availability: **25%**

Current workload: *Willamette Water Supply - Water System Integration – 6%; CWA Water Quality Blending Evaluation – 8%; Other Projects – 55%*

Chris brings over 35 years of expertise in water quality engineering and infrastructure development, with deep knowledge of regulatory compliance, treatment processes, and supply reliability. Having spent 18 years at Tacoma Water as Water Quality & Supply Manager and Deputy Superintendent, he led major initiatives, including regulatory compliance, resource planning, and the execution of $235M in capital projects. At Confluence, Chris applies his technical expertise to support CWA's planning and evaluation of transmission and treatment infrastructure. His leadership in water quality analyses strengthens integration of the Tacoma supply, addressing hydraulic, operational, and maintenance considerations. His proven ability to navigate complex technical and policy challenges makes him a key asset in advancing project success while maintaining long-term water reliability. Chris plays a pivotal role in upholding the highest standards of water quality throughout the process.

Appendix 1

Name	Firm	Location (City, State)	Proposed Role	A (yrs relevant exp.)	B (yrs program mgmt)	C (# programs)	D (yrs in similar role)	E (LF in similar role)	F (LF in planning)	G (LF in design/const.)	H (LF in WA state)
Makarand Pendse	Jacobs	Bellevue, WA	Project Manager	30	12	7	6	90	168	135	N/A
Ken Durbin	Jacobs	Bellevue, WA	Task Lead: Program Support	41	29	28	29	N/A	N/A	N/A	N/A
Andrew Behnke	Jacobs	Bellevue, WA	Task Lead: Planning	30	8	6	16	250	250	145	123
Kari Lowe	Commonstreet	Sublimity, OR	Task Lead: Right of Way	23	10	4	10	N/A	N/A	N/A	N/A
Emilie Wicker	Jacobs	Bellevue, WA	Task Lead: Permitting	25	12	18	22	N/A	N/A	N/A	N/A
Natalie Monro	Jacobs	Bellevue, WA	Task Lead: Communications	9	4	2	4	N/A	N/A	N/A	N/A
James Chae	Jacobs	Bellevue, WA	Task Lead: Design	30	8	4	13	25	185	126	120
Jay Hueter	Jacobs	Bellevue, WA	Task Lead: Construction	41	10	6	15	2	1	2	2
Chris Catlin	Jacobs	St. Paul, MN	Task Lead: Operations	30	4	2	30	N/A	N/A	N/A	N/A
Emma McGowan	Jacobs	Bellevue, WA	Deputy Project Manager	13	9	1	3	N/A	N/A	N/A	N/A
Gina Hortillosa	KBA	Bellevue, WA	Owner's Advisor	29	21	200	5	30	75	75	50
Mike Reimbold	Jacobs	Bellevue, WA	Strategic Advisor & Risk Management	37	15	4	12	20	20	20	20
Liz Forbes	Jacobs	Bellevue, WA	Phase 1/2 Due Diligence	14	7	4	5	N/A	N/A	N/A	N/A
Jennifer Henke	Jacobs	Bellevue, WA	Modeling	27	14	5	24	>5,000	>5,000	3,500	1,200
Ryan Mallory	Jacobs	Bellevue, WA	Program Controls	17	9	3	9	30	20	10	20
Roger Beieler	Jacobs	Bellevue, WA	Pipeline Design	50	15	5	40	350	800	760	350
Chris McMeen	Confluence	Seattle, WA	Water Quality	37	17	3	21	300	N/A	N/A	N/A

5.

Project History

Appendix 2

Column	San Mateo Clean Water Program and Construction Management	SPU Ship Canal Water Quality Project (SCWQP)	KC WTD South Plant Facilities PMOA	Willamette Water Supply Program Partnership Projects (WWSP)	KC WTD North Mercer Island Interceptor and Enatai Interceptor Upgrades	Tacoma Water Second Supply Project Pipeline (Pipeline 5)
Program Support						
Program Management	❍	❍	❍			
Cost Development	●	●	❍	●	●	
Scheduling	❍	❍	❍	●	●	
Risk Management Planning	●	●	❍	●	●	
GIS/Mapping	●	●	❍		●	
Grant Funding Application Support	❍	●	❍			
Planning						
Route Selection	●	●		●	●	●
Options Analysis	●	●	❍	●	●	●
Facilities Plan	●	●		●	●	●
Operational Plan	●	●	❍	●	●	●
O&M Plan/Development	●	❍	❍		●	
Delivery Method Analysis	●	●	❍	●	●	
Hydraulic Analysis/Planning	●	●		●	●	●
Surge Modeling/Planning	●	●		●	●	●
Seismic Review/Planning	●	●		●	●	●
Trenchless Review/Planning	●	●		●	●	●
Cathodic Protection Review/Planning	●	●		●	●	●
Environmental Review/Planning	●	●	❍		●	●
Right of Way						
Route Planning/Alternative Review	●	●		●	●	●
Railroad Coordination	●	●		●		●
Utility Coordination	●	●	❍	●	●	●
Obtaining Franchise Agreements	●	●		●	●	●
Obtained Permanent Easements	●	●		●	●	●
Obtained Temporary Easements	●	●		●	●	●
Permitting						
Project Review/Assess Permit Needs	●	●	❍		●	●
Environmental Documentation/Permit	●	●	❍		●	●
Develop Permit Packages	●	●			●	●
Review Permit Packages	●	●	❍	●	●	
Submit Permit Packages	●		❍		●	●
Communications and Outreach						
Conducting Public Meetings	❍		❍	●	●	
Community Concern Management	❍		❍		●	
Developing Graphics	●	●	❍		●	
Website Development	●				●	
Social Media Outreach	❍		❍		●	
Collecting and Sorting Public Input	❍		❍		●	
Design Support						
Develop Design Standards	●		❍		●	
Develop Preliminary Design	●	●			●	●
3rd Party Design Review	●	●	❍		●	
Cost Estimating or Review	●	●	❍	●	●	●
Construction Support						
Constructability Review	●	●	❍		●	●
Construction Phasing/Sequencing Plans	●	●	❍		●	
Construction Management	●	❍	❍			●
Construction Inspection	●	❍	❍			●
Operations Support						
Constuctability Review	●	●	❍			
Training Development	●	●		❍	●	
Commissioning Support	●	●	❍	❍	●	●
Electronic O&M Creation	●	●			●	
Other						
Pipeline Project, 24" and below	●	❍			●	●
Pipeline Project, 25" through 48"	●	❍			●	●
Pipeline Project, 49" and above	●	❍		●		●
Project Location: Washington		❍	❍		●	●
Project Location: Northwest (OR, ID, MT)				●		
Staff Involved						
Project Manager	●					
Task Lead: Program Support	●	❍	❍			
Task Lead: Planning		●	❍		●	
Task Lead: Right of Way				●		
Task Lead: Permitting			●			
Task Lead: Communications			●			
Task Lead: Design		●	❍		●	
Task Lead: Construction		❍	❍		●	
Task Lead: Operations		❍				
Emma McGowan, Deputy Project Manager						
Gina Hortillosa, Owner's Advisor						
Mike Reimbold, Program Advisor		❍	❍			●
Liz Forbes, Phase 1/2 Due Diligence						
Jennifer Henke, Modeling						●
Ryan Mallory, Program Controls		●	❍			
Roger Beieler, Pipeline Design	●			●	●	●
Chris McMeen, Water Quality				●		●

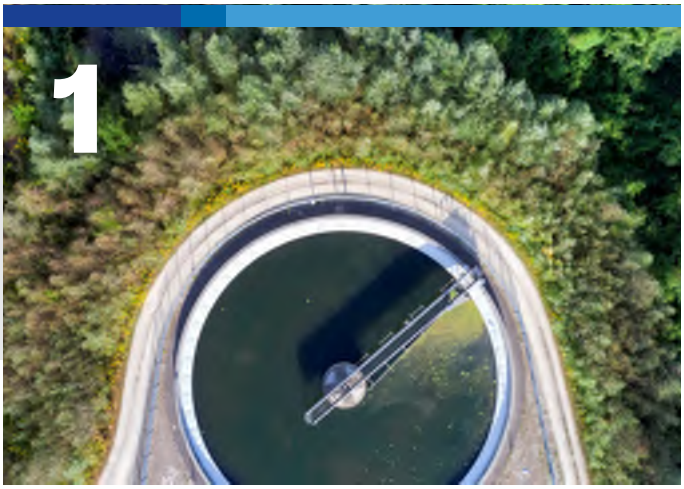
5. Project History

San Mateo Clean Water Program and Construction Management

City of San Mateo, San Mateo, CA

Similar Program Components
Program Management and Initiation | Engineering Design Reviews | Real Estate/Land Acquisition/Leases | Environmental Compliance/Permitting | Planning | Financial Strategies | Construction Management

Beginning Year: 2014 **End Year:** 2026 (est.)
Beginning Budget: $120M (Jacobs) $1.3B (Program)
Final Budget: $158M (Jacobs) $1.76B (Program)
SOQ Staff: Jacobs: Pendse, Conveyance Program Manager; Green, Collaborative Delivery; Pitzler, Decision Science, Financial Modeling; Harris, Engineering Lead; Finney, Trenchless Construction; Burke, Program Advisor; Davis, Hydraulics/Surge



Client Reference: Deryk Daquigan, Public Works Deputy Director, 650.522.7287, deryk.daquigan@gmail.com

Project Summary

Jacobs has led this award-winning, multi-year $1.8B program since 2014 to replace aging infrastructure and build new treatment and conveyance facilities to meet current and future regulatory requirements. Our initiation team immediately supported the City's limited team (14 staff) and built a diverse, co-located and resource-rich organization that, at its peak, included 30 city staff, 50 co-located program team members, and 200 engaged technical resources across all program functions, including onsite construction management and inspection.

Jacobs developed all program standards in the first three months of the program, including document templates and guidelines; cost estimating and scheduling standards; design standards, including specifications and bidding templates; health and safety requirements; and communications standards, among others. We identified existing City and other local agency standards to retain and be supplemented by program-specific needs. We created an online SharePoint repository for updating standards as needed and to be accessible by City, program team, consultant and contractor leads. We completed facility master plans for the 90 million gallons per day (MGD) treatment plant, city-wide SCADA system, and collection system, and developed virtual O&M manuals/BIM models. Our program level environmental documents with environmental assessments and permitting analyses provided consistency across all projects. Our online dashboards allowed City staff and program leadership to monitor key performance indicators at the project level.

Our 10-year delivery plan covered planning, compliance, design, construction, testing and commissioning. An integrated P6 cost-loaded schedule was used to determine critical project interfaces, pre- and post-construction cutovers, and testing/commissioning. We reviewed over 300 cost estimates across 70 individual projects and reconciled unit costs against a program-specific cost database that tracked all construction bids received over the life of the program. Jacobs prepared independent AACE cost estimates to compare to engineer and contractor estimates. Our risk management team actively tracked and manage over 1000 project risks with associated cost and schedule impacts, and revisited risks monthly with designers and contractors to track progress toward implementing mitigations. We managed risk reserves at the individual

project and overall program level. Estimate reviews factored risk into unit pricing, allowance for indeterminates, and contingencies. Our value engineering resulted in $52M in savings.

We secured over $700M in WIFIA and State Revolving Funds (SRF) loans for the program that required monthly reporting for 13 different projects. We procured and delivered over 70 separate design and construction project, developing RFPs/RFQs, conducting interviews, evaluating proposers, preparing contracts, and recommending awards to the City Council. Over the course of the program, no less than five construction projects at a time were active. Jacobs evaluated collaborative delivery models and developed a General Contractor/Construction Manager (GC/CM) procurement strategy. Market outreach informed a strategy to divide projects into different sizes for better market participation. We oversaw, managed, and worked collaboratively with the City, nine separate consultant design teams (HDR, Stantec, others), and 12 construction contractors. Our engineering team completed facility planning for the entire program and designed and constructed 20 early action projects (EAPs) over the first three years to minimize interruptions to system operations. We prepared bridging documents for design consultants and managed the guaranteed maximum price (GMP) review and negotiations with the GC/CM contractor. Conveyance improvements include over 92,000 LF of new and rehabilitated gravity sewers (up to 72-inch), force mains (up to 48-inch), 5.6 million gallons (MG) in storage, and new pump stations (up to 72MGD).

We established program communication protocols and provided monthly updates directly to City leadership. We led over 200 public engagement activities across all projects and directly presented updates to citizens, regulators, and elected officials. We led weekly meetings to status projects and address project interfaces with City activities. We implemented city-wide door-to-door outreach and managed a hotline and web portal to track and respond to inquiries.

Ship Canal Water Quality Project (SCWQP)

Seattle Public Utilities (SPU) and King County WTD, Seattle, WA

Similar Program Components
Program Support | Program Initiation | Right-of-Way (ROW)/Property Acquisition | Planning | Permitting | Communications and Outreach | Design Support | Construction Management/Construction Support | Operations Support

Beginning year: 2013 **End year:** 2028 (est.)
Beginning budget: $39M (Jacobs), $500M (Program)
Final budget: $51M (Jacobs) $710M (Program)
SOQ Staff: Jacobs: Reimbold, Program Manager; Behnke, Value Engineering; Chae, Engineering Review; Mallory, Program Controls Lead; Mitsopoulos, Construction Manager; Colzani, Construction Manager; Harris, Planning Lead; Green, Collaborative Delivery; Burke, Technical Advisor; Finney, Trenchless Construction; DeLeon, Operations Planning; Beieler, Pipeline Design; Pitzler, Decision Science; Davis, Hydraulics/Surge; Gallo, Cost Estimating; Thompson, SCADA/I&C Lead; Liu, Constructability; Sharp, Architecture. MPM: Prisacaru, Scheduling. Meng Analysis: Buckley, Value Engineering Lead.
Client Reference: Alan Lord, Project Executive, 206.353.5624, alan.lord@seattle.gov

Project Summary

SPU and King County are building an underground storagetunnel, tunnel effluent pump station (TEPS) and conveyance pipelines to convey and store combined sewage to prevent overflow into the Lake Washington Ship Canal. This $710M, 29.2 MG CSO storage system program was initiated by Jacobs as part of our CSO Program work and transitioned to a standalone program in 2015. We have provided program management that included full program functions, options analysis, facility planning and routing/siting studies, and associated preliminary design for the 14,000-foot long, 19-foot inside diameter tunnel, approx. 5,000 feet of large diameter (72 to 144-inch) conveyance pipelines, and the TEPS.

Our early predesign work included evaluation of alignment alternatives and option selection; developing a multi-phase geotechnical investigation program; development of a Joint Project Agreement between SPU and King County; preparation of preliminary design concepts for the entire scheme, leading to preparation of the Facility Plan and Basis

of Design Report; supplemental EIS associated with the tunnel and pump station; real property services required for acquisition of ROW, property and easements to construct the projects. We worked with SPU to develop and implement a robust, logical and structured decision-making framework, documenting all options considered the evaluation criteria used and the reasons for selection. We also led the development of risk management and contract packaging strategies. Critical milestones were completed ahead of the schedule dictated by federal consent decree.

Our scope transitioned to provide co-located construction management, program management and systems integration. Program support services included development and implementation of systems for cost management, change management, schedule management, risk management and document control. Permit support, project reporting and program advisory support were also completed. Construction management is being provided for the storage tunnel, pump station and conveyance contracts and includes bid document development, constructability review, resident engineering, change management, claims and dispute resolution, resident inspection, project controls, safety support and commissioning.

Our Systems Integration Team was tasked with designing, implementing, and integrating the final systems control package to link the separate projects with King County's West Point facility. Jacobs developed a Replica™ simulation model to give the SPU the opportunity to "test drive" control systems and resolve issues prior to taking ownership. This innovative hydraulic and control system modeling technology will optimize functionality and provide realistic simulation testing prior to actual commissioning.

To meet the programs fixed budget of $710M, Jacobs and SPU developed a robust programmatic budget and schedule control systems that integrates cost, schedule, change and risk management programs in a complete package that manages cost, schedule and risk for each project element as well as contingency and program reserves. Integration of potential and approved cost/time changes are monitored monthly and impacts to the confidence level of delivering the project on time and within budget are included in the Quarterly Risk Update Model.

Our team responded when the program experienced several cost growth events impacting contingency and reserves, reducing confidence that the project could be delivered at the approved budget. We integrated with SPU and developed a Programmatic Cost Reduction Plan that includes a Cost Estimation Program Oversight Committee to realize proposed cost-saving strategies. The team participated in cost-saving workshops, cost estimating exercises, and collaborative value engineering, led by Timothy Buckley of Meng Analysis, our teaming partner for the CSP, sessions with existing contractors. Overall,156 cost savings were identified, and eight elements (e.g., trucking instead of barging spoils, alternate ground improvement, and combined contract packages) were implemented to save approximately $15M.

South Plant Facilities Program Manager/ Owner Advisor (PMOA)

King County Wastewater Treatment Division (KC WTD), Seattle, WA

Similar Program Components:
Program Management | Program Initiation | Planning Permitting| Communications and Outreach | Construction Management/Construction Support | Operations Support

Beginning Year: 2024 **End Year:** 2036 (est.)
Beginning Budget: $13M (Jacobs) $800M (Program) **Final Budget:** N/A **SOQ Staff**: Jacobs: Liskova, Program Manager; Chae, PIC; Durbin, Program Initiation; Monro, Communications Lead; Reimbold, Risk Manager; Bolio, Program Initiation; Sears, Program Advisor; Green, Collaborative Delivery; Burke, Collaborative Delivery; DeLeon, Asset Management; Gallo, Cost Estimating; Boswell, Health & Safety; Hueter, CM; Pekarek, Funding.

Formation Lab: Pozos, Equity Lead. EnviroIssues: Franklin, Community Relations. Progressive DB: Thaxton, Collaborative Delivery Contracting
Client Reference: Bryahna 'Bry' Polk, South Treatment Plant Facilities Program Manager, 206.263.2540, brdavis@kingcounty.gov

Project Summary

Jacobs is providing best-in-class program management and owner advisory services for the KC WTD as part of the South Plant Facilities Program (STPFP). This 12-year, program involves strategic delivery planning, project oversight, and implementation of over $800M in various infrastructure projects that enhance wastewater treatment capacity and efficiency. Jacobs set the standard for WTD programs by developing the governance framework and program key performance indicators, completed a program readiness assessment, and developed program management plans in less than 12 months. In our PMOA, we work closely with WTD to identify efficiencies in project delivery that will meet project schedules and defined an optimized construction delivery approach based on key drivers. An early project bundle was identified for GC/CM delivery our team prepared the content and guided WTD through CPARB's PRC approval process. Our market outreach efforts gained input to inform the KC WTD GC/CM procurement structure. As a result of our efforts, KC WTD received a 60% increase in GC/CM proposals compared to other similar KC WTD GC/CM procurements led by other program teams.

Concurrent with program initiation and planning efforts, we completed facility planning that reprioritized projects. From this planning, multiple projects have been initiated ahead of schedule. The program manager and operations, construction management, and engineering leads worked closely with KC WTD staff to develop processes and tools that identify project interdependencies within the plant and solve critical needs for project sequencing, outages, construction staging and coordination. We developed a GIS-based project dashboard that is available to KC WTD staff to monitor project progress to identify project interdependencies and sequencing to improve project coordination and planning.

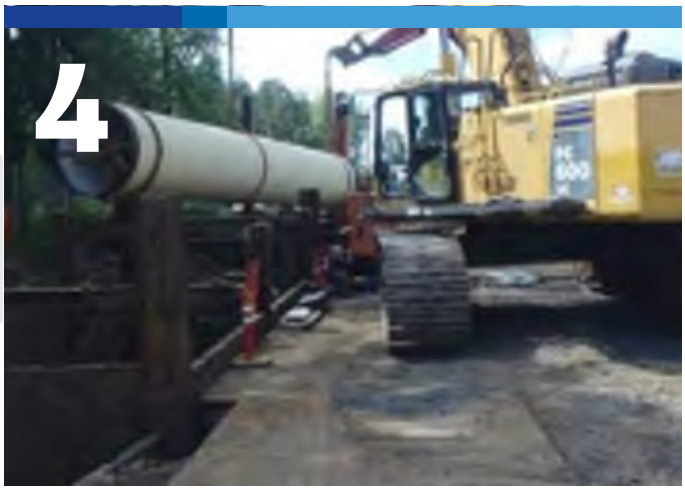
We developed permitting and environmental compliance processes and tools for programmatic coordination. Our program controls team developed an integrated P-6 baseline cost loaded program schedule and cost control and change management processes. A programmatic risk register was developed, and risk management approach implemented, that uses interdependencies between the overall program and separate projects. The communications and equity team has worked closely with WTD in developing a program framework for external communications and outreach. Our extensive experience with STP service area and neighboring communities, and relationships with community-based organizations, have created educational opportunities, enhanced communications and improved community understanding of workforce opportunities and criticality of the infrastructure.

Willamette Water Supply Program Partnership Projects (WWSP)

Tualatin Valley Water District, Hillsboro, OR

Similar Program Components
Facility Planning | Engineering Design | ROW | Permitting | Communications and Outreach | Construction Management/Construction Support | Operations Support

Beginning Year: 2016; **End Year:** 2025 (est);
Beginning Budget: $4.8M (Jacobs); $1.2M (Commonstreet); $940K (Confluence) **Final Budget:** $5.2M (Jacobs), $1.2M (Commonstreet); $2.5M (Confluence)
SOQ Staff: Jacobs: Beieler, Pipeline Design; Finney, Trenchless Pipelines. Commonstreet: Lowe, ROW Lead. Confluence: Friedman, Water Quality, Mcmeen, Water Quality.
Client Reference: (Jacobs) Mike Britch, Tualatin Valley Water District, 503.701.1343, mike.britch@tvwd.org; (Commonstreet): Joelle Bennett, Willamette Water Supply Assistant Program Director, 503.349.7236, Bennett@tvwd.org; (Confluence): Deborah Rose, Project Delivery Coordinator, 503.544.9551, deborah.rose@tvwd.org



Project Summary

This $1.6B clean drinking water program, funded through WIFIA, represents a seismically resilient water supply system for Northwest Oregon. **Jacobs** served as the lead designer for the PLM 2.0 and PLM 5.0 projects, each as segments of Tualatin Valley Water District's (TVWD) overall 30-mile regional transmission pipeline system. PLM 2.0 included a 3,000-foot section of 66-inch diameter pipeline constructed adjacent to and beneath a new road segment of SW Kinsman Road designed by the City of Wilsonville and administered by Oregon Department of Transportation (ODOT). The corridor included high groundwater, wetlands, and a 230kV Bonneville Power Administration transmission line. PLM 5.1 included a new 66-inch diameter pipeline with 6,950 LF of open-cut and 220 LF of trenchless construction. PLM 5.2 and PLM 5.3 included a new 66-inch diameter pipeline continuing from the end of PLM 5.1 with 30,900 LF of open-cut construction. These sections traverse developed and undeveloped rights-of-way, including 4,700 ft in ODOT Highway 210 and a crossing of ODOT Highway 10. Jacobs worked with the City of Wilsonville to incorporate new roadway and ROW improvements to the pipeline construction documents. To expedite the schedule and obtain preferred materials at competitive pricing, Jacobs developed a separate procurement package that allowed TVWD to buy pipe materials and valves outside of the construction package.

As part of the program team, **Commonstreet** worked with Jacobs to implement the PLM 2.0 and PLM 5.0 ROW strategy. Their staff provided proactive outreach to nearly 400 landowners and prominent businesses to obtain over 300 acquisitions—including temporary and permanent construction easements and rights of entry. Commonstreet participated in quarterly risk management meetings, managed internal ROW team and outside ROW teaming agents and appraisers, and advised TVWD and design team leads on ROW acquisition and relocation activities. Commonstreet's dedicated team of expert ROW agents and technical specialists coordinated services from local subcontractors and small businesses for appraisal and appraisal review. The team worked closely with WWSP, TVWD, interested parties, design team leads, public outreach teams, utility relocation experts, and multiple local jurisdictions. After seven years, the ROW program is nearing completion. Commonstreet has been commended by the project owner team for its deep understanding of each acquisition file, its early mitigation planning, and its strong communication approach.

Under a separate contract, **Confluence** has performed distribution systems data collection and characterizations, preliminary system evaluations, design of water quality scenarios and testing plans, outreach and communications planning, technical support, development of systems integration operational strategy, and distribution monitoring and maintenance. This work is in anticipation of receiving a new water source to be supplied by a surface water treatment plant. Confluence presented at two Blue Ribbon Panels, comprised of national water system managers, regulators, and university faculty to provide third party review of key deliverables and recommendations. This ongoing multi-year project will support needs as identified by TVWD. All work has been completed within allotted budgetary limits associated with each amendment.

North Mercer Island Interceptor and Enatai Interceptor Upgrades (Mercer Enatai)

King County Wastewater Treatment Division,
Bellevue, WA

Similar Program Components:
Planning | ROW | Permitting | Communications and Outreach | Engineering Design Support | Operations Support

Beginning year: 2014 **End year:** 2026 (est.)
Beginning budget: $2.1M (Jacobs), $76M (Project)
Final budget: 5.8M (Jacobs), $116M (Project) **SOQ Staff:**
Jacobs: Chae, Engineering Lead; Behnke, Project Principal; Hueter, Constructability; Gallo Cost Estimating; Beieler, Pipeline Design.

Client Reference: Sibel Yildiz, King County Capital Projects Managing Supervisor, 206.477.5434, sibel.yildiz@kingcounty.gov

Project Summary

The Mercer Enatai sewer upgrade project included alignment alternatives evaluation and final design of over 20,000 linear feet (LF) of pipelines and structures in Mercer Island and Bellevue, and a comprehensive upgrade of the existing North Mercer Pump Station. Jacobs roles included development of design criteria, evaluation criteria and alternatives; design flow projections; hydraulic modeling and transient analysis; trenchless construction evaluation; risk analysis; cost estimating; contract packaging/delivery methodology, and pump station and pipeline condition assessment. During the final design phase, Jacobs led the overall conveyance system design that includes the East Channel siphon system (3,000-LF 32 -inch diameter HDD crossing with 2,200 LF of rehabilitated 27-inch pipeline) and 11,000-LF of open trenched conveyance system within the City of Mercer Island. The project required extensive community engagement, open houses and communications, 48 easements, environmental and construction permitting, and coordination with numerous interested parties (WSDOT, City of Bellevue, SPU, PSE, etc.).

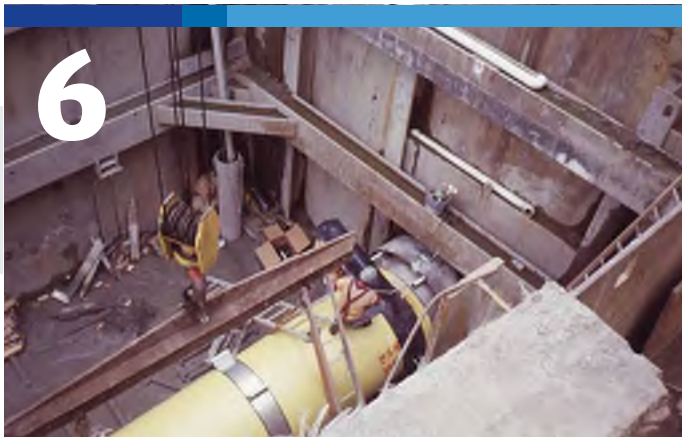
Design elements led by Jacobs included overall hydraulic analysis of conveyance system and design of 7,180 LF of dual 16-inch and 18-inch forcemains; 3,300 LF of 12-inch to 30-inch gravity sewer; and 480 LF 96th Ave siphon system crossing I-90. Jacobs also provided all mechanical, electrical, and trenchless design for the Lift Station 11 upgrade including new pumps, structural retrofit, electrical and controls. The project is nearing substantial completion in late 2025, and Jacobs is currently providing construction and operational startup/commissioning support.

Second Supply Project Pipeline (Pipeline 5)

Tacoma Water, Tacoma, WA

Similar Program Components
Facility Planning | ROW | Permitting | Communications and Outreach | Construction Management/Construction Support | Operations Support

Beginning Year: 1998; **End Year:** 2018;
Beginning Budget: (Jacobs) $5.6M (Confluence) $57K **Final Budget: (**Jacobs:)$6.2M (Confluence) $57K **SOQ Staff**: Jacobs: Beieler, Pipeline Design Lead. Confluence: McMeen, Water Quality.
Client Reference: Client Reference: Kim DeFolo, Water Quality Principal Engineer, 253.396.3087, kdefolo@cityoftacoma.org



Project Summary

Jacobs led a large multidisciplinary team to design Pipeline 5, 35-miles of 60- to 70-inch-diameter pipeline that completed Tacoma's Second Supply Project (SSP). This design culminated a 40-year build-out planned by Tacoma Water and provides redundancy to Pipeline 1, increases total capacity to Tacoma, and supplies Tacoma's partners (Kent, Covington Water District, and Lakehaven Water and Sewer District) in the project.

The SSP Pipeline project was designed and constructed in phases to accommodate, enable, and leverage effective use of both Tacoma Water and consultant staffing resources, as well as buffer financial impacts to Tacoma Water and its SSP partners. For Pipeline 5, Jacobs completed facility planning, hydraulic/surge modeling, ROW acquisition, environmental and local permitting, and supported community outreach. Design elements included open-cut installation, microtunneled river/sensitive area crossings, poor soils and seismic mitigation measures, cathodic protection, safe O&M structures, and O&M manuals. One of the key features of the SSP Pipeline is its flow control facility that was designed around precision flow control systems. Pipeline 5 continues to work as a complementary and supplementary system to Pipeline 1 while affording greater flexibility, capacity, and\ reliability.

As part of a later water quality evaluation, **Confluence** helped Tacoma Water address manganese associated turbidity in Pipeline 5 and developed recommendations for minimizing the impacts to customers. The two-step assessment reviewed historical treatment, chemistry, and hydraulic data and followed with a year-long monitoring effort along Pipeline 5 and within the Partners' and Tacoma Water's distribution systems. A series of mitigation strategies were developed for additional evaluation and future implementation by Tacoma Water.

6.

Sample of Work

6. Sample of Work

Featured Program: Ship Canal Water Quality Project
Included Documents: Facility Plan, Project Definition Report (Engineering Transition Package)
Background: As part of our CSO Program Management contract with Seattle Public Utilities (SPU), Jacobs (as CH2M) was tasked with completing the planning and preliminary engineering of the overall Ship Canal program that included seven separate projects. Key project elements include the main storage tunnel, tunnel effluent pump station (TEPS), early works projects, and connecting pipeline projects.
Relevance: This work was completed under a program delivery model. Jacobs was specifically tasked with developing options and through SPU's defined processes, arriving at a feasible technical alternative that would serve as the basis for Ecology-compliant facility planning, programmatic environmental permitting, construction sequencing analysis, community and regulatory early engagement, financial forecasting, SPU future staffing and O&M facility needs, and other program level needs. The planning documents also served as the basis of the SPU/King County operational and ownership framework that dictated cost-share, flow management responsibilities, and I&C/SCADA system integration requirements. Our remit also included the development of a 20% level-of-completion conceptual design that was transferred to the engineering team (McMillen/Jacobs (now Delve), HDR and Brown and Caldwell) as part of a transition document deliverable (Project Definition Report).

The Facility Plan was delivered ahead of the Consent Decree milestone and accepted by Ecology and EPA in June 2017.

Project Team Participation: Our project team members who participated in the development of this set of planning documents are listed below. Their role on Ship Canal program and their proposed role **(in parentheses)** for the Cascade Supply Program are identified.

- **Mike Reimbold** – Program Manager (**Program Strategy Advisor, Risk Manager**)
- **Court Harris** – Planning Lead, Primary Author/ Engineer of Record for Facility Plan and Transition Documents (**Principal-in-Charge**)
- **Pat Burke** – Technical Advisor (**Collaborative Delivery Strategic Advisor**)
- **Andrew Finney** – Tunneling/Trenchless Construction (**Trenchless Construction**)
- **Corinne DeLeon** – Operations Planning (**Asset Management, Organizational Effectiveness and Change Management**)
- **Dan Pitzler** – Alternatives Evaluation (**Financial, Economic Analysis and Funding Strategy**)
- **Roger Beieler** – Pipeline Materials (**Pipeline Design**)
- **Mark Sharp** – Architecture, Space Planning, Code Compliance (**Facilities Architecture, Space Planning, Local Permitting Compliance**)
- **Stacia Dugan** – Air Quality Analysis (**Air Quality Permitting**)

Our Sample Report along with the client's email granting permission to share the report with Cascade, is securely saved on our USB-C as a separate file labeled Appendix_Sample Document.

7.

Standard Contract Language

7 Standard Contract Language

Jacobs

REQUESTED CONTRACT REVISIONS

Cascade Water Alliance
Cascade Supply Program
Program and Engineering Support

Jacobs Project Management Company Inc. (Jacobs) has reviewed the sample contract included with the Request for Qualifications (RFQ) and find it generally acceptable as the basis for negotiation of a mutually-agreed-to final agreement between both parties. Jacobs has previously negotiated contracts with Cascade Water Alliance using modified contract terms and conditions and will seek the same modifications for this program. As directed in the RFQ, Jacobs has provided proposed revisions to the contract language and accompanying rationale. We believe these are mutually beneficial changes for Cascade Water Alliance and Jacobs.

Proposed revisions are included in tracked changes as noted by colored text herein.

PROVISION & PROPOSED CHANGE	RATIONALE
III.C Services by Consultant - REVISE The standard of care applicable to Consultant's Scope of Services will be ~~the greater of (1) its obligations under this Agreement or (2)~~to the degree of quality, skill and diligence normally employed by consultants performing the same or similar Scope of Services for the same or similar projects or facilities in the State of Washington. Consultant shall have sole and exclusive control over the means and methods of its Scope of Services and shall be solely responsible for planning, scheduling, coordinating, executing and completing the Scope of Services in accordance with its chosen means and methods.	Requested change to clarify expectations. This is a great standard of care clause that Jacobs agrees with, and the initial statement under (1) makes the interpretation and expectation unclear.

PROVISION & PROPOSED CHANGE	RATIONALE
III. Services by Consultant – ADD Notwithstanding the foregoing, if Consultant is called upon to observe the work of other contractor(s) for the detection of defects or deficiencies in such work, Company will not bear any responsibility or liability for such defects or deficiencies or for the failure to so detect. Consultant shall not make inspections or reviews of the safety programs or procedures of other contractor(s), and shall not review their work for the purpose of ensuring their compliance with safety standards. Consultant shall have no influence over construction means, methods, techniques, sequences or procedures. No fault or negligence shall be attributed to Consultant based upon the acts or omissions of any construction contractors. Safety shall remain the sole responsibility of the other contractor(s).	Jacobs requests this addition to define roles and responsibilities related to services, contractors, and other third parties when delivering services attached to construction or design support during construction.
X. Hold Harmless/Indemnification - REVISE Consultant shall defend, indemnify, and hold harmless Cascade, its board of directors, members, officers, managers, employees, engineers, and agents~~, and volunteers~~ (collectively, as used herein, the "Indemnified Parties") from and against all demands, claims, losses, injuries, damages, liabilities, suits, judgment, reasonable attorneys' fees and costs, and other expenses of any kind (including any suits or claims made by or for the benefit of Consultant's employees or their survivors) on account of, relating to, or to the extent arising out of Consultant's negligent acts or omissions under this Agreement, except to the extent such injuries or damages are caused by the ~~sole~~ negligence of one or more of the Indemnified Parties (the "Indemnified Claims").	Requested changes to make the indemnification proportionate and consistent with RCW 4.24.115. Also a request to remove "volunteers" as an undefined third party, so that Jacobs has a clear understanding of roles and expectations.

PROVISION & PROPOSED CHANGE	RATIONALE
XI. Consequential Damages – REVISE In no event and under no circumstances shall Cascade and Consultant be liable to ~~Consultant~~ each other, or its officers, agents, representatives, employees and subconsultants for any principal, interest, loss of anticipated revenues, earnings, profits, increased expense of operation or construction, loss by reason of shutdown or non-operation, or for any other economic, consequential, indirect, or special damages.	Requested change to make this provision a *mutual* waiver of consequential damages. This allows both Jacobs and Cascade to be safeguarded from unnecessary legal challenges.
XII. Liability Insurance Coverage/Liability Limitation – REVISE Consultant shall require and verify that ~~also cause~~ all subconsultants (if allowed by Article IV of this Agreement) maintain insurance meeting all the requirements ~~to carry such policies and with such limits~~ as shown on Attachment C, unless Cascade at its option waives such requirements.	Request to revise this language to match similar language from *Attachment C - Insurance.* OMWBE/SBE teaming partners may find it burdensome to meet the currently requested $5M Professional Liability threshold, or (depending on the subconsultants' services) may not carry certain policies (like drone). Jacobs would like to see this change clearly set expectations that Cascade is open to good faith conversation and determining on a case-by-case basis that some subconsultants, based on their contracted services, will not have to meet the same insurance requirements (re: flowdown) as the prime consultant.

PROVISION & PROPOSED CHANGE	RATIONALE
XII. Liability Insurance Coverage/Liability Limitation – ADD The total aggregate liability of Consultant arising out of the performance or breach of this Agreement shall not exceed the contract value paid under this Agreement. Notwithstanding any other provision of this Agreement, Consultant shall have no liability to Cascade for contingent, consequential or other indirect damages, including, without limitation, damages for loss of use, revenue or profit, operating costs and facility downtime, or other similar business interruption losses, however the same may be caused. The limitations and exclusions of liability set forth in this paragraph shall apply regardless of the fault, breach of contract, tort (including negligence), strict liability or otherwise of Consultant or its employees or subcontractors.	CWA has previously signed Jacobs' professional services agreement that included limit of liability (LOL)/ waiver of consequential damage (WCD).
XVII.A Termination of Agreement – REVISE Termination for Default. Either Party shall have the right, but not the obligation, to terminate this Agreement, in the event the other Party's service or performance materially fails to conform to the ~~requirements~~ Standard of Care set forth in~~of~~ this Agreement. Prior to such termination, a written notice of default shall be provided with a minimum of ten (10) days to cure.	Requested clarification to define "requirements" and make sure that there's a clear understanding of what's expected from this provision.

PROVISION & PROPOSED CHANGE	RATIONALE
XXI. Confidentiality – DELETE Furthermore, Consultant agrees to comply with a separate Confidentiality Agreement, the terms of which are incorporated herein by reference. The Confidentiality Agreement shall be signed by an authorized signatory on behalf of Consultant and the Project Manager identified on Attachment D. Additionally, Consultant shall cause an authorized signatory and/or project manager for each subconsultant listed Attachment E to sign the Confidentiality Agreement. ~~Cascade reserves the right to require every member of the Consultant team performing certain tasks, or obtaining certain information, to sign the Confidentiality Agreement.~~ Violation of the Confidentiality Agreement by Consultant's employees or subconsultants may result in removal of those individual employees or subconsultants from performing work under the Agreement, which Cascade shall determine in its sole discretion. Removal of Consultant's employees or subconsultants from performing work under the Agreement shall not be Cascade's sole remedy for violations of the Confidentiality Agreement.	Jacobs requests to strike the language here and include it if needed/warranted as specific projects are awarded. Jacobs would also request a copy of the Confidentiality Agreement to review. Generally, Jacobs wouldn't ask individual staff throughout the life of a project to sign separate CAs unless there is a specific project that requires that level of confidentiality. A Jacobs authorized signer generally signs on behalf of Jacobs and the project team, and in general our project controls group takes responsibility for this.
XXI.D. General Conditions, Written Notice – REVISE **Written Notice.** All communications regarding this Agreement shall be sent to the Parties at the addresses listed in Article I above by registered or first class mail, ~~or~~ by personal service, or by email, and shall be deemed sufficiently given if sent to the addressee at the address stated in this Agreement or such other address as may be hereafter specified in writing.	Request to revise to add option for virtual / email delivery of notices, work product, deliverables, etc. unless Cascade has a strict hard copy delivery policy.

Attachment C, Insurance Requirements Consultant shall procure and maintain for the duration of the Agreement insurance Coverages A through E as described below, and Consultant shall procure and maintain Coverages F through H as needed.~~-~~ **I.** Required ~~Minimum~~ Scope of Insurance Coverage shall include: A. Commercial General Liability: Insurance Services Office Commercial General Liability coverage (occurrence Form CG 00 01) to be maintained for so long as any work or Service is performed by Consultant, plus an additional three (3) years from completion of such work or Service. B. Automobile Liability: Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code 1 (any auto). C. Workers' Compensation insurance as required by the State of Washington. D. Employers' Liability coverage or Stop Gap Liability coverage. E. Professional Liability insurance (errors and omissions) on a claims-made basis to be maintained retroactive from inception of any work or service under this Agreement through completion of any such work or Service, plus an additional three (3) years from completion of such work or Service. ~~unlimited extended reporting period ("tail policy"). If an unlimited tail policy is not available, compliance with Section VI is required.~~ F. Contractor's Pollution Liability~~: Consultant/Contractors' Pollution~~	Jacobs requested changes for the Insurance Requirements are to clarify expectations for this type of agreement. • Jacobs will provide the actual limits specified in the contract consistent with policy terms and conditions. • Jacobs and its insurers require clear, specific coverage amounts required by the Client contract and we attempt to avoid imprecise or open-ended description of insurance limits such as "minimum/not less than" language which may create uncertainty and increase the risk. • Some requested exceptions are to clarify coverage terminology per review by our insurance group that aligns to how our policies are written. Example: PL is not written on a "combined single limit or per occurrence, rather, it's on a 'claims' basis. • The reasoning behind the strikeout to 'agents' is that we offer the insurance coverage for our client, its employees, etc. but not third parties. The word 'agent' is very broad. • Some requested changes, for example tail policy term, are industry standard.

~~Liability and/or Asbestos Liability~~as needed. G. ~~IT/~~Technology Errors and Omissions Professional Liability Coverage as needed. H. Unmanned Aircraft Systems ~~Drone Aviation~~ Liability Coverage as needed. **II.** Required ~~Minimum~~ Limits of Insurance Consultant shall maintain limits ~~no less than~~of:		
A. Commercial General Liability: (Including operations, products and completed operations.)	$2,000,000 per occurrence and $4,000,000 general aggregate for bodily injury, personal injury and property damage. ~~If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.~~	
B. Automobile Liability:	$1,000,000 per accident combined single limit for	

	bodily injury and property damage.	
C. Workers' Compensation	As may be required by the State of Washington.	
D. Employers' Liability:	$1,000,000 each accident, $1,000,000 policy limit bodily injury by disease, $1,000,000 each employee bodily injury by disease.	
E. Professional Liability	$~~5~~2,000,000 per claim and in the aggregate for professional services.	***We request a*** *lower the limit to reflect the unknown scope of work beyond the first two years and the potential for this contract to be managed similar to a Master Services Agreement (MSA). If Jacobs were to be assigned specific projects under this program that necessitate increased project risk / a higher threshold, we will provide documentations demonstrating our ability to meet the higher requirement. Generally Jacobs does not carry open ended insurance, and will meet an increased limit based on actual project risk versus anticipated/potential work. Additionally, this level of insurance is difficult for our small business partners to obtain and carry through the duration of an MSA-type contract where assignments may be assigned intermittently over time..*
F. ~~Consultant/~~Contractors Pollution ~~- Asbestos~~ Liability	As needed: $2,000,000 ~~each occurrence~~ per claim- $4,000,000 policy aggregate, including errors and omissions.	
G. ~~IT/~~Technology Errors and Omissions Professional Liability Coverage	As needed: $1,000,000 per claim and in the aggregate.	
H. Unmanned Aircraft Systems~~Drone Aviation~~ Liability	As needed: $~~2~~1,000,000 ~~per~~ each occurrence combined single limit~~and $2,000,000 in the aggregate~~ for in-flight	

	operations, bodily injury, property damage, personal injury, invasion of privacy, trespass, and hijack/malicious damage coverage.	
III. Deductibles and Self-Insured Retentions Any deductibles or self-insured retentions ~~(1)~~ shall be the sole financial responsibility of Consultant. ~~and (2) must be declared and are subject to approval by Cascade. At the option of Cascade, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects Cascade, its officers, officials, employees and volunteers; or the Consultant shall provide a financial guarantee satisfactory to Cascade guaranteeing payment of losses and related investigations, claim administration and defense expenses~~.		
IV. Other Insurance Provisions The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: 1. Cascade, its officers, officials, and employees~~, and volunteers~~ are to be covered as additional insureds (1) with respect to liability arising out of automobiles and boats owned, leased, hired or borrowed by or on behalf of the Consultant and (b) with respect to liability arising out of negligent work or operations performed by or on behalf of the Consultant including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the		

Consultant's insurance, or as a separate owner's policy. 2. For any claims related to this project, the Consultant's insurance coverage shall be primary insurance as respects Cascade, its officers, officials, and employees~~, and volunteers~~. Any insurance or self-insurance maintained by Cascade, its officers, officials, and employees~~, or volunteers~~ shall be excess of the Consultant's insurance and shall not contribute with it. 3. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after ~~forty-five (45)~~ thirty (30) days prior written notice(except 10 days for non-payment of premium) has been provided to Cascade. **V.** ~~Pollution Liability Insurance~~Reserved. ~~The Consultants/Contractors Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. The definition of Pollution shall include microbial matter, including mold.~~ **VI.** Claims Made If ~~General Liability, Consultant/Contractors' Pollution Liability and/or Asbestos Pollution Liability and/or Professional Liability~~ any of the above requiredc~~overages~~ insurance policies are written on a claims-made form: 1. The retroactive date must be shown, and must be before the date of the Agreement or the beginning of Agreement work. 2. Insurance must be maintained and evidence of insurance must be provided for at least three~~six~~ (~~6~~3) years after completion of Agreement work or substantial	

completion of construction (if construction is part of Consultant services), whichever is later.

3. If coverage is canceled or non-renewed, and not replaced with another claims- made policy form with a retroactive date prior to the contract effective date, the Consultant must purchase extended reporting period coverage for a minimum of ~~six~~ three (~~6~~3) years after completion of contract work or substantial completion of construction, whichever is later.

4. ~~A copy of the claims reporting requirements must be submitted to Cascade for review.~~

VII. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A-:VII, unless otherwise acceptable to Cascade. Exception may be made for the State Compensation Insurance Fund when not specifically rated.

VIII. Verification of Coverage

Consultant shall furnish Cascade with a certificate of insurance and required endorsements effecting coverage required by this Agreement. ~~The endorsements are to be signed by a person authorized by that Insurer to bind coverage on its behalf.~~ The endorsements are to be on the current Insurance Services Office (ISO) forms or their equivalent~~provided by Cascade, unless the insurance company will not use Cascade's form~~. All required endorsements are to be received and approved by Cascade before work commences. However, failure to do so shall not operate as a waiver of these insurance requirements. ~~As an alternative to Cascade's forms, the Consultant's insurer may provide complete copies of all required insurance policies, including endorsements affecting the coverage required by these specifications.~~

PROVISION & PROPOSED CHANGE	RATIONALE
IX. Waiver of Subrogation Consultant hereby agrees to waive subrogation except on the Technology Errors and Omissions Professional Liability policy which any insurer of Consultant may acquire from Consultant by virtue of the payment of any loss. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. **X.** Subconsultants Consultant shall require and verify that all subconsultants (if allowed by Article IV of this Agreement) maintain insurance meeting all the requirements stated herein, unless Cascade at its option waives such requirements.	

8.

References

8. References

1 San Mateo Clean Water Program and Construction Management, City of San Mateo; San Mateo, CA

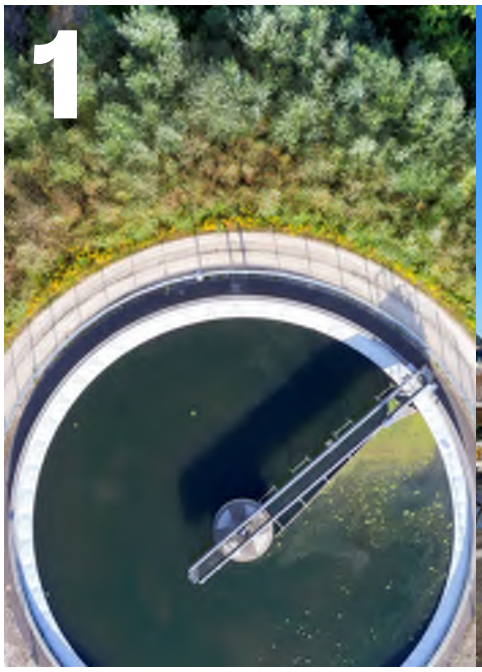
Project start date: 2014
Project end date: 2026 (Est.)
Reference name, title, project role, and current contact telephone number: City of San Mateo, Mr. Deryk Daquigan, Public Works Deputy Director, (O) 650.522.7287 (M) 415.793.0810

2 Cargill MSS Processing and Brine Discharge Pipeline Program, Newark, CA

Project start date: 2019
Project end date: Ongoing
Reference name, title, project role, and current contact telephone number: Cargill, Mr. Drew Heise, Build Project Manager (M) 925.353.8695

3 Haweswater Aqueduct Resilience Program, United Utilities, Manchester, United Kingdom (UK)

Project start date: 2015
Project end date: Ongoing
Reference name, title, project role, and current contact telephone number: United Utilities, UK, Mr. David Souter, Engineering Manager, (M) 044.782.788.6326



9.

Resumes

Andrew Behnke, PE

Jacobs

Task Lead: Planning

Andrew is a water/wastewater engineer with 30 years of experience in civil engineering and project management. He has led the planning, design, and construction services for conveyance projects. Andrew's working knowledge of wastewater systems design includes gravity and pressure conveyance systems, pump stations, pipeline repair and renovation, and wastewater odor control facility design. His experience also includes traditional stormwater detention and conveyance facilities, green stormwater infrastructure, stream rehabilitation and restoration, and hydraulic modeling. Andrew will draw on his project management and technical experience to expediently prepare a facilities plan to quickly initiate project design.

Education/Qualifications

BSE, Civil Engineering, Ira A. Fulton Schools of Engineering, Arizona State University

Registrations/Certifications

Professional Engineer:
WA (#36473)

Other

Total years' experience: 30
Joined Jacobs: 2023
Office location: Bellevue, WA

Section 5. Projects Relevant to CWA

- ✓ North Mercer Island Interceptor and Enatai Interceptor Upgrades | Project Principal
- ✓ Ship Canal Water Quality Project (SCWQP) | Facility Planning

Relevant Project Experience

Project Engineer, King County - Brightwater Wastewater Treatment Plant EIS, King County, WA. This project involves configuration and analysis of approximately 22 miles of influent and effluent pipelines for the proposed Brightwater Wastewater Treatment Plant. Andrew assisted in configuration, analysis, and evaluation of influent and effluent conveyance systems for approximately 35 preliminary treatment plant sites. He sized and located pump stations and conventional and deep-tunnel pipelines. He assisted in developing deep-tunnel and conventional pipeline configuration standards. He also produced preliminary plans and profiles for several influent and effluent treatment plant conveyance systems.

Project Engineer, King County - Brightwater Wastewater Treatment Plant Siting and Conveyance Development, King County, WA. Andrew assisted in developing engineering criteria used for configuring systems required to deliver flow to potential plant sites. System configurations were developed utilizing gravity sewers, pump stations, and force mains. He assisted in sizing pipelines and pump stations in addition to conveyance alignments. He also located system appurtenances based on developed criteria. The configurations provided the basis for development of cost estimates and determination of community impacts.

Project Manager, King County – Kent/Auburn Conveyance System Improvement Project, King County, WA. The project included development of capital improvement plans to expand King County's wastewater conveyance system in Kent, Auburn, Algona, and Pacific. During project planning, Andrew developed and evaluated several alternatives including combinations of storage, pump stations, force mains, and gravity sewers to determine the best service configuration through 2050. Andrew evaluated wastewater conveyance alternatives including evaluation of cost, schedule, constructability, permitting, and environmental issues. He investigated phasing of planning-level projects and limited surcharge of conveyance piping to defer or eliminate projects. Andrew's work resulted in a significant decrease in the scope and cost of conveyance in Kent and Auburn. During implementation, Andrew served as project manager for engineering and environmental compliance services associated with design of the Stuck River Trunk and the Auburn West Interceptor Parallel. Andrew developed pipeline designs including 100% construction plans, specifications, and construction cost estimates for 3,800 feet of 21-inch gravity sewer referred to as the Stuck River Trunk. Andrew also developed a 60% design for the 4,800-foot-long Auburn West Interceptor Parallel gravity sewer with a 48-inch diameter.

Roger Beieler, PE

Pipeline Design

Jacobs

Roger has 50 years of experience managing projects, designing pipeline conveyance systems, and leading design teams. He has been responsible for the design of several miles of steel pipelines with diameters ranging from 24-inches to 108-inches. His experience includes designing pipelines that cross rivers, creeks, wetlands, highways, and railroads on projects that include pipeline appurtenances such as air valves, line valve stations, pressure reducing stations, blowoffs, and cathodic protection.

Roger has given several presentations at ASCE and AWWA conferences involving pipeline design. One of the papers was titled "Suggestions for Preparing Concise Design Guidelines for Pipeline Projects." He is the author of several Jacob's master specifications involving conveyance systems, including the specification for general piping requirements, air valves, in-line valves, precast vaults, pipeline hydrostatic testing, and pipeline disinfection.

With his decades of pipeline design experience Roger will lead the development of design standards, supporting facility planning by completing technical analysis during route selection, and design of critical CSP elements to initiate ROW and permitting. Additionally, Roger will lead the technical review of the design elements from the CSP design engineering teams to provide quality technical reviews throughout the program design phase.

Education/Qualifications

MS, Civil Engineering, Washington State University
BS, Agricultural Engineering, Washington State University

Registrations/Certifications

Professional Civil Engineer:
WA (#15420), OR (#9583)

Other

Total years' experience: 50
Joined Jacobs: 1974
Office location: Bellevue, WA

Section 5. Projects Relevant to CWA

- ✓ North Mercer Island Interceptor and Enatai Interceptor Upgrades | Pipeline Design
- ✓ Second Supply Project Pipeline (Pipeline 5) | Pipeline Design Lead
- ✓ Willamette Water Supply Program Partnership Projects (WWSP) | Pipeline Design

Relevant Project Experience

Project Manager, Tolt Pipeline Project, City of Seattle, Seattle, WA. Managed the design of this $54M project, including preparation of drawings and specifications, property acquisition efforts, permitting, and construction services. The project includes 12 miles of steel pipe with diameters up to 72 inches and 2 large valve chambers. The open cut crossing of the Sammamish River was noted for minimal environmental disruption. The project included the crossing of several wetlands, creeks, and associated mitigation measures. The trenchless crossing of the Snoqualmie River won the Trenchless Technology Project of the Year award.

Senior Technical Advisor, Kennedy Newton Main & Annacis Main No. 5 South, Metro Vancouver, Vancouver, BC. Served as the technical advisor responsible for the design of the steel pipeline and the valve chambers for this project involving 12 km of 60-inch diameter welded steel pipe in a metropolitan area with heavily used streets. The project includes two railroad crossings, a stream crossing, and several crossover chambers.

Senior Reviewer, Tacoma Pipeline1 Relocation, **Tacoma, WA**. Reviewed drawings, specifications, cost estimates, and construction schedules for this project involving relocation of a 42-inch diameter welded steel pipe. He became familiar with Tacoma Water's supply system, the hydraulic conditions, standards, and temporary shutdown requirements. The project included design of connections to the existing system and extensive coordination with a concurrent roadway project.

Chris Catlin, PE

Task Lead: Operations Support

Jacobs

Chris brings 30 years of comprehensive experience in water treatment and distribution, with career spanning roles such as operator, lead operator, system manager, design engineer, and operations consultant. He has managed multiple water treatment plants and distribution systems as a plant manager and holds licensure as a professional engineer in Iowa and Minnesota. Additionally, Chris is certified at the highest level as a water treatment and distribution system operator in several states.

Chris has operated and managed several large distribution and pumping systems, both as a utility employee and as a temporary system manager. This work included everything from managing watermain breaks to master planning and computer modeling. Chris will bring his decades worth of experience to inform and guide the CSP design for future operability.

Education/Qualifications

MS, Civil and Environmental Engineering, University of Iowa
BSE, Chemical Engineering, University of Iowa

Registrations/Certifications

Professional Engineer:
IA (#P12163), MN (#25686)
Class 4 Water Treatment Operator & Water Distribution Operator (IA and AZ).
Class 4 Water Treatment Operator (WA)

Memberships

AWWA Member and contributor
Presenter, University of Wisconsin Extension and University of Minnesota System

Other

Total years' experience: 30
Joined Jacobs: 2012
Office location: St. Paul, MN

Relevant Project Experience

Acting Manager, Staff Augmentation, Norwood Water Treatment Plant, NMB Water, City of North Miami Beach, FL. Acted as plant manager for this utility serving a population of 175,000. Managed treatment plant, storage, and pumping systems. Provided technical support for the distribution system, including master planning, computer modeling, capital improvements planning, and budgeting. Performed field testing for fire flow, low-pressure complaints, leak detection, and related activities.

Acting Plant Manager and Acting Water Quality Manager, North Water Treatment Plant and Santan Vista Water Treatment Plant, Gilbert, AZ. Provided management services on an interim basis (approximately one year) for water utility serving a population of 220,000. The system included two treatment plants, 20 storage tanks, and associated pump systems and three pressure zones. Provided technical support for the distribution system, including main disinfection and break response.

Acting Pumping and Storage Manager, Baltimore Water System, Baltimore Department of Public Works, Baltimore, MD. Acted as system manager for a 300-million-gallons-per day (MGD) system including 20 pump stations and 30 storage tanks. Work included master planning, capital improvements coordination, and management of staff. Provided training to distribution system operators and supervisors.

Treatment Operator, Seattle Cedar Water Plant, Seattle, WA. During a staffing shortage, Chris operated a high-capacity water treatment plant with flows ranging from 50 to 150 million MGD. The treatment process involved ozone, UV disinfection, and gas chlorination, with no filtration, requiring all microbial inactivation to be achieved through these methods. Additionally, Chris was responsible for directing the plant's effluent to the City of Seattle's surge tanks, maintaining appropriate levels for city staff to distribute water throughout the system.

Superintendent, Operations and Maintenance, Minneapolis Water Treatment Plant, Minneapolis, MN. Managed a 120-MGD surface water treatment plant, including a staff of 140. Operations, maintenance, and water quality departments within the water utility. Managed 50+ miles of large diameter transmission mains and associated pump stations and storage tanks. Developed staff, created a rewards and recognition program, optimized staffing, optimized treatment, and residuals disposal. Created standard operating procedures for seasonal treatability issues.

James Chae, PE, PMP

Task Lead: Design Support

Jacobs

James has 30 years of experience in design engineering and construction management. He has served various roles in planning, design, project management, and construction management for water and wastewater pipelines and facilities, pump stations, storage structures, and projects involving a wide variety of trenchless methods. He has focused his career delivering pipeline projects in many of the jurisdictions that comprise the CSP corridor and is fully committed to serving CWA in successfully delivering this program.

Education/Qualifications

MS, Civil Engineering (Environmental), University of WA
BS, Civil Engineering, University of WA

Registrations/Certifications

Professional Engineer: WA (#34788)
Project Management Professional (#1209889)

Memberships

American Society of Civil Engineers (ASCE)
Member, Water Environment Federation
North American Society for Trenchless Technology

Other

Total years' experience: 30
Joined Jacobs: 1994
Office location: Bellevue, WA

Section 5. Projects Relevant to CWA

- ✓ KC WTD South Plant PMOA | Principal-In-Charge
- ✓ North Mercer Island Interceptor and Enatai Interceptor Upgrades | Lead Project Engineer
- ✓ Ship Canal Water Quality Project (SCWQP) | Engineering Review

Relevant Project Experience

Pipeline Design Reviewer, Tacoma Cascade Pipeline Project Central Segment, Cascade Water Alliance, King County, WA. This project included a water transmission line project that consists of installing 60,500 linear feet (LF) of 42-inch diameter water pipeline from tie-in to the Tacoma Second Supply Pipeline to 140th Avenue SE in unincorporated King County. Scope of VE/review included 60% level water plans and profiles, trenchless design crossings, surface restoration details, water appurtenances, construction schedule, and cost estimate. Size: 60,500 LF of 42-inch diameter water pipeline.

Project Manager, Olympus Meadows Trunk Sewer and Water Transmission Main Improvements, Alderwood Water & Wastewater District, Snohomish County, WA. This project included design and construction of approximately 800 LF of 30-inch diameter trunk sewer, including trenchless crossings under North Creek, SR 527, and Silver Creek. The project also provided approximately 4,000 linear feet of 24-inch water main including trenchless crossings under North Creek, SR 527 and Silver Creek on 196th Street SE. This water main is a portion of the 660 Zone Water Transmission Main for conveyance of water from the east side of the zone to the west.

Project Manager, I-5/164th Martha Lake Gateway Sewer and Water Improvement, Alderwood Water & Wastewater District, Snohomish County, WA. This project included for design and construction of 4,800 lineal feet of 12-inch and 15-inch diameter gravity sewer and 1,800 LF of 8-inch and 24-inch waterline in Snohomish County that includes: evaluation of sewer and water alignment alternatives through private properties and public right-of-way (ROW); I-5 trenchless crossing alternatives analysis including microtunneling, pipejacking, and HDD options; geotechnical investigations including preparation of geotechnical interpretive report and geotechnical baseline report; review of design flow projections; review of environmentally sensitive areas including streams and wetlands; permit evaluation and preparation including preparation of a Permit Management Plan; ROW/ easement acquisitions including five private properties, Snohomish County Public Utilities District, and WSDOT; preparation of final plans, specifications, estimates, and construction schedules; and bidding period and construction support. Project design is complete, and construction is scheduled for completion in 2014.

Ken Durbin, PE

Task Lead: Program Support

Jacobs

Ken is Global Head of Delivery Excellence and a senior program manager for Jacobs, having led numerous mega programs in his 41 years with the company. His expertise is in program management with a demonstrated ability to collaboratively lead consortiums and partners with interested parties to successfully deliver complex major programs throughout all phases from planning, design, and construction, to commissioning and close-out. In his role as Jacobs' Head of Delivery Excellence for Global Major Programs, Ken leads the development and continuous enhancement of a powerful Initiation Framework—equipping teams with the tools and methodologies needed to drive consistent, high-impact program delivery from the outset. Ken is prepared to lead our CSP team in establishing the program framework to successfully implement this program over the next 15 years.

Education/Qualifications

BS, Mechanical Engineering, San Diego State University

Registrations/Certifications

Professional Engineer:
WA (#26911), CA (#M28064)

Other

Total years' experience: 41
Joined Jacobs: 1984
Office location: Bellevue, WA

Section 5. Projects Relevant to CWA

- ✓ KC WTD South Plant PMOA | Initiation Lead

Relevant Project Experience

Initiation Leadership, 10K Mile Powerline Undergrounding Program, PG&E, CA. Leading the team in the development of an organization/ governance structure, including agreement and ratification of the delivery process, stage gates, organizational structure, roles and responsibilities, delegation of authority, meeting structure, and reporting methods to support timely decision making.

Program Management Operations Director/Project Manager, SuedLink, Wuerzburg, Germany. Served as overall operations director and southern project manager during the Initiation Phase of the 700km-long Suedlink HVDC underground power cable network. This transformative infrastructure is a cornerstone of Germany's energy transition strategy, enabling the nationwide transmission of renewable energy from wind, solar, and hydro sources, and supporting the country's move away from coal and nuclear power. Representing Jacobs as the Program Delivery Partner to TenneT and TransnetBW, Ken led the critical early-phase mobilization, establishing a robust regional team structure and fostering a collaborative delivery model across two distinct client organizations. He also spearheaded the development of key operational systems, including program controls and digital infrastructure, ensuring the program is dynamically supported and positioned for long-term success.

Project Director, Lee Tunnel, Thames Water Ltd, London, UK. As Program Director for the £635M Lee Tunnel project, Ken led the successful completion and close-out of one of London's most critical infrastructure undertakings. Designed to work in tandem with the Thames Tideway Tunnel, the Lee Tunnel captures an average of 39M tons of sewage annually from the City's 35 most polluting Victorian-era combined sewer overflows. Spanning 7km with a 7.2-meter diameter, the tunnel runs beneath the London Borough of Newham, connecting Abbey Mills Pumping Station to Beckton Sewage Treatment Works. The project also included the construction of a new 38-meter diameter, 87-meter-deep pumping station and a major outfall structure. Ken's leadership was instrumental in conceptualizing and negotiating an incentivized fixed-price contractor close-out agreement, significantly reducing client risk and uncertainty. He also drove the team to complete the final work, including testing and commissioning of the 12,000-liter-per-second main pump station and tunnel system.

Liz Forbes, LG

Phase 1 & Phase 2 Remediation Lead

Jacobs

Liz has 14 years of experience in a variety of technical and project management roles. Project work includes environmental investigations, including Phase I and Phase II environmental site assessments (ESAs), remedial investigations (RIs), analyzing and interpreting data, developing conceptual site models, planning and implementation of remedial actions, hazardous materials assessments, and preparation of technical reports. Liz's extensive local remediation experience will be critical for the completion of Phase I and II site assessments as necessary along with the proposed alignment.

Education/Qualifications
BA, Geology, Whitman College

Registrations/Certifications
Licensed Geologist: WA (LG #3112)
OSHA 40-hour HAZWOPER
Certificate/Supervisor (current 8-hour refresher)
First Aid Certification

Other
Total years' experience: 14
Joined Jacobs: 2018
Office location: Bellevue, WA

Relevant Project Experience

Project Manager, Former MCAS Tustin and El Toro, US Navy, Irvine, CA. Project manager for the PFAS RIs at the Former Marine Corps Air Stations (MCAS) Tustin and El Toro. The PFAS RI included preparation of a Sampling and Analysis Plan, and soil, groundwater, sediment, and surface water sampling across the former stations to delineate PFAS. Includes coordination with multiple local, state, and federal agencies, as well as private interested parties.

Project Manager, Tulalip Test Site, US Environmental Protection Agency, Marysville, WA. The Tulalip Test Site is an approximately 525-acre site in Marysville, WA, with volatile organic compounds (VOC) groundwater plumes identified and characterized at six distinct areas across the site. Project activities included review of remedial investigation work plans, oversight of RI field sampling activities to define trichloroethylene (TCE) in groundwater, technical review of RI Reporting, technical review of the site TCE Treatability Testing, and Baseline Risk Assessment review.

Hazardous Materials Lead, Sound Transit West Seattle Ballard Extension – Environmental Impact Statement, Sound Transit, Seattle, WA. Lead author of the hazardous materials section of the draft Environmental Impact Statement (EIS). The hazardous materials section focused on the historical and current property use and identified properties that may have the potential to impact human health and the environment during project construction and operations. Included review of historical aerials, Sanborn Fire Insurance maps, database report, and state and federal record review. Also provided third-party review of Phase I ESAs for property acquisitions.

Task Lead, Phase I and Phase II ESAs, King County Metro, Kent, WA. Phase I ESAs were completed to support property acquisition at a former gasoline service station and a former dry cleaner facility. Phase I was completed in accordance with ASTM 1527-13, with consideration for ASTM 1527-21 updates. Responsible for managing the subsequent Phase 2 ESA to investigate potential soil and groundwater contamination based on the findings of Phase 1 ESA.

Task Lead, Hazardous Materials Reports, Washington Department of Transportation (WSDOT), Bellevue, WA. Prepared hazardous materials reports for WSDOT projects to identify and evaluate known or potentially contaminated sites that may adversely impact the environment or create significant construction impacts or costs. Reports were completed for construction corridors along right-of-way, and included review of historical documents, maps, and state and federal database review.

Jennifer Henke, PE

Modeling

Jennifer is a hydraulics engineer with 27 years of experience working on a variety of projects involving water distribution planning and hydraulic modelling, potable water treatment, and reliability and redundancy evaluations.
She develops efficient pump control schemes for hydraulic models evaluating multiple pump station operation and interaction. Jennifer has undertaken multi-faceted evaluations for over 1,000 miles of large diameter water distribution that start with the supply strategy coupled with the overall system operation and customer water delivery to meet operational goals for energy efficiency, system performance, reliability, and water quality. Jennifer's decades worth of hydraulic modeling experience will help complete the CSP Facility Planning analysis and support design teams with confirmation modeling.

Education/Qualifications

MS, Civil Engineering,
University of Texas at Austin
BS, Civil Engineering,
University of Texas at Austin

Registrations/Certifications

Professional Engineer:
TX (#92664)

Software Expertise

InfoWater Pro
EPANet
WaterCAD
WaterGEMS
MIKEUrban
AquaTwin
InfoWorks WS

Other

Total years experience: 27
Joined Jacobs: 1997
Office location: Bellevue, WA

Relevant Project Experience

Modeling Analysis Lead, 96-inch Diameter Water Transmission Main Relocation and Implementation Study and Hydraulic Modeling, Great Lakes Water Authority (GLWA), Detroit, MI. Performed the hydraulic analyses to identify the recommended option and implementation procedures for a new 96-inch water transmission main around an industrial landfill site.
The implementation of the pipeline relocation took the inline 25 MGD Rochester Booster Pump Station out of service and eliminated supply to the 45 MGD North Service Center Pump Station from Lake Huron WTP while connections were made to the existing 96-inch pipeline. To mitigate the supply restrictions with the 96-inch relocation, Jennifer assessed alternate supply strategies in the GLWA system for 10 communities who were supplied directly from the Rochester Booster Pump Station. After working with GLWA to identify acceptable levels of operational risk and supply ranges, Jennifer developed, analyzed, and presented GLWA the 12 scenarios of alternative routes, demand conditions, and implementation options that included temporary and permanent facilities that provided GLWA with the information to identify the preferred relocation alternative and implementation plan.

Modeling Lead, Water Supply Outage Simulations and Evaluation, Seattle Public Utilities (SPU), Seattle, WA. Jacobs performed hydraulic modeling of the SPU water transmission system to identify detailed operational controls for the SPU water supply system to maintain service to both wholesale water customers and Seattle customers in the event of a pipeline failure in the water supply system. Jennifer coordinated with SPU operations staff to identify timelines to make manual operational changes at facilities to capture the timeline of procedures in the hydraulic modeling. The outcome of the study identified facility improvements to improve response time and maintain water supply service during a potential outage.

Modeling Lead, Water Transmission System Operations Optimization and Maintenance Plan, Tarrant Regional Water District, Fort Worth, TX. Jacobs developed a hydraulic model of the TRWD's transmission system that conveys water over 150 miles from water supply reservoirs in East Texas to more than 30 wholesale customers in North Texas. One of the goals was to identify the optimal operating scenarios for the series of pump stations and reservoirs to efficiently deliver the required flows to the wholesale customers. Jennifer led the effort to review and validate the existing hydraulic model that consists of a series of pipelines ranging in diameter from 60-inch to 108-inch, deep tunnels, water storage tanks, balancing reservoirs, and pump stations and to provide guidance and recommendations to TRWD on how to develop a model maintenance program and to develop and simulate the desired operating scenarios.

Gina Hortillosa, PE, PMP

Owner's Advisor

Gina has 29 years of experience in the industry and applies a philosophy that values strong performance, continuous improvement, and collaboration. She has the proven ability to engage interested parties by effectively communicating goals, practicing active listening, and recognizing each individual's unique contribution. Appointed by the Capital Project Advisory Review Board (CPARB), Gina serves a three-year term on the State of Washington's Project Review Committee. Gina will lead the collaborative delivery strategy review, development, and execution for the CSP program.

Education/Qualifications

Master of Infrastructure Planning and Management Degree, University of Washington
BS, Civil Engineering, Seattle University

Registrations/Certifications

Professional Engineer:
WA (#37380), CA (#63816)

Memberships

Project Review Committee Member, Construction Managers Representative, CPARB

Other

Total years' experience: 29
Joined KBA: 2022
Office location: Bellevue, WA

Relevant Project Experience

Project Manager, Everett Port Gardner Water Quality Program, City of Everett, Everett, WA. Gina is the project manager for the $200M City of Everett Port Gardner Water Quality Program, which serves to improve water quality in Puget Sound and Port Gardner Bay. KBA's project management services for this project currently include constructability reviews, activity scheduling, value engineering, risk analysis, and contract administration. As the project progresses, KBA will provide additional construction management services, inspection, change management, and quality assurance.

Owner Advisor, Wastewater Treatment Plant (WWTP) Expansion and Improvements, City of Lynnwood, Lynnwood, WA. Gina is the project manager for the $300M WWTP project. This plant collects and treats wastewater from a sewer service area of approximately 6,000 acres. The project is anticipated to be delivered via General Contractor/ Construction Manager in three phases: Upper Site preparation, liquid stream improvements, and solids handling improvements.

Project Manager, 8th Ave. W Sewer and Water Main Replacement, City of Kirkland, Kirkland, WA. Gina is the project manager for this $2.5M project that is replacing approximately 1,700 linear feet of the 6-inch concrete sanitary sewer with 8-inch PVC, replacing eight sanitary sewer manholes, replacing approximately 1,900 linear feet of 6-inch cast iron water main and appurtenances with 8-inch ductile iron, and replacing connected water services and sewer laterals.

Project Manager, Lake Stevens Sewer District (LSSD) Lift Station and Force Main, Lake Stevens Sewer District (LSSD), Lake Stevens, WA. Gina is the project manager for this $4.7M project, for which KBA is providing inspection services. The project is constructing gravity sewer improvements and upcoming force main extensions. Lift Station 2C upgrades include installing a new submersible pump station, expanding the wet well capacity, building a new electrical rack, furnishing new auxiliary power, and making miscellaneous site improvements.

Project Manager, Redondo WWTP Biotower 2 Rehabilitation, Lakehaven Water and Sewer District, Des Moines, WA. Gina served as the Project Manager for this $3.9M project, which included extensive rehabilitation of a 46-inch diameter by 30-inch high Biotower treating 2.8 MGD of primary effluent. The work also included removing and reinstalling the existing FRP domed roof and odor control ductwork. KBA provided full-time inspection services to the project's design engineers, Brown and Caldwell.

Jay Hueter, CCM

Task Lead: Construction Support

Jacobs

Jay brings 41 years of construction experience to provide owners with the "contractor's perspective" and a solid negotiating standpoint. He is able to provide alternative solutions to avoid conflicts to make certain projects run smoothly to completion. He has worked closely with some of the most critical public agencies in the Puget Sound, including King County, the Port of Seattle, Sound Transit, and the cities of Seattle, SeaTac, Everett, and Bellevue. His expertise consists of constructability reviews, reviewing contract documents to provide a "best value" project to the owner, budgeting, scheduling, as well as owner and contractor related negotiations and correspondence. Jay's decades worth of experience will be invaluable for the implementation of constructability considerations from planning through construction.

Education/Qualifications

BS, Construction Management, University of Washington

Registrations/Certifications

Certified Construction Manager (CCM), CMAA
Jacobs Certified Project Manager
Certified Erosion & Sediment Control Lead
OSHA 10
First Aid/CPR
Competent Person Training: Excavation Shoring & Confined Space

Memberships

CMAA

Other

Total years' experience: 41
Joined Jacobs: 2008
Office location: Bellevue, WA

Relevant Project Experience

Construction Administration Program Manager, Olympic Region GEC, Washington Department of Transportation (WSDOT), Olympic Region, WA. Provided and managed construction administration resources to WSDOT Olympic Region. Tasks consisted of staff augmentation for four regional offices primarily consisting of inspection services, contract administration, schedule reviews, environmental compliance, material testing, and project design support. The program also included complete construction administration project teams to fully manage construction projects for WSDOT materials office. Construction projects included roadway improvements such as overlays and roundabouts, and fish passage improvements including bridges and retaining structures.

Resident Engineer, North Creek Interceptor and Olympus Meadows Sewer Improvements, Alderwood Water and Wastewater District, Lynnwood, WA. Project scope included approximately 3.5 miles of sewer improvements requiring deep, open cut trenching techniques, deep shafts and approximately 12 microtunnels. Jay was responsible for oversite and management of the construction management team, reviewing and interpreting specifications, preparing and negotiating change order proposals, reviewing the project schedule, preparing and responding to general contractor correspondence and reviewing contractor pay requests, and closeout negotiations.

Construction Contractor's Project Manager, Queen Anne Water Systems Improvements, Seattle Public Utilities, Seattle, WA. This project was demolished and re-installed the Queen Anne water system originally installed in the early 1950s. The project consisted of work throughout a very dense urban environment which required significant collaborative efforts with staging, and traffic control. Work included demolition of Queen Anne Water Tank and construction of a new two-million-gallon steel water tank with booster pump station; installation of 15,000-lineal-feet of watermains and appurtenances, removal and disposal of contaminated soils and roadway restoration. Jay worked in conjunction with SPU for all water shutdowns and re-installation of service connections. Project schedule and cost were reduced by use of additional localized construction crews completing locations in a linear fashion.

Section 5. Projects Relevant to CWA

- ✓ KC WTD South Plant PMOA | CM
- ✓ North Mercer Island Interceptor and Enatai Interceptor Upgrades | Constructability Review

Kari Lowe, SR/WA

Task Lead: Right of Way

COMMONSTREET CONSULTING

Kari Lowe is Commonstreet's CEO and right-of-way (ROW) leading program manager and an expert in complex real estate services for public agencies and programs. She is skilled in communicating effectively and sensitively with clients, program teams, property owners, governmental staff, and legal representatives. Kari has extensive knowledge of the Uniform Relocation Act and ROW procedures. She excels at adapting to client processes, resolving complex acquisition issues, and safeguarding project funding and certifications. Kari brings 23 years of real estate experience and mega program experience in Washington, Oregon, and Alaska to include serving as the delivery manager for the Willamette Water Supply Program. Kari will bring her proven service-oriented approach to effectively deliver the CSP ROW support services.

Education/Qualifications

BA, English Technical Writing, University of Oregon

Registrations/Certifications

SR/WA - International Right of Way Association: OR (#6317)
Real Estate Principal License: OR (#201233922), WA (#102000)

Memberships

IRWA, Beaver Chapter 3, Board of Directors, Advisory Board, 2019-2020
ACEC-ODOT Liaison Steering Committee Co-Chair, 2023

Other

Total years' experience: 23
Joined Commonstreet: 2019
Office location: Salem, OR

Relevant Project Experience

Principal-in-Charge, On-Call Real Estate Research Consulting, Urban Flood Safety & Water Quality District (UFSWQD), OR. Kari is Principal-in-Charge for Commonstreet's partnership to lead ROW for UFSWQD's 30-mile levee and pump station program. She is responsible for shaping the real estate strategy and providing essential program management, cost estimating, scheduling, risk analysis, advising route selection and alternative planning, and overall performance of the ROW team. She also supports ROW training to UFSWQD and the Army Corp of Engineers and facilitates the critical component of close coordination with key interested parties (City of Portland, East County Working Group, and the Interstate Bridge Replacement Program) to prioritize parcels, valuations, temporary and permanent easement acquisitions, franchise agreements, utility relocations and mitigation with rail prior to construction.

Senior Property Management Agent, Alaskan Way Viaduct (AWV) Replacement Program, WSDOT, Seattle, WA. For this 74-parcel, $2B, WSDOT-compliant mega project and highway replacement located in the heart of downtown waterfront in Seattle, Kari served as the Senior Property Management Agent. Over 30 design/construction projects are associated with this federally funded program and over 350 individual property rights were required in all. Kari performed cost estimates for the sale of surplus properties.

Section 5. Projects Relevant to CWA

- ✓ Willamette Water Supply Program Partnership Projects (WWSP) | Right-of-Way Lead

Senior Property Management Agent, SR 509 Gateway Replacement Program, WSDOT, Seattle, WA. This WSDOT was a mega project inclusive of 98 parcel acquisitions, over 100 residential and commercial relocations, and over 70 parcel land exchanges between WSDOT and Sound Transit. Kari managed WSDOT-owned parcels, prepared and executed leases for tenants, and facilitated the transient trespass response including providing a list of resources for unhoused people, posting of notices, coordination with law enforcement to secure vacated buildings, site monitoring, and repair and clean-up of vandalism and other hazmat and non-hazmat clean out.

Ryan Mallory

Program Controls

Jacobs

Ryan is a seasoned project controls expert with deep expertise in planning and scheduling, cost control, project analysis, and earned value management. He has successfully led and supported project controls and cross-functional teams on high-profile programs, consistently aligning project execution with strategic objectives and timelines. Known for his natural leadership, Ryan has guided integrated teams through the delivery of large-scale, complex initiatives, demonstrating a strong ability to navigate challenges and drive results. Ryan will work collaboratively with the CWA CSP team to develop a program controls strategy for the duration of the CSP.

Education/Qualifications
BA, Management Information Systems, Washington State University

Registrations/Certifications
Earned Value Professional (EVP)

Other
Total years' experience: 17
Joined Jacobs: 2014
Office location: Bellevue, WA

Section 5. Projects Relevant to CWA

✓ Ship Canal Water Quality Project (SCWQP) | Program Controls

Relevant Project Experience

Project Controls Lead, King County Wastewater Division Capital Improvement Program (CIP) Support, Seattle, WA. The program focuses on maintaining and upgrading wastewater infrastructure to support environment sustainability and accommodating regional growth. Jacobs provides project management and engineering design support for various CIP projects in the region of varying size and complexity. As project controls lead, provides schedule, cost, and estimating support for various infrastructure projects. Developed and implemented scalable Earned Value Management (EVM) techniques for consultant design contracts. Trained project managers, project staff, and clients on the use and implementation of project controls and earned value best practices to track progress and monitor performance. Developed and maintained baseline schedules using the critical path methodology, performed schedule analysis and risk mitigation to enable project success.

Program Management Consultant, Water for the Future (WFF) Program, New York City Department of Environmental Protection, New York, NY. The $1B program is a comprehensive initiative aimed at ensuring the long-term reliability of the city's water supply. Jacobs provides program management support for multiple aspects of the program. Developed overall program master schedule and methods to update consistently and accurately. Coordinated among multiple interested parties and project managers to monitor schedule performance and critical paths to program milestones. Developed a reporting structure for internal and external interested parties.

Program Management Consultant, Combined Sewer Overflow Program, Seattle Public Utilities (SPU) Wastewater Division, Seattle, WA. This $900M program is designed to reduce sewage and stormwater overflows into Seattle's waterways, ensuring compliance with environmental regulations and protecting public health. Jacobs provided program management support for multiple aspects of the program. Provided cost, schedule, and estimating support for various capital improvement projects in the SPU Wastewater Division portfolio. Supported database management and processes for the Primavera P6 software, including training for SPU project controls and project management staff. Developed project controls reports and analysis ranging from individual small-scale delivery projects to large programs and portfolios. Provided technique expertise, advice, and implementation strategies of scalable techniques for an Earned Value Management System (EVMS), critical path methodology scheduling, and database processes.

Emma McGowan, PE

Deputy Project Manager

Jacobs

Emma is a dedicated program manager. She has spent the last nine years delivering Salt Lake City Department of Public Utilities (SLCDPU) SLCDPU Program. She is instrumental in program initiation and planning, and managing various teams required to deliver large, complex programs. As part of the program management team, Emma will bring her recent program experience and dedication to deliver the CSP.

Education/Qualifications
BS Environmental Engineering, Johns Hopkins University

Registrations/Certifications
Professional Engineer:
UT (#10896698-2022)

Memberships
Member, American Society of Civil Engineers (ASCE)

Other
Total years' experience: 13
Joined Jacobs: 2015
Office location: Bellevue, WA

Relevant Project Experience

Program Manager/Operations Manager/Program Systems Lead/Project Manager, SLCDPU Program, Salt Lake City, UT. SLCDPU Program is a 10-year, $2.5B program. Jacobs' Program Management contract was awarded in October 2016 and includes program and project management support for over 100 sewer, water and storm water projects annually. Main focuses of the program include capital planning, project management of individual projects, technical support including condition assessments, preliminary design, construction management, and schedule and cost management for all SLCDPU's projects. Jacobs also provides a variety of services for SLCDPU's largest projects including acting as the owner's agent for the design and construction of the $900M 48 MGD water reclamation facility and the design and construction of the $200M upgrade to City Creek WTP. Another key focal point of the program is the development of a centralized, electronic program/project management system, entitled Project Central, which is used to manage new, standardized workflows for key project processes, project documentation, project form generation and project reporting. **Emma has been working full-time on the SLCDPU Program for nine years and progressively has taken on additional assignments, responsibility, and challenges:**

- **Program Manager, June 2023 – Present.** Emma is responsible for the development, prioritization and management of $7M in task orders annually. She represents Jacobs with the client executive team and also represents Jacobs on emerging areas within the program such as supporting SLCDPU in complying with the federal Lead and Copper Rule Improvements. She confirms the adherence to both Jacobs and client procedures and policies for all the work of the program.
- **Deputy Program Manager/ Operations Manager, June 2022 – June 2023.** Emma has led the development of Jacobs task orders over four client fiscal years. In this role Emma managed all program financials and represents Jacobs in weekly client contract review meetings.
- **Program Systems Lead, 2018 – Present.** Emma has led the development efforts to improve and restructure department and project management processes for all of SLCDPU's capital projects and implement these changes in a customized SharePoint site with automated workflows. Emma also leads bi-weekly training sessions for 25 DPU Project Managers and other DPU project personnel.
- **Project Manager/Project Engineer, 2016 – 2022.** Emma has managed the design and construction of capital sewer, stormwater, and drinking water projects. These projects included lift station upgrades, new pipeline installations, pipeline repairs, and maintenance hole repairs. Tasks include RFQ/RFP development, advertisement, selection of consultants, management of design consultants, design review, bidding services, management of construction contractors, change management, and project closeout. Emma also completed oversight of multiple condition assessments of the sewer collection system, including multisensor inspections of sewer interceptors 24- to 72-inch diameter, smoke testing, and H2S sampling and modeling for odor and corrosion studies.

Chris McMeen, PE

Water Quality

Chris brings 35 years' experience serving as a leader in diverse private and public organizations. In various roles, he developed expanding workgroups to meet water quality and supply needs, sought out and identified impactful challenges, actively engaged in public processes, and worked with diverse professional teams to deliver effective solutions.

Education/Qualifications

MS Civil Engineering (Environmental Engineering & Science), University of Washington
BS Civil Engineering, University of Washington

Registrations/Certifications

Professional Engineer: WA (#30282)

Other

Total years experience: 35
Joined Confluence: 2020
Office location: Seattle, WA

Section 5. Projects Relevant to CWA

- ✓ North Mercer Island Interceptor and Enatai Interceptor Upgrades | Project Manager
- ✓ Willamette Water Supply Program Partnership Projects (WWSP) | Project Manager

Relevant Project Experience

Project Manager, 2026 Water System Plan Update, Covington Water District, WA. Confluence Engineering is a subconsultant supporting the development of specific elements of the District's Water System Plan in two categories: Water Quality Analysis and Water Resources Evaluation. The analysis element includes standard review and updating water quality regulatory compliance issues, as well as a more detailed look at water quality challenges associated with the Tacoma Second Supply Source and Pipeline. The resources evaluation involves supporting the prime consultant on matters of regional water supply options, issues, and opportunities. Each of these topic areas is relevant to Cascade's development of the Tacoma-Cascade Transmission Line, including potential operational and water quality issues that must be evaluated.

Project Manager, Bellevue-Issaquah Pipeline Emergency Response and Flushing Plans, and Cascade's Water Quality Blending Evaluation, Cascade Water Alliance, WA. Assembled and organized detailed information about Cascade's 24-inch Bellevue-Issaquah Pipeline and associated appurtenances, and analyzed options to flush, test and restore service in the event of a water quality emergency condition within the pipeline. This process involved facilitating three workshops with involved Cascade Members (Bellevue, Issaquah, and Sammamish Plateau Water), and producing two final documents in 2023 titled the Emergency Operations Response Plan and the Emergency Flushing Plan. In late 2024, Confluence began work on a water quality blending study to evaluate potential impacts of blending the future Tacoma Green River water supply with Cascade's current primary sources from SPU's Tolt and Cedar River. This evaluation is focused on anticipated changes in treated and distributed water chemistry, and identified, qualitative risk implications.

Senior Project Manager, Various Projects, City of Bremerton, WA. Served as the project manager for development of regulatory monitoring plans as part of the Water System Plan update, water treatment recommendations for new and changing sources, and a complete Risk and Resiliency Assessment.

Project Manager, Soos Creek Water & Sewer District Chlorine Residual Management Study, Renton, WA. Served as the project manager as well as the principal author of the District's Water Quality update for the 2025 Water System Plan.

Natalie Monro

Task Lead: Communications & Outreach

Natalie is an experienced manager and effective leader in strategic communications, interested parties' engagement, and marketing, as well as a leader in regional water recycling initiatives. She excels at working with multidisciplinary teams particularly for large, complex infrastructure projects. Natalie's communication and leadership skills will be instrumental in communication and community outreach efforts throughout the CSP.

Education/Qualifications

Master of Public Administration, Boise State University
BA, Psychology, University of Puget Sound.

Memberships

RPNW WateReuse Association Board

Other

Total years' experience: 9
Joined Jacobs: 2024
Office location: Bellevue, WA

Section 5. Projects Relevant to CWA

✓ KC WTD South Plant PMOA | Communications Lead

Relevant Project Experience

Communications Manager, Recycled Water Program, Boise, ID. Led the communications strategy for the development of the new Recycled Water program. Facilitated focus groups, interested party meetings, and public tours of the demonstration pilot. Project managed the National Water Research Institute panel and developed utility policies including the Good Neighbor Policy, End Use Policy, and the Community Benefit Policy.

Communications Lead, Nutrient Reduction Evaluation (NRE), Bellingham WA. Led the strategy for interested parties' engagement and public education for the City's NRE. Managed relationship with sub-consultant PRR. Developed strategy for interested parties' involvement for the NRE planning process, including interfaces with political leaders, community review boards, and external partners.

Communications Manager, Clean Water Bond, Boise, ID. Led the communications strategy educational materials development for Idaho's largest public bond of $570M dollars. Bond passed with 82% voter support.

Communication and Public Outreach Lead, Rancho Mid-Pauba Groundwater Banking and Water Resources Program, Rancho California Water District, Temecula, CA. Documented existing communications, and public outreach activities and identify opportunities to streamline and enhance engagement. Developed communication and public outreach strategies and support local staff as augmentation and technical expert.

Communications Lead, Rock Creek Watershed Restoration, Twin Falls, ID. Led the strategy for public involvement in the restoration planning for the Rock Creek Watershed, an urban and agricultural watershed in Twin Falls.

QC Manager and Task Lead, Mouth of Duwamish Wet Weather Treatment Station, King County, WA. Managed the task leads on Mouth of Duwamish Combined Sewer Overflow Program Manager/Owner Advisor services. Managed QC logs, deliverable trackers, action and decision item logs, etc.

Customer Service Lead, Nutrients Initiative, Bellingham, WA. Worked collaboratively with a multidisciplinary team to create a pursuit strategy for the City of Bellingham's upcoming wastewater projects. Developed key messaging and strengthened relationships with City staff.

Communications Lead Water System Plan (WSP), Bellingham, WA. Led the strategy for interested party engagement and public education for the City's WSP. Managed relationship with sub-consultant PRR and developed strategy for interested parties' involvement for the NRE planning process, including interfaces with political leaders, community review boards, and external partners.

Makarand Pendse, PMP

Jacobs

Project Manager

Makarand is a program manager with 30 years of diversified industry experience and 16 years of combined program management, project management, design management and project engineering experience. He has specialized knowledge and experience in planning, designing long conveyance pipelines and pumping infrastructure, drinking water UV treatment and transfer systems, water resource planning and estimation; engineering, construction and commissioning of large storm water and flood management facilities including municipal wastewater collection and flow equalization systems; wastewater treatment plants and influent pump stations. Makarand will bring his collaborative, engaging program management style to lead the team in delivering the critical and complex CSP.

Education/Qualifications
BS, Engineering Technology

Registrations/Certifications
Certified Project Management Professional (PMP)

Memberships
Member of PMI

Other
Total years' experience: 30
Joined Jacobs: 2011
Office location: Bellevue, WA

Section 5. Projects Relevant to CWA

- ✓ San Mateo Clean Water Program and Construction Management | Program Manager - Conveyance

Relevant Project Experience

Program Manager, Cargill MSS Brine Processing and Discharge, Newark, CA. Makarand is leading the planning and engineering phases of this $250M program, which comprises planning, development of route alternatives, permitting and designing of approximately a 17-mile long, 18-inch conveyance pipeline through East Bay cities. Program also included Onsite and Offsite pumping facilities to convey and discharge MSS brine into San Francisco Bay utilizing existing treated effluent outfall operated by EBDA. The program included interested party engagement, constructability reviews and engineering support for environmental permitting and CEQA applications.

Assistant Program Manager, Haweswater Aqueduct Resilience Project, United Utilities, UK. Project included the assessment and development of alternative engineering solutions for water supply resilience, including replacement of approximately 31 miles of tunnel sections of Haveswater aqueduct and developing water sourcing and treatment alternatives. Additional services included shortlisting based on risk and consequence profile and Makarand provided leadership in doing program scheduling, alternatives analysis construction feasibility and market testing involving contractors and third-party cost validation of shortlisted solutions and assisted in submission of business plan to Ofwat for Direct Procurement for Customers (DPC) determination. Makarand also assisted in interested party engagement and planning geotech investigations.

Project Manager, Water Quality Compliance Program, South East Water, UK. The project addressed Drinking Water Inspectorate (DWI) water quality compliance requirements for AMP6 Year 5 and AMP7 Years 1 and 2, encompassing UV disinfection treatment, enhanced water quality monitoring, and the upgrade and refurbishment of water treatment facilities. Makarand managed various phases of this program including securing funding, planning, engineering and construction of several projects.

Conveyance Lead for Strategic Water Supply Assessment, MMWD, CA, and East Bayshore Recycled Water Project Feasibility Assessment, East Bay Municipal Utility District, CA. Project involved the strategic assessment and the development of water supply alternatives for draught resilience. Makarand led route selection, alternatives analysis, and development of concept design of conveyance pipelines and pump stations and construction feasibility assessment and cost estimation.

Mike Reimbold, PE

Program Management Strategy Advisor/Project Execution Plan/Quality Management

Jacobs

Mike is a senior program manager with over 30 years of experience in planning, design, and construction of civil infrastructure and environmental design projects. Mike has served as program and project manager, quality manager and design manager for water and environmental programs and projects. Mike will leverage his experience managing the Ship Canal Water Quality Project to advise the program team throughout the CSP lifecycle.

Education/Qualifications

MS, Geotechnical Engineering, University of Texas at Austin
BS, Civil (Geotechnical/ Environmental) Engineering, Drexel University

Registrations/Certifications

Professional Engineer: WA (#28614)

Other

Total years' experience: 37
Joined Jacobs: 1988
Office location: Bellevue, WA

Section 5. Projects Relevant to CWA

- ✓ Ship Canal Water Quality Project (SCWQP) | Program Manager
- ✓ KC WTD South Plant PMOA | Risk Manager

Relevant Project Experience

Risk Manager, Mouth of the Duwamish Combined Sewer Overflow (MDSCO) Engineering Services. King County Wastewater Treatment Division, Seattle, WA. Risk manager supporting the engineering services team in coordination with the MDCSO Program Manager/Owner Advisor to identify and assess risk during the alternatives analysis phase of the project. Responsibilities included facilitating collaborative and continuous processes that required input from multiple team members and interested parties of the program for proactive risk response planning. Engage in monthly and quarterly risk review activities with the PMOA.

Project Manager, Puyallup River Flood Risk Management General Investigation 35% Design, US Army Corps of Engineers (USACE) , Puyallup, WA. Project manager during 35% design and cost estimate for modifications to approximately 20 miles of the existing levee system in the Puyallup River Basin to manage flood risk. Design work focuses on aspects that affect major cost items, such as the overall alignment and footprint, and typical levee and floodwall typical sections. Major cost and schedule risk items were also identified. The design optimized the alignment and footprint relative to the draft feasibility study, considering numerous design constraints such as property ownership and utilities, as well as multiple interested parties. Design and cost estimate used USACE engineering standards, and included: geotechnical, structural, hydraulic, civil, and cost estimating.

Quality Manager, Georgetown Wet Weather Station Phase 1 Design Services, Seattle, WA. Quality manager during Phase 1 Design Services consisting of alternative analysis and site selection. The project consists of sitting, designing, building, and commissioning a new wet weather treatment facility, influent conveyance facilities, and an outfall, to treat CSOs from the Brandon and Michigan Street CSOs prior to discharge into the Lower Duwamish River. Primary responsibility is for development/management and implementation of the Project Quality Management Plan, and documenting results. Worked in partnership with the PM and quality reviewers in resolving quality issues.

Project and Design Manager, Snohomish Force Main and Pump Station (Everett Conveyance Project), City of Snohomish, Snohomish, WA. Mike was the project and design manager for developing a facility plan, permitting, environmental review and preliminary and final design for a sewer force main to transfer the City of Snohomish's wastewater from its current wastewater treatment plant (WWTP) to the City of Everett. The force main route is approximately five miles in length and crossed under the Snohomish River at or near the existing treatment facility and continues west south of the BNSF railroad towards the City of Everett. The pipeline includes horizontal-directionally drilled trenchless crossings of the river (1200 feet length) and flood control canal (1300 feet length). The project schedule was executed under a US Consent Decree and State Agreed Order.

Emilie Wicker

Task Lead: Permitting

Jacobs

Emilie has 25 years of experience working as a land use planner for local governments and in the private sector as a business owner. She is a detail-oriented planner specializing in current planning regulatory compliance, development of land use regulations, permitting, land use analysis, GIS and historical land records. She has experience in a variety of planning issues such as floodplain management, environmentally critical areas, land use regulations and design guidelines. Emilie also has many years of experience in the public participation process, from engaging with City Councils, presenting and testifying in public hearings as part of the land use decision process.

Education/Qualifications
BA, Urban Planning/ Geography

Other
Total years' experience: 25
Joined Jacobs: 2024
Office location: Bellevue, WA

Relevant Project Experience

Segment Permitting and Right-of-Way Coordinator, Sound Transit West Seattle Link Extension, Sound Transit, Seattle, WA. Jacobs is working with Sound Transit and the City of Seattle to develop the permit implementation framework for City of Seattle permitting for the light rail line, including identifying needed permitting and developing permitting schedules. Emilie is assisting with the identification of all permits necessary to complete the project on a parcel-by-parcel level and is responsible for permitting in one of the three segments.

Program-Wide Permitting Lead, STRIDE Bus Rapid Transit, Sound Transit, Seattle, WA. The Stride Program establishes BRT service within the I-405 corridor for 37 miles between Lynnwood and Burien as well as service along the SR 522/NE 145th corridor for nine-miles between Shoreline and Bothell. It also includes an operations/ maintenance facility (Bus Base North) that supports BRT operations and ST Express buses as well as a new Transit Center in the City of Renton. Emilie worked on the state and local land-use, environmental, and construction permitting and coordination with the 12 governing jurisdictions along each of the corridors.

Local Permitting Lead, King County Eastside Interceptor 8 Rehabilitation, King County Wastewater Treatment Division, Seattle, WA. King County Wastewater Treatment Division's Eastside Interceptor 8 is a mile long, 90- to 96-inch concrete wastewater pipeline constructed over 50 years ago. Due to significant degradation, the existing pipeline needs to be rehabilitated while minimizing capacity impacts to the critical regional wastewater conveyance system. The project involves a two-mile temporary sewage diversion, rehabilitation of the existing pipeline, trenchless installation under WSDOT right-of-way, and environmental impacts. Emilie is coordinating with the Client and Contractor to obtain necessary land use approvals and construction permits from the City of Bellevue.

Senior Planner/Building Department Administration, City of Kenmore, WA. Managed complex planning development applications and review of projects for compliance with adopted City, State and Federal Regulations. Presented reports and other findings to commissions, city council and public hearings. Coordinated permitting processes and database system of the City's newly established building department. ECityGov Alliance building department representative for intergovernmental coordination during the creation of MyBuildingPermit.com site.

CONTACT

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