# ATTACHMENT E



February 28, 2020

Mr. David E. Capka, P.E. Director, Division of Dam Safety and Inspection Federal Energy Regulatory Commission Office of Energy Projects Division of Dam Safety and Inspections – Headquarters Office 888 First Street, N.E. Washington, D.C. 20426

Subject:Klamath Project No. 2082 and the Lower Klamath Project No. 14803<br/>Owner's Representative Letter of Assurance regarding Fiscal Capacity

Dear Mr. Capka:

McMillen Jacobs Associates (McMillen Jacobs) was retained by the Klamath River Renewal Corporation (KRRC) to serve as Owner's Representative for the Klamath River Renewal Project (Project). In this role, McMillen Jacobs is responsible for oversight on the Preliminary Services work, which includes, but is not limited to preparation of final plans and specifications, design report, schedule, and cost. We are responsible for oversight during construction. The Project work will be executed through two contracts: (1) Kiewit Infrastructure West will be responsible for the flow bypass and dam removal; and (2) Resource Environmental Solutions (RES) will be responsible for construction of the Klamath River habitat restoration work, and operation and maintenance of the completed habitat work through a Liability Transfer Corporation (LTC).

McMillen Jacobs is a full-service engineering, construction management, environmental, and selfperforming construction firm operating in the water resources, hydropower, fisheries, water conveyance, irrigation, transportation, heavy civil, and underground markets. McMillen Jacobs has extensive relevant experience with the elements required for the Project. Given our experience as a design engineer, Owner's Representative, design-builder, and general contractor, we have hands-on relevant experience that can be directly applied to the Project. Our experience ranges from initial flow bypass and dewatering to dam removal and fish passage restoration.

Since joining the KRRC team in December 2019, McMillen Jacobs has completed a thorough review of the Project documents prepared by the Kiewit, RES, and the KRRC Project team. In effect, our review represented a completely independent review since McMillen Jacobs was not involved in developing the Project Definite Plan or the work completed by Kiewit and RES. As a starting point, our team reviewed the Definite Plan and related appendices. We then reviewed the documents prepared as part of the 60% design report submittal by Kiewit and RES, which included the following:

- Construction Plans and Specifications in 60% Design Report
- Construction Schedule
- Updated Risk Register
- Guaranteed Maximum Price (GMP) for construction, habitat restoration, and LTC functions

- Local Impact Management Fund Budget
- Regulatory and Permitting Matrix and Planning Documents

We have worked closely with Kiewit and RES to complete a detailed review of each of these documents. Our review included an in-depth assessment of the Project Risk Register to ensure that the potential risks associated with Project implementation are clearly identified, the risk assigned to the appropriate party, and the mitigation measures incorporated into the Project design and execution to effectively eliminate the risk, where possible. For those risks that could not be fully mitigated within the Project design and execution, a contingency amount adequate to cover the potential financial impact of the risk, if it occurred, was allocated within the Project budget. Altogether, more than \$50 million of contingency is included in the Project budget, consisting of amounts embedded in the GMP as well as an amount carried by the KRRC.

In our role as Owner's Representative, we also reviewed the KRRC-managed work activities, which included KRRC required regulatory and permitting activities, development of the Project Agreements, internal budgets for the KRRC staff, as well as the Technical Representative (AECOM) and Owner's Representative budget, required through final Project completion. The focus of this review was to ensure that the overall Project budget is representative of the level of effort required to implement the Project.

McMillen Jacobs has designed, built, maintained, and operated many projects licensed by the Federal Energy Regulatory Commission, as well as other complex water resources facilities. Our track record with GMPs is outstanding.

Based on our extensive review, including review of the 60% design report, we are confident in providing an assurance that Project implementation will be completed within KRRC's \$450 million budget, and the contingency budget is adequate and even conservative to cover potential uncontrollable events that may occur during such implementation. We are confident that further development of the construction specifications will remain within the GMP as a result of value engineering that reduces cost or schedule for various tasks.

If you have any questions or need additional information, please do not hesitate to contact me at (208) 342-4214.

Sincerely,

Mort D. Mc Killen

Morton D. McMillen, P.E. Executive Vice President

cc: Mark Bransom, CEO, KRRC Laura Hazlett, COO and CFO, KRRC File

# **PROPOSAL FOR:**

# Klamath River Dam Removal Project OWNER'S REPRESENTATIVE

Submitted on December 5, 2019





**TO**:





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#### APPENDIX

Appendix A - Resumes Appendix B – Scope of Work Comments Appendix C – Budget



#### ATTACHMENT B PROPOSAL SUBMISSION COVER SHEET

McMillen LLC, dba McMillen Jacobs ("the Proposer") hereby submits its Proposal in response to the Request for Proposals for the Owner's Representative Services for the Klamath River Dam Removal Project ("RFP") issued by Klamath River Renewal Corporation ("KRRC") on November 12, 2019. As a duly authorized representative of the Proposer, I hereby certify, represent, and warrant, on behalf of the Proposer team, as follows in connection with the Proposal:

1. The Proposer acknowledges receipt of the RFP and the following addenda:

Q&R No.	Date 11-21-19

2. The submittal of the Proposal has been duly authorized by, and in all respects is binding upon, the Proposer.

3. The name of the legal entity that will execute the Owner's Representative Services Agreement is McMillen LLC

4. All information and statements contained in the Proposal are current, correct and complete, and are made with full knowledge that KRRC will rely on such information and statements in selecting the successful Proposer and executing the Owner's Representative Services Agreement.

5. The Proposer and its key personnel have all current and valid licenses, registrations and certificates required by applicable law to submit this Proposal and for provision of the services described in the RFP.

6. The principal contact person who will serve as the interface between KRRC and the Proposer for all communications is:

NAME:	Morton D. McMillen, PE (McMillen, LLC)
TITLE:	Executive Vice President
ADDRESS:	1471 Shoreline Drive
ADDRESS.	Boise, ID 83702
PHONE	208-342-4214
- II OI (L	208-342-4216
FAX:	mortmcmillen@mcmjac.com
E-MAIL:	<i>yy</i>

7. The key technical and legal representatives available to provide timely response to written inquiries and to attend meetings requested by KRRC are:

The Technical Representative:

NAME:	Morton D. McMillen, PE (McMillen, LLC)
TITLE:	Executive Vice President / Project Manager
ADDRESS:	1471 Shoreline Drive
ADDRESS.	Boise, ID 83702
DUONE	208-342-4214
PHONE	208-342-4216
FAX:	

E-MAIL:

mortmcmillen@mcmjac.com

Legal Representative:

NAME:	David K. Eckbert
TITLE:	Director (McMillen Jacobs Board of Directors)
ADDRESS:	701 Pike Street, Suite 1400 Seattle, WA 98101-3927
PHONE	206-268-8658 206-343-7053
FAX: E-MAIL:	deckberg@bpmlaw.com

8. If selected, the Proposer agrees to negotiate in good faith to enter into an Owner's Representative Services Agreement that reflects the substantive terms and conditions of the RFP (including the Scope of Services) and the Proposal.

9. The Proposer has submitted all Proposal forms required to be submitted by the RFP and such Proposal forms are a part of this Proposal.

McMillen LLC
Name of Proposer
Mara McMillen, President
Name and Title of Designated Signatory
mara memiller
Signature
December 5, 2019
Date



### 1.2 Introductory Letter

December 5, 2019

Klamath River Renewal Corporation Olivia Mahony Via email to: olivia@klamathrenewal.org

Dear Ms. Mahony:

McMillen LLC, dba McMillen Jacobs Associates is pleased to submit our proposal for the Owner's Representative for the Klamath River Dam Removal Project. We are confident that the McMillen Jacobs' team represents the best firm to meet the needs of Klamath River Renewal Corporation (KRRC). Our team provides the following benefits to this Project:

- Because McMillen Jacobs has previously served as an Owner's Representative, progressive design-build lead, CM/GC, General Contractor with self-perform construction, and Engineer-of-Record, we are able to offer a unique perspective to KRRC.
- We are one of the few firms who have either designed and/or constructed ALL of the elements of this project including dam decommissioning, reservoir modifications, construction of fish hatcheries, water line replacements, and habitat restoration.
- McMillen Jacobs' capacity is large enough to provide the necessary resources for a project of this size, but small enough to provide nimble, cost efficient services to KRRC.
- Having completed over 150 projects at hydropower facilities, many FERC regulated, and well over 110 fisheries
  projects, we are experienced at agency coordination and permitting and negotiations with local Indian Tribes. We also
  have experience working at PacifiCorp facilities.
- Over 80% of our work is from repeat clients—a true testimony to our ability to manage complex projects and keep them on budget and schedule.
- Our Project Manager, Mort McMillen, has participated in <u>over 50 Design-Build projects</u> and has spent the last 30 years completing planning, design, or construction of water resources and hydropower projects including dam decommissioning, reservoir modifications, construction of fish hatcheries, water line replacements, and habitat restoration projects.
- Water resources, dam, and hydropower facilities are not just a significant business line—it is the foundation and passion of our business.
- With 33 years of relevant project experience, Mort McMillen brings the specific hands on engineering and construction expertise to truly provide KRRC guidance for overall project implementation and risk management.

The primary office that will be providing the Owner's Representative Services is our Boise, Idaho office located at 1471 Shoreline Drive. McMillen LLC will be the legal entity to contract with KRRC and Mara McMillen is authorized to submit this proposal and represent the firm in any correspondence and negotiations and execute all required documents. McMillen LLC is wholly owned by the parent company, McMillen Jacobs Associates, Inc. Contact information for Mara as well as our proposed Project Manager, Mort McMillen, is provided below.

We hereby confirm our understanding and acceptance of KRRC's policy that our team members will not be eligible to perform other work related to the Project implementation. Our team has reviewed the sample Services Agreement that was included with the RFP (Attachment C) and have no exceptions or suggested modifications.

To-date, McMillen LLC has no previous working relationship with Kiewit, Knight-Piesold Consulting, Resource Environmental Solutions ("RES"), Environmental Science Associates ("ESA"), AECOM, or CDM Smith. Our Underground Division, operating under the legal name of Jacobs Associates has had previous working relationships with





some of these entities, so due to this we have not included any of their staff members on this team. McMillen LLC is the managing partner for a JV agreement with Stantec Inc. for a contract with the USACE Portland District. To date we have executed no task orders jointly or have any under contract through this JV agreement. In 2018, we served as a subcontractor to Stantec to provide an inspection and assessment of a potential water and sewer line upgrade for a maintenance yard in Sacramento, CA for the California Department of Water Resources. Regarding all the entities listed above, we are neutral with no bias or adversary relationships.

We look forward to the opportunity to attend an in-person interview on December 9th. We are eager to combine our extensive relevant knowledge and experience in successfully managing projects to deliver a successful project for KRRC. We look forward to working with you on this challenging project. Please feel free to call or email us at maramcmillen@mcmjac.com or mortmcmillen@mcmjac.com, or call at (208) 342-4214 or cell at (208) 869-4007 (Mara) (208) 830-1394 (Mort)

Sincerely,

### mara memillen

Mara McMillen President of McMillen LLC, dba McMillen Jacobs Associates and proposed Project Manager

Monto D. Mc Miller

Morton D. McMillen, PE Executive VP of McMillen LLC

Mort McMillen has been following the Klamath Dam Removal Project for many years. He is excited to have the opportunity to work on such a significant project which brings tremendous value to the public, fish, and wildlife resources. Mort has spent his

entire career working on water resources projects with a primary focus on hydropower, dams, and fisheries. Your project brings all of these elements together into one challenging

project providing him the opportunity to utilize all his past skills to serve KRRC in the implementation of this project. As illustrated in our staffing plan, Mort is committing to

lead McMillen Jacobs' Owner's Representative team dedicating a significant time commitment to KRRC to deliver a successful project.





# 2. Approach

McMillen Jacobs is pleased to submit our proposal for Owner's Representative role for the Klamath River Dam Removal Project. We understand that the KRRC is seeking Owner's Representative services in connection with the decommissioning and removal of four hydroelectric dams on the Klamath River, and subsequent habitat restoration (the "Project"). The Owner's Representative services are to support KRRC with respect to the administration of the Project Agreement for the Design, Construction, Demolition, and Habitat Restoration Services in connection with the Removal of the Lower Klamath River Dams entered into between KRRC and Kiewit Infrastructure West Co. (the "Project Company") on April 24, 2019 (The "Project Agreement").

We have organized our proposal to meet the specific requirements outlined in the RFP instructions. We have been following the Project development over the past few years and are excited for the opportunity to submit a proposal for such a challenging project. We have reviewed the available background documents including the Definite Plan for the Lower Klamath Project, FERC submittal, and other relevant documents in preparing our proposal. Based on this information and previous discussions with KRRC staff, we have developed a project team which we believe is ideally suited and <u>"right-sized" with the flexibility to expand and contract for the Owner's Representative role.</u>

## 2.1 Goals and Objectives

We understand that the KRRC proposes to remove four hydroelectric developments: J.C. Boyle, Copco No. 1, Copco No. 2, Iron Gate, along with appurtenant facilities. We understand the purpose of the Project is to achieve a free-flowing condition and volitional fish passage in the Klamath River, in the reaches currently occupied by these developments (river miles 193.1 to 234.1). The Project consists of measures to remove the four developments; remediate and restore the reservoir sites; avoid or minimize adverse impacts downstream; assure completion of the Project with committed funds; and avoid damages and liabilities for PacifiCorp, the States, and third parties. In the Owner's Representative role, McMillen Jacobs will work closely with KRRC, the Project Company, and the project stakeholders to ensure the Project Goals and Objectives are fully achieved.



"...McMillen demonstrates a talent to combine an exceptional ability to propose efficient technical solutions, bring a large diverse group to focus on the task at hand, and obtain agreement on a single technical design that solves a complex problem." - Kim Lane, PSE Program Manager

# 2.2 Approach to the Work

We have reviewed the KRRC proposed scope of services as presented in Attachment A of the RFP. We believe the work scope and organization provides a suitable platform for the Owner's Representative position. As part of our review, we have provided comments on the draft scope of work which are included in Appendix B of our proposal. A more detailed description of our approach to the work is presented in the subsequent paragraphs.

Our general approach to the Owner's Representative starts with selection of our Project Manager, Mort McMillen. Mort has extensive experience with water resources and hydropower projects from all contracting facets and roles, including Owner's Representative, design engineer-of-record, general contractor, and design-build contractor. Mort understands the unique perspective each participant has related to the Project implementation. The unique nature of the Project focusing on major facility demolition and restoration, rather than construction of new dam and powerhouse facilities also adds another level of complexity. Through his career, Mort has touched on nearly <u>every element</u> of the Project which is illustrated in Table 2-1.

Klamath River Dam Removal Project - Work Elements	Project Example	Contract Type	McMillen Jacobs' Role
Dam Removal	Elk Creek Dam Removal	Design-Build	EOR, Permitting
	Mill Pond Dam Removal (FERC)	Design-Bid-Build	Prelim Design, Contract Reviews
	Honk Dam	Design-Bid-Build	EOR, Program Manager
Powerhouse Demolition	Faraday Repower	CMGC	General Contractor

Table 2-1. Project Manager Demonstrated Ability to Lead the Project





Klamath River Dam Removal Project - Work Elements	Project Example	Contract Type	McMillen Jacobs' Role
Water Pipeline Gallup Water Pipeline		Lump Sum	General Contractor
	Allison Creek Penstock	Design-Build	Design Builder
	Sitka Water Supply Pipeline	Design-Bid-Build	Design Lead
	United Water (multiple projects)	Design-Bid-Build	Engineer
Fish Hatchery	Springfield Sockeye Hatchery	Design-Build	Design Builder
-	MRS Coho Hatchery	Design-Build	Design Builder
	Walla Walla Chinook Hatchery		Design Builder
Stream / Estuary / Habitat Elk Creek Dam Removal		Design-Build	EOR, Permitting
Restoration Don Edwards Salt Marsh Restoration		Design-Build	Design Builder
FERC, Regulatory, Tribes	Lower Baker (hydro)	CM/GC	EOR, Design
	Avista Utilities (hydro)	Design-Build	Builder, Contractor, Consultant
	Grant Lake (hydro)	Design-Bid-Build	Design-Builder
	Leaburg-Walterville	T&M NTE	Engineer
	Clackamas River (hydro)	T&M NTE	Engineer
	MCWRA Interlake Project	T&M NTE	Engineer

Through these and other related projects, Mort has built a broad background of hands-on experience extending from early planning activities through design, construction, and startup. Mort has demonstrated the ability to work with project stakeholders including FERC, USFWS, NOAA Fisheries, ODFW, CDFW, local stakeholders, and tribal entities. Mort also has extensive project experience working in California and Oregon on similar projects. With this hands-on project experience, Mort developed McMillen Jacobs' team into four major work categories: 1)Project Controls and Administration; 2)Regulatory, Permitting, and FERC Support; 3)Field Construction Management/Inspection; and 4)Engineering Support.

Each of these categories will be led by a senior McMillen Jacobs' staff member (*Identified in Section 4*) with the technical and management skills required to effectively manage specific work assignments. Mort will work closely with each of these technical leads in finalizing the work plan and budget, executing each of the major work phases, and proactively manage the Project addressing issues which may arise to minimize scope and budget impacts. Mort will organize and guide the team working closely with each work category lead. The project staffing plan was then developed anticipating the range of expertise which could be required for the Project execution. Organized by work category, we assigned staff members to ensure full coverage of the technical, administrative, and specialty skills that may be required. A baseline staffing level for each work phase was assume in developing the Project staffing plan and budget. It is important to note that in developing our staffing plan, we wanted to ensure that we have provide the technical skills to fully support the Project implementation. All these staff members may not be used on the Project, but we wanted to demonstrate to KRRC that we have the in-house staffing plan is presented in Section 3 of this proposal. Mort will serve as the main point of contact with KRRC, the Project Company, and the project stakeholders during the project implementation. An overview of the anticipated approach to each of the major work phases as outlined in the RFP is presented in the following paragraphs.

### 2.2.1 General Responsibilities

We understand that the Owner's Representative shall have responsibility for the direct oversight and facilitation of the Project ensuring the schedule and budget requirements are met while maintaining high quality work products. The Owner's Representative will serve as the primary point of contact between KRRC and the other Project team members. In this role, McMillen Jacobs will be responsible for establishing and maintaining effective communication protocol, document tracking systems, schedule monitoring and updates, and budget control. We understand that a progressive design-build contract has been executed with the Project Company and will be utilized throughout the Project Implementation. We believe it will be important to work closely with KRRC and the Project Company to identify potential areas of responsibility overlap between the Owner's Representative and the Project execution through the overall Project organizational structure. Examples of potential redundancy include the field Quality Control/Quality Assurance (QA/QC) Programs; specialty material testing services; design review and submittal assignments; document control and distribution systems; and staffing levels. These may be areas where we can verify there are no redundancies. If





there is at any point in time where additional resources are needed to support these areas, McMillen Jacobs has the staff to supplement or enhance in order to meet the overall objectives. As a first step following award, we propose a task-by-task review of the work assignments between McMillen Jacobs and the Project Company to ensure the roles and responsibilities are clearly defined, redundancies are eliminated, and the maximum efficiency is achieved. This analysis will include the role of other KRRC consultants such as AECOM Technical Services, as well. Throughout this analysis, it will be important to balance effective oversight of the Project Company throughout the implementation with efficient resource allocation and responsibilities between all parties.

### 2.2.2 Specific Scope of Work

Utilizing the proposed scope of work arrangement outlined in the RFP, we have provided a brief overview of our approach to each of the work phases in the following paragraphs *(Section 2.2.2.2 through 2.2.2.6)*. Within this part of our proposal, our objective was to outline our basic approach and where appropriate, specific experiences from previous projects that we would propose to incorporate into our work plan. In general, we plan to utilize standard document templates which we will provide to KRRC for review and comment prior to implementation. These templates include shop drawings review forms, submittal logs, daily inspection logs, specialty inspection logs, weekly construction progress reports, meeting agendas, contact lists, and wide range of other forms and templates commonly used by an Owner's Representative. It will be important to coordinate closely with the Project Company on some of these templates to eliminate redundancy and utilize the best template in the project execution. Many of our standard forms have also been tailored for a Design-Build contract execution providing efficiency in the initial Project setup and work management.

#### 2.2.2.1 General Program Management

We agree with the general program management specific work elements as outlined in Attachment A of the RFP. As part of our review, we have included a list of subtasks which we would recommend be incorporated to support the Project budget development and tracking. These work subtasks comprise the project and contract administration, meetings, scheduling, and data management associated with the Owner's Representative role. It will be important in the first weeks of the project development to establish the data management system which will be used for the Project implementation. We are familiar with and have used many of the available systems such as SharePoint. We would propose to coordinate with the KRRC and Project Company to select the final operating platform and tailor the system to meet the specific Project needs. Compatibility between all parties will be important to ensure efficient and timely communication, consistent and complete project documents, and user support. Our Project Manager will lead this effort working with his management team to set up the program management tools and assign specific roles and responsibilities to the appropriate team members. We believe in effective delegation to the lowest possible level to ensure cost efficient work execution and eliminate potential bottle necks which can occur without effective delegation.

### 2.2.2.2 Guaranteed Maximum Price (GMP) Support and Negotiation

Our staff is intimately familiar with the development of GMP contracts as both an Owner's Representative as well as a Design-Builder. For the Blue Lake Project, the construction bids were all significantly over the Engineer's estimate. As a result, an extensive bid review and value engineering exercise was developed and implemented by McMillen Jacobs serving as the Owner's Representative. Through this process, design revisions were implemented which resulted in significant cost savings and schedule improvement. Serving in the Design-Build Contractor role, McMillen Jacobs has developed and negotiated GMP and contract provisions for numerous projects including the Long Lake Dam Spillway Improvements, Nine Mile Sediment Bypass System, Springfield Hatchery, and Allison Creek Hydroelectric Project. For your Project, we will utilize the experience gained on our previous projects, where we have served as the Owner's Representative and the General Contractor, to support the GMP support and negotiations. Our approach will include:

<u>Utilization of our heavy construction business skills in the GMP cost estimate review.</u> Their hands-on experience with developing GMP's for similar projects will allow a focused and efficient review of the cost estimate organization, staff and equipment makeup, production rates, and schedule sequencing. The focus of this review will be to confirm the approach and general components of the estimate, the proposed scheduled, and identify potential value engineering suggestions which could result in cost estimate and/or schedule savings. In our experience, the GMP review should focus on higher value items and suggestions rather than questioning every dollar in the estimate which expends significant budget with little benefit in terms of cost savings to the Project.





#### Our experienced team will review the in-progress design documents for completeness, feasibility, and

**constructability.** We will use our specialized team experience to bear on each of the major Project elements providing a cost-effective review resulting in specific recommendations for potential value engineering design modifications. We will also identify any missing design features which are not included in the cost estimates and should be addressed to ensure a comprehensive GMP and control future contract change orders.

Based on the completeness of the design packages, evaluation of the risk associated with the work activity, and the Project schedule, we will provide recommendations for line item contingency to be carried for all phases of the Project. We will also provide recommendations for design document modifications and/or construction approaches which could lead to a reduction in risk and contingency.

Using the information developed above, we will support the KRRC in negotiating the GMP and GMP amendments. The pre-project Implementation Work amendments to the GMP will be reviewed for accuracy with recommended changes in pricing, scope, and schedule provided, as required.

#### 2.2.2.3 Project Implementation Work

The project work breakdown for this work phase is consistent with our previous project experience. A brief summary of our approach associated with each major work task under this phase is presented in the following paragraphs.

**Pre-Project Implementation Work Amendment:** As part of the general program and administration setup process, we will work closely with AECOM Technical Services to obtain all relevant documents and contacts, status reports, and support documents. This work effort will require access to the project management information system and transfer to the selected management system, if different than what has historically been used. Within this effort, it will be important to obtain all root files which allow for editing and updating, or incorporation into subsequent work plans and documents which may be developed for the Project implementation. We anticipate a kickoff meeting with AECOM to discuss the transfer of relevant documents, preparation of a pre-project implementation document bibliography, process for document transfer, and schedule for work to be complete.

As part of this work effort, we will also organize and facilitate a Pre-Project Implementation Work meeting to establish the protocols and required coordination prior to commencing site work. We will prepare the meeting agenda, initial anticipated protocols, and required field pre-existing data collection which will be used to establish the baseline existing site conditions. Following the meeting, the final protocols and baseline document plan will be issued, and the field work completed.

**Project Implementation Work Management:** Within this work phase, the Owner's Representative will be responsible for the oversight on the Project Company's construction activities. We concur with the work subtasks outlined in the RFP scope of work which include submittal tracking and review, response to RFI's, change order management, quality control, pay request review, schedule compliance, weekly construction meetings, document control, and environmental compliance. These work activities will be managed from our field office led by our construction manager with support from our field team. Our minimum field team will consist of the construction manager, QA/QC manager, office engineer, administrative assistant, and inspectors, as required for the work oversight. We anticipate our field team staff will expand and contract with the construction activities and the addition of supplemental inspection and engineering support staff, as the Project requires. Project controls, engineering support, and regulatory/permitting support will be provided from our support office locations in the Pacific Northwest. Where required, we will mobilize additional office support to the field to address a specific project issue, provide supplemental inspection staff, and ensure efficient field work execution. Our office engineer and administrative staff will handle the document flow in the field with support of the project controls group.

Mort, serving as the overall project manager, will continue to manage the overall project execution through the implementation phase. We anticipate the site construction manager will handle the day-to-day field activities working with the Project Company. <u>Mort will be onsite approximately 50% of the time during construction</u> and will ensure the McMillen Jacobs resources, from the off-site offices, are fully available as required, provide direct support to the KRRC team, overall risk management, budget and schedule oversight, and address major project issues which may arise.





**Inspections:** As part of our proposal development, we estimated the anticipated level of inspection required for the Project implementation will vary through the construction schedule. The Project is unique in that it is comprised of major facility demolition and natural resource restoration activities. The majority of the initial work activities are related to removing existing dam and hydropower facilities. The inspection work associated with these work activities are primarily related to ensuring compliance with the construction documents, ensuring permit conditions are being followed, safe handling of materials and off-site disposal of materials, and general project safety. Support from an independent material testing firm and laboratory will be required where permanent fill material is being placed, or permanent new facilities such as the hatchery modifications, bridge rehabilitation or replacement, and permanent fill materials are required. We anticipate general civil inspector(s) with experience in the work activities associated with the demolition work will be provided during this period. We plan to utilize one lead inspector supplemented with additional inspection support to cover multiple work activities based on the Project Company's final schedule.

The reservoir restoration work involves more specialized environmental restoration expertise. We will utilize our field inspection staff to support these work activities in terms of general oversight but will bring in specialized expertise from our Boise office to perform periodic specialized inspections specific to the soil preparation and plantings. These inspections will be tied to milestone completion dates and associated completed field construction to maximize the staff efficiency and minimize cost.

When required, we will bring in our engineering support staff to provide support on a specific field construction work activity. In general, engineering support will be the responsibility of the Project Company as it relates to the design-build work activity. However, in the event that a design or construction scenario arises in the field that cannot be resolved at the field office level, our engineering support will be accessed to provide independent analysis and recommendations.

#### 2.2.2.4 Post Project Implementation Work Completion/Closeout

We have found that the final Project closeout activities can drag out if not effectively managed and driven to completion. To ensure this does not happen on the Project, planning for the Post Project Implementation work phase will start while the Project is still in the implementation phase. The successful development and implementation of the data and document management system provides a solid foundation to move into the final project closeout and work completion. All documents related to the design and construction of the Project will be filed electronically within the data management system. McMillen Jacobs will track the document status on a weekly basis ensuring that any outstanding submittals, RFI's, design documents, contract changes, and related construction documents have been prepared and submitted in their final approved form. Any open items will be addressed weekly during the Project implementation. A Closeout Workplan will be developed presenting the required work activities, documents, inspections, and schedule for final inspection and approval. The specific contract requirements to be met will be reviewed with the Project Company to ensure that all parties have the same understanding of what constitutes final completion and acceptance of the work. With the workplan reviewed and complete, the final inspection of the work will be held with the Project Company to verify Substantial Completion and prepare the Project punch list and a schedule for addressing these items.

#### 2.2.2.5 Potential Issues and Risk Mitigation Measures

As previously noted, we have reviewed the available documents related to the Project. One of these documents is the Amended Risk Management Plan contained within Appendix A of the Definite Plan, dated July 2019. In our opinion the management plan presents a logical approach to identifying the risk associated with the Project assessing the risk impact and outline the management strategy. We have used a similar approach and system for similar projects including the Avista Long Lake Dam Spillway Rehabilitation, Avista Nine Mile SBS Project, and the Faraday Repower CMGC Project. From our analysis of the Project and drawing from previous project experience we would view the following to be some of the highest risk to the Project implementation and cost (Table 2-2).

Project Feature	Potential Challenge/Risk	Impact	Mitigation
FERC Approval	Schedule and Approval	Schedule delay and	Focused communication with FERC for
	Conditions	cost increases	resolution / contingency for conditions.

#### Table 2-2. Potential Issues and Risk Mitigation Measures





Project Feature	Potential Challenge/Risk	Impact	Mitigation
Environmental / Permitting	Schedule and Approval Conditions	Schedule delay and cost increases	Focused communication with agencies / proactive response to comments / contingency for conditions.
Flow Bypass / Reservoir Drawdown	High flows or delay in schedule	Schedule delay and cost increase	Project Company develops comprehensive design / contingency plan for high flows
Unforeseen Conditions	Design Changes, Construction Work	Schedule delay and cost increase	During design, complete comprehensive review of field conditions / have contingency plan in Project Company workplans
Unknown Hazardous Materials at Powerhouse	Environmental Compliance, Schedule, Construction work plan modification	Schedule, regulatory input, cost	Complete due diligence during design / all materials on hand for potential hazardous material encounter / contingency plan in work plan.
Wildfires	Restricted access / stops work	Schedule delay and cost increase	Maintain alternative access routes / develop detailed wildfire protection plan
Weather	Cold, very wet, and high river flows	Schedule delay and cost increase	Focus high production work during good weather conditions / prepare for poor weather with site conditions improvement

McMillen Jacobs has dealt with each of these issues on our construction and Design-Build projects. Due to our preplanning work efforts and contingency plan implementation, we were able to work through the issues, maintain schedule, and meet project budgets. As part of the Owner's Representative role, we will assume management of the risk register incorporating our site-specific knowledge and work closely with the team to develop and proactively implement effective risk management strategies.

#### **Proven Performance** Open & Effective Communication

"After having finished two projects with McMillen I'm impressed with their <u>consistent level of</u> <u>professionalism and quality of work.</u> Both projects went well and we were able to easily navigate challenges as they came because of their <u>open and effective level of</u> <u>communication</u>." - Caleb Johnson, Idaho Power Field Engineer for Swan Falls and Upper Salmon

#### 2.2.2.6 Controlling Changes in Scope, Schedule, Cost and Quality

McMillen Jacobs has well-established and proven project control systems and methods developed to efficiently plan, execute, and track the Project work. We utilize Spectrum cost accounting system which is a standard construction system. We also use HeavyBid construction cost estimating software which provides a full breakdown of a construction project budget. We use Primavera as our standard scheduling platform, which is an industry standard. Our experience with these systems and our project management systems allow us to establish a budget and scheduling system consistent with the Project Company providing efficient cost data interface and progress report preparation. We are currently using many of these systems on our Faraday Repower Project to ensure accurate schedule and budget controls.

**Scope**. Effective scope management starts with the design and GMP work phase. It is important to complete a thorough review of the design documents, identify risk items which could impact schedule and cost, develop and implement a strategy to mitigate the risk, then include these provisions in the GMP pricing. McMillen Jacobs will closely review the design documents for content and completeness with the goal of identifying all potential items which could lead to an increase in scope during construction. These would be covered with a contingency within the pricing structure. During the construction this process will mitigate scope creep.

**Schedule.** As part of the pre-implementation work phase, the detailed project schedule will be developed for the full project implementation. This schedule will identify all project tasks from permitting through final project transfer. Critical paths will be identified and strategies to address this developed and implemented. Working with the Project Company, the detailed construction schedule will be developed. The schedule float will also be defined. During the project implementation phase, it is important to proactively monitor the schedule with the goal of identifying potential schedule slippage early, allowing mitigation actions to be developed and implemented. Our experience is that individual work tasks will slip on specific items. The measure of success is in active schedule management and adaptive management to maintain schedule. McMillen Jacobs will lead this effort working with KRRC and the Project Company.





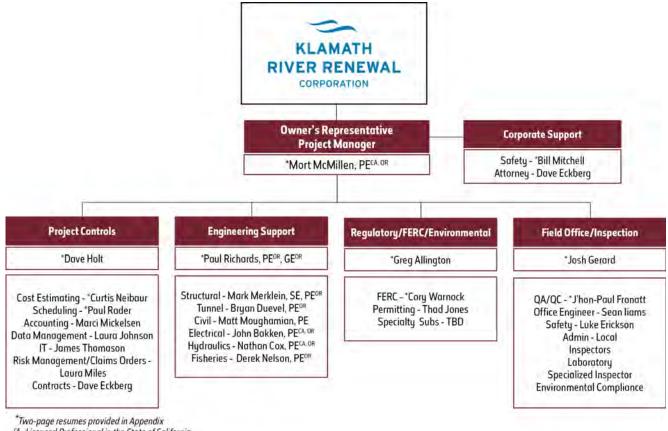
<u>Cost Control</u>. Prompt and equitable evaluation of change orders, whether they are change orders originating from KRRC or the Project Company, require an impartial evaluation of cost and schedule impacts. When evaluating a cost change, it is important to understand the production-type cost estimates that account for labor, equipment and construction methods typical of a contractor change request. We will utilize our cost estimating expertise to review the change order request for completeness, reasonable approach, and justifiable costs that match the scope. We will also ensure that the proposed scope truly falls outside the established GMP and is justified. Where possible, we will also identify alternate approaches which could eliminate the change requirement.

Quality Control. Our philosophy is that Quality Control (QC) is performed to provide evidence that contract requirements for the finished product are met, and to identify deficiencies requiring evaluation and/or correction. We provided in Section 3. Our approach to managing QC serving as the Owner's Representative.

# 3. Organizational/Management Structure

### 3.1 Organization Chart

McMillen Jacobs' team provides KRRC with the construction management expertise, tools, management procedures, and track record in delivering efficient and timely management of major civil works projects. As illustrated in Figure 3-1, our team organization was designed to provide the full range of technical services which could be required during the Project implementation, but also provides an efficient team structure ensuring effective communication, lines of responsibility, and work execution.



CA - Licensed Professional in the State of California

on - Licensed Professional in the State of Oregon

Note: We bring additional key personnel and subconsultants that will be available to support this project as needed. Our goal would be to utilize lacal subconsultants with specialized skills as much as possible.

Figure 3-1. Organizational Chart





The team is organized into four major categories, as shown in Table 3-1 with the identified roles and responsibilities:

Work Category	Roles and Responsibilities
Project Controls and	Developing and implementing the project control measures required to oversee and manage the
Administration	Project Company. Work tasks include cost estimating, scheduling, budget management,
	accounting, data and file management, IT, risk and change order management, subcontracts,
	internal and external reporting.
Engineering Support	Provide engineering support as requested by the Project Manager to support the Project
	implementation. Work tasks include submittal review, addressing field engineering issues,
	provide technical oversight of the Project Company, specialized field inspections, and general
	support the Project team.
Regulatory, Permitting and	Provide regulatory, permitting, and FERC support to the Project team to support the Project
FERC Support	implementation. Work tasks include assist in obtaining project permits, coordination with
	regulatory agencies, compliance monitoring, FERC strategy assistance and coordination.
Field Construction	Provide direct construction management oversight of the Project Company. Work tasks include
Management/Inspection	typical construction management activities including submittal review, response to RFI's,
	QA/QC, inspection, environmental monitoring, progress payment review, scheduling and
	budget oversight.

Each of these categories will be led by a senior staff member from McMillen Jacobs with technical and management skills required to effectively manage specific work assignments. These four individuals, along with Mort McMillen as overall Project Manager, will serve as the Owner's Representative management team. Mort will work closely with each of these technical leads in finalizing the work plan and budget, executing each of the major work phases, and proactively managing the Project addressing issues which may arise to minimize scope and budget impacts. We have provided a brief bio of the key personnel in the following paragraphs in Table 3-2.

Table 3-2. Management Team Qualifications Overview

	Management Team Qualifications Overview
Mort McMillen, PE Project Manager	Registered PE in California and Oregon with over 33 years of experience the water resources, heavy civil, infrastructure, fisheries, and hydropower markets. He has led over 50 design-build projects and has participated in over 150 projects at hydroelectric facilities. He has recent and relevant dam removal expertise including Elk Creek Dam in Oregon, Mill Pond Dam in Washington, and Honk Dam in New York. His depth of project knowledge from the planning through construction brings KRRC a project manager able to also address sediment management, reservoir drawdown, water pipelines, volitional fish passage, hatcheries, flood analysis, and habitat restoration. Mort has completed major modifications to existing dams and has developed new hydroelectric facilities from 4 MW to 140 MW bringing hands-on knowledge of the design and construction of these facilities which will be beneficial in reviewing proposed demolition plans. He brings hands on experience in managing highly visible multiple stakeholders as well as navigating the FERC and regulatory requirements for water resources projects. Mort understands the complexity of multidiscipline projects and is ideally suited to bring his 33 years of experience to serve as the Project manager for the Owner's Representative role on the Klamath River Dam Removal Project.
Dave Holt Project Controls Lead	Dave Holt has 18 years of heavy civil construction experience and more than 10 years of experience managing large-scale heavy civil construction operations up to \$500M. He has also managed the construction of hydropower improvement projects, pumping plant retrofit, waste water systems, supporting infrastructure at national parks, transportation projects, a variety of flood control projects, and heavy civil construction projects. Dave has a demonstrated ability to develop and implement project control systems leading to effective project delivery on time and budget. Dave's background in construction is ideal to support the oversight of the Project Company from the initial GMP review through final project closeout.
Paul Richards, PE Engineering Support Lead	Paul Richards is a licensed Civil and Geotechnical engineer with 21 years of experience working on water resources, locks and dams, and hydroelectric projects. In addition to leading design teams, he has served as an onsite engineer, geotechnical lead, and site inspection lead on hydropower, water resource, and industrial development projects. He has extensive experience working as the Engineer-of-Record but also as the onsite





	Quality Assurance Manager, Resident Engineer, Field Manager, and Field Engineer during construction. Paul
	brings hands-on dam removal experience from his role as the <u>lead geotechnical engineer for the San Clemente</u> <u>Dam Removal and Carmel River Re-route Project in California.</u>
Greg Allington Regulatory/Envir onmental Lead	Greg Allington has over 14 years of experience as a biologist and specializes in natural resource permitting with local, state, and federal agencies. Mr. Allington has a unique expertise in offering support during the design phase but also in monitoring compliance during construction. He has managed and coordinated complex issues involving complicated engineering components in sensitive areas, preparing technical permit documents, and developing mitigation plans. Specifically, he specializes in agency coordination and negotiation during the permitting process, as well as implementation and oversight of permit regulations during construction. He has hands direct project experience in dealing with California Fish and Game, Tribes, FERC, and PacifiCorp Energy. Greg led the regulatory and permitting activities for the SMUD South Fork Powerhouse and Don Edwards Salt March Restoration Project in California, as well as multiple projects in Oregon, bringing hands-on experience to the project.
Josh Gerard Field Office / Inspection Lead	Josh Gerard brings more than 23 years of international hydropower and dams' construction and design project knowledge. Josh has experience being the liaison with all the project participants; including EPC contractors, Owners, Lenders, Dam Safety Panel, DAB and engineering and construction staff. His background also consists of working and living in remote and difficult international environments. While with another firm he served as the senior Construction Engineer for the Olmsted Dam Project, a \$830 M construction project, where he communicated daily with the owner to resolve operations, design, and contractual issues. He also monitored change orders, NCRs, and design revisions. On the Bujagali Hydroelectric Project on the Nile River in Uganda, East Africa, he served as the Resident Engineer for Owner of this \$900M EPC Contract. He led the onsite constructability design review of contractors change orders and engineering designs when they conflicted with the EPC contractor and owner. Josh coordinated social and environmental programs, including compensation programs for project affected persons, social/environmental plan monitoring, and community status meetings and reports.
	Additional Key Support Personnel Qualifications
Curtis Neibaur Cost Estimating	Curtis Neibaur has a BS in Construction Management and brings more than 14 years of experience in estimating and scheduling of heavy civil construction work in the hydroelectric, dams, fisheries, and water resources markets. Due to the combined experience of his current role as McMillen Jacobs' lead construction Cost Estimator, as well as previously serving as an on-site Project Manager for various civil works projects he brings a unique understanding of construction costs, work sequencing, and realistic scheduling to the projects he works on. Curtis has provided independent review of other general contractors' construction pricing as an Owner's Representative to support development of GMP contracts. His hands-on experience will prove invaluable to review of the Project Company GMP development and cost change requests.
J'hon-Paul Fronatt QA/QC	J'hon-Paul (JP) Fronatt brings 26 years of experience and specializes in developing, implementing, and monitoring QA/QC programs on complex construction projects. He has served as the client's representative, resident project representative, QA/QC manager, construction manager, project manager, or superintendent for general contractors as well as directly for clients. Mr. Fronatt's experience includes the construction of power plants and environmental remediation. He is currently serving as the lead QA/QC on-site manager for the Faraday Repower CMGC project. He previously worked on the California Public Utilities Commission (CPUC) / Pacific Gas & Electric (PG&E) Utility Upgrade Program where provided project management, inspection, and contract administration for private utility locating, sub-contracted specialists and electrical/gas meter placement locations.

## 3.2 Communication Procedures

A key to the success of any project is effective communication throughout the project execution. To ensure effective communication between McMillen Jacobs, KRRC, and the Project Company, we anticipate a communication protocol that consists of meetings, calls, email, and project management systems that drive effective communication. McMillen Jacobs utilizes a wide range of tools and techniques, as presented in Table 3-3 to encourage and foster effective collaboration. We have found these tools to be very effective in establishing strong team communication and relationships at the project onset leading to full and open collaboration.



Tool/Technique	Description	Benefit
Established Executive Committee (EC)	The EC is comprised of members of the KRRC and McMillen Jacobs with authority to make contractual, staffing, and policy decisions.	Provides a path for resolution to issues that cannot be addressed within the project team.
McMillen Jacobs' Assigned Project Manager	Proven ability to foster collaboration with the project team and resolve issues as they arise.	Mort McMillen has a reputation for effectively fostering collaborative project teams and addressing and resolving issues in a positive, team oriented manner.
Weekly Coordination Meetings	Coordination meetings between KRRC and McMillen Jacobs to coordinate the project execution and monitor progress.	Frequent communication via a well-organized meeting promotes effective communication and collaboration.
Monthly Project Meetings	Meeting between KRRC and McMillen Jacobs' management team and Project Company to discuss the project status.	Provides an effective platform for the management team to discuss overall project execution, staff performance, issue resolution, and project status.
Action Item List	Clearly identifies specific project action items, responsible parties, schedule, and deliverable.	Provides clear identification of the responsibilities between McMillen Jacobs and Project Company is tracked to completion.
SharePoint (Or other selected database)	Provides ready access to all project documents for the entire team.	Provides efficient data management and acquisition for all team members.
Risk Register	Identifies all potential risks which could affect the project execution cost, schedule, and mitigation measures.	Promotes collaboration between McMillen Jacobs, KRRC, and Project Company in effectively implementing a risk management strategy.

Table 3-3. Collaboration Tools/Techniques for Strong Communication

As part of our coordination conference calls, a detailed meeting agenda will be developed and implemented to ensure the project work plan is clearly defined and implemented, issues are identified and resolved, clear distinction of roles between McMillen Jacobs, Project Company and KRRC are defined, and action items are assigned. McMillen Jacobs will maintain an action item list which will be updated for each coordination meeting. Our Project Manager, Mort McMillen, will ensure the action items are completed by the assigned team member by the identified date.

### 3.3 Quality Management

Our philosophy is that Quality Control (QC) is performed to provide evidence that contract requirements for the finished product are met, and to identify deficiencies requiring evaluation and/or correction. The Contractor's QC activities include: (1) field verification of work in progress and completed work; (2) verification of materials and equipment fabricated off site; (3) testing of materials performed by on-site and off-site organizations; (4) documentation of verifications and testing; and (5) evaluation of test or inspections; (6) identification of non-conforming conditions; and (7) tracking resolution or correction of non-conformance issues.

We see our Quality Assurance (QA) role as the process to evaluate the effectiveness of the QC activities to determine if they conform with the Project Quality Control (QC) Plan. As appropriate, we will enforce the approved construction QC plan where deficiencies are observed. QA activities include review and evaluation of the QC Plan, procedures, qualifications, and documentation, as well as independent inspections, audits and verification surveys.

Our Lead QA Inspectors, in conjunction with local material testing organizations and our Inspectors, will develop and implement a QA plan in accordance with KRRC requirements. This plan will be tailored from our previous design-build plans which will ensure effective balance between the Owner's Representative and Project Company roles and responsibilities. We will also perform independent identification of non-conforming conditions and take the lead in tracking resolution of non-conformance issues.

With the major facility demolition and natural resource restoration activities any delays to these critical path operations can lead to expensive, contentious contract disputes, claims, and litigation. The Owner's Representative must therefore have accurate records documenting details of the Contractor's work activities to rapidly evaluate and resolve construction issues as they arise. The daily reports will be prepared by each Inspector electronically. A daily log will then be generated





automatically allowing our McMillen Jacobs' Field Construction Management/Inspection Team real-time access to inspection details, material and labor quantities, and the complete daily ledger. Our goal is to work closely with KRRC and the Project Company to ensure the Plans and Specifications requirements are met during construction. Our approach to

changes caused by unforeseen conditions or other circumstances will be reviewed with KRRC and the Project Company to ensure that the Project objectives are not just maintained but achieved.

# 3.4 Financial Management Procedures

Effective project management serves as the "road map" for completing a project on time and within budget, and Project Controls and the tools used by project management to track schedule and budget. We will provide Project Controls including scheduling, cost and budget control, estimating, forecasting, and sub-consultant contract administration as needed to ensure an effective Owner's Representative role implementation. We will work with KRRC to establish reasonable resource schedules, budgets, and standardized procedures so that the project is planned and monitored during construction.

### Proven Performance – Transparent Partnership with Owners

"At every stage of the project, McMillen Jacobs Associates have maintained...a level of <u>transparency</u> of operations to Avista that facilitated <u>a true partnership</u>. Additionally, they have been consistent in proactively examining project risks and mitigation strategies that minimize cost, schedule, and compliance risks to the project. They have consistently demonstrated performance in a very professional, efficient, and competent manner." -Meghan Lunney, Avista's Aquatic Resources Specialist re: Long Lake Dam

In response to this RFP, we have provided a detailed budget breakdown for the Project Owner's Representative scope of services as outlined in the KRRC RFP. In preparing our budget estimate, we have strived to utilize technical resources that are based in our home office as well as based on the project site. The proposed McMillen Jacobs staff members provide the senior technical expertise and leadership required to effectively manage a project of the scope and complexity of this Project. Our senior team will guide and mentor the local resources or specialty subconsultants to form an integrated, seamless team. We believe this approach will provide KRRC with a high-quality technical Owner's Representative team while maximizing the use of the local talent. Our approach will also provide a significant reduction in direct expenses such as housing, transportation, and per diem.

McMillen Jacobs will provide a Management Work Plan (MWP) which will form the foundation for managing this project and will be developed prior to initiating any work within four weeks following our Notice to Proceed. The MWP establishes the method and sequence for completing the work-specific project procedures, and represents a key aspect of assuring close coordination, clear lines of communication, and clear decision protocol. The detailed schedule will be revised to incorporate KRRC input, which will be updated on a regular basis. The schedule will be tracked, updated, and presented in the Monthly Progress Reports, which will also include the status of issues and problems with methods of resolution.

Since we track our labor hours with Spectrum software, our project managers can monitor costs at any time from their computer. Because electronic timesheets are submitted weekly, our project managers have careful control over costs and can supply KRRC with up-to-date reporting at any time.

## 3.5 Safety Oversight

McMillen Jacobs self-performs heavy civil construction for water resources and hydropower projects. This type of work requires knowledge of the site-specific safety risks and hazards associated with this type of work. Demolition of major facilities adds another dimension to safety risks in terms of potential unknown hazardous materials, stability issues which may arise during the demolition activities, crane and heavy equipment operation, removal of hydropower equipment, inwater work areas, and transportation requirements. From our experience, establishing a project specific safety culture on the project site is the most important step in achieving an effective comprehensive site safety program. We have found this requires the following:

- Preparation of a site-specific safety plan that clearly addresses the specific site conditions, working conditions, and hazards.
- Implementation and training for all Project Company employees and subcontractors. It is important that the training is comprehensive and required for all Project participants including KRRC and McMillen Jacobs staff.





- A top down commitment to the safety culture on the project site. This requires full commitment of the Project Company management team as well as subcontractor staff.
- Monitoring and enforcement of the safety plan.
- Updating the plan as required to reflect new work tasks, changes in approach, or unforeseen conditions.

As the Owner's Representative, we will provide a detailed review of the Project Company site specific safety plan. Our corporate safety manager, Bill Mitchell, will provide a detailed plan review. We will also have Luke Erickson, currently serving as the on-site safety manager for our Faraday Repower Project, review the plan. This will bring our direct and current experience on an existing powerhouse demolition, working around high voltage power lines, in-river construction, crane/heavy equipment operation, and major transportation requirements to this Project.

Once the plan is in place, we will actively work with the Project Company in their implementation and monitoring of the safety plan. We will proactively identify and inform the Project Company of potential safety issues, ensure the full aspect of the plan is being implemented such as job hazardous analysis, and complete site specific safety audits using our construction safety staff, where needed.

# 4. Personnel Qualifications

As outlined in the previous section, we have developed our team organization to provide a seamless communication and work execution. Our team will be led by Mort McMillen who will be responsible for the overall work execution, staffing, and performance through the Project implementation. Mort will serve as the primary contact with KRRC as well as the Project Company. Mort will be supported by his work category leads in the day-to-day work execution. A brief summary of our key personnel roles and qualifications is presented in Table 4-1.

Name/Title/Primary Location	Roles/Responsibilities	Time Commitment per Phase (%)
	Management Team	·
Mort McMillen	Represent KRRC's best interests	PH 1: 75%
Project Manager	<ul> <li>Serve as the direct point of contact for KRRC and liaison with Project Company</li> </ul>	PH 2: 75% PH 3: 50%
Boise Office – 50% Field Office – 50%	<ul> <li>Ensure resources are available and committed to the Project</li> <li>Schedule and financial management including budget cash flow forecasting</li> <li>Stakeholder coordination/collaboration</li> <li>Ensure KRRC project goals and objectives are met</li> </ul>	
<b>Josh Garad</b> Field Office/ Construction Management/ Inspection	<ul> <li>Manage the field construction management team with direct oversight of the Project Company.</li> <li>Oversee schedule, budget, and quality measure in the field.</li> </ul>	PH 1: 10% PH 2: 100% PH 3: 100%
Boise, ID Office – 5% Field Office – 95%	<ul><li>Organize and execute weekly construction meetings including documentation.</li><li>Construction budget cash flow forecasting.</li></ul>	
<b>Dave Holt</b> Project Controls and Administration Lead Boise, ID Office – 80% Field Office – 20%	<ul> <li>Manage the project controls functions throughout the project execution.</li> <li>Develop and implement project controls templates and protocols.</li> <li>Participate in the GMP cost estimate and schedule revenue.</li> <li>Review change order requests during construction.</li> </ul>	PH 1: 50% PH 2: 20% PH 3: 20%
<b>Paul Richards</b> <i>Engineering Support Lead</i> Portland, OR Office – 90% Field Office – 10%	<ul> <li>Manage the engineering support team to respond to management team requests.</li> <li>Assign and manage design review process.</li> <li>Assign staff and manage shop drawing review, response to RFI's, and other construction management team requests as required.</li> </ul>	PH 1: 25% PH 2: 15% PH 3: 5%
<b>Greg Allington</b> Regulatory/Enviro Lead Boise, ID Office – 90% Field Office – 10%	<ul> <li>Manage the regulatory team to respond to management team requests.</li> <li>Lead permitting and regulatory support efforts as required.</li> <li>Provide staff to perform specialized field inspection as required.</li> </ul>	PH 1: 25% PH 2: 25% PH 3: 25%





Name/Title/Primary Location	Roles/Responsibilities	Time Commitment per Phase (%)
	Additional Key Personnel	
<b>Curtis Neibaur</b> Project Controls, Cost Estimating Boise, ID Office – 90% Field Office – 10%	<ul> <li>Provide cost estimating support throughout the project execution.</li> <li>Review, comment and provide negotiation support on Project Company GMP.</li> <li>Review and comment on proposed project change orders.</li> <li>Support evaluation and documentation of the final project cost.</li> <li>Support development and monitoring of the project risk register.</li> </ul>	PH 1: 75% PH 2: 25% PH 3: 5%
<b>J'hon-Paul Fronatt</b> QA/QC Boise, ID Office – 5% Field Office – 95%	<ul> <li>Develop and implement field independent field QA/QC plan to provide oversight on Project Company work efforts.</li> <li>Oversee the independent testing firm to schedule and conduct field testing.</li> <li>Manage full documentation of field QA/QC program including the shop drawing review process, inspection reports, and associated documents.</li> </ul>	PH 1: 5% PH 2: 100% Ph 3: 100%
<b>Paul Rader</b> Project Controls, Scheduling Boise, ID Office – 90% Field Office – 10%	<ul> <li>Develop the master project P6 schedule which reflects all aspects of the Project execution.</li> <li>Review the Project Company master schedule for completeness and logic.</li> <li>Provide monthly project schedule updates.</li> </ul>	PH 1: 50% PH 2: 10% PH 3: 5%
<b>Cory Warnock</b> FERC Support Bellingham, WA - 95% Field Office – 5%	<ul> <li>Provide support for FERC coordination and approval process.</li> <li>Prepare FERC submittals and documents, as requested, to support the project execution.</li> </ul>	PH 1: 20% PH 2: 20% PH 3: 10%
<b>Bill Mitchell</b> <i>Corporate Safety</i> Boise, ID Office – 95% Field Office – 5%	<ul> <li>Provide detailed plan review of Project Company site specific safety plan.</li> </ul>	PH 1: 2% PH 2: 2% PH 3: 2%
<b>Sean Iams</b> Office Engineer Field Office – 100%	<ul> <li>Provide office engineering support in the field office including shop drawing review, preparation of weekly jobsite reports, documentation of field activities, and general project administration.</li> </ul>	PH 1: 5% PH 2: 100% PH 3: 100%

Full Resumes are provided in Appendix A for key personnel shown in burgundy above.

### 4.1 Staffing Plan

Our workplan and team organization was set up to allow "right sizing" the project team based on the work phase, specific tasks, and coordination with the Project Company. We anticipate the staffing requirements to grow as the Project moves into the full implementation phase, then drop off as the field construction is completed and final inspection and warranty period is initiated. Throughout the work execution, we expect to see an ebb and flow of the staffing requirements depending on the field activities, engineering and permitting support required, and issues which may arise which require attention. Our management team will meet weekly to review the short-term and long-term staff requirements, ensure the staff resources are properly allocated and budgeted, then monitor the work execution to ensure the assignments are efficiently completed. In general, Table 4-2 outlines observations related to staffing through the project execution based on the staff categories.

0	Table 4-2. Staffing Plan
Work Category	Staffing Requirements
Project Controls and Administration	Full project controls team will be active throughout the Project work phases. Cost estimating, scheduling, and risk management staff will have heavy involvement through Pre-Project Implementation, then decrease to focus on budget review and cost changes in subsequent phases.
Engineering Support	Engineering support will focus on design review in pre-project implementation phase. Subsequent work will focus on shop drawing review, engineering support to the field construction management team, and specialized inspections during implementation phase. Staffing levels will be determined based on coordination with the Project Company and Owner's Representative.
Regulatory, Permitting and FERC Support	We anticipate the largest workload will occur during the pre-project phase to support obtaining permits





Work Category Field Construction Management/Inspection Staffing Requirements

Full time baseline staff including construction manager, QA/QC, office engineer, lead inspector, and administration support. Staff supplementation for engineering support, additional inspectors, and specialized inspection as required. Project controls support from the Boise office will be maintained throughout the field construction activities.

### 4.2 Resumes

In addition to the bios provided in Section 3, we have included 2-page resumes for our key personnel as outlined in Figure 3-1, Organizational Chart, in Appendix A. Resumes for the additional support staff can be provided upon request.

# 5. Firm Qualifications

McMillen LLC, dba McMillen Jacobs Associates (McMillen Jacobs), is a full-service engineering, construction management, environmental, and self-performing construction firm in the water resources, hydropower, fisheries, water conveyance, irrigation, transportation, heavy civil, and underground markets. We are fully qualified to contribute to a project at the planning stage with feasibility studies and alternatives analysis, navigate the regulatory and permitting requirements, develop detailed design, self-perform construction, and participate in startup, commissioning, and support of operations. Our multi-discipline engineering, regulatory and permitting, construction management, construction, and operations staff are able to provide technical expertise to a wide range of project types – often with accelerated schedules and complex facilities.

### 5.1 Relevant Project Experience

McMillen Jacobs has extensive relevant project experience with the elements required for the Project. As either a design engineer, Owner's Representative, design-builder, or a general contractor, <u>we have hands on relevant experience which</u> <u>can be directly applied to the Project.</u> We understand the Project features and the specific challenges associated with the planning, design, and construction of each element. With experience ranging from the initial flow bypass and dewatering to dam removal and habitat restoration, <u>we believe we are uniquely qualified for the Owner's Representative role.</u>

Figure 5-1, provided on the following page, illustrates some of our specific project experience as it relates to the major Project features. More detailed relevant Project examples are enclosed within this section as well.





McMillen Jacobs provides KRRC with the depth of resources, technical expertise, and demonstrated project experience in all aspects of the Klamath Dam Removal Project.

#### **Demolition/Dam Removal/Hydro**





District on a challenging dam removal and fish passage project. We completed the construction plans/specs in 3 months including full USACE and agency approval. Removal of in-place RCC (55,000 cy) and structural concrete created the required fish passageway through the existing dam.

• NYDEP, Honk Dam Removal (NY)

- Sonoma County Water Agency, Potter Valley Project (CA) (Scott Dam decommissioning) • Seattle City Light, Mill Pond Dam Removal (WA) (prelim and regulatory lead)

#### **Highly Visible; Multiple Stakeholders**



USACE, Napa Dry Bypass Flood Protection Project (CA) – This highly visible flood protection project required us to manage more than 23 stakeholders comprised of local, state, and federal interties. "McMillen never faltered in their constant coordination in order to attempt to satisfy all stakeholders, and to provide a design that could be constructed," USACE Sacramento District Contracting Officer

Ē @ **X №** ≢

- City of Boise, Esther Simplot Park and Whitewater Park DB Project (ID)
- PGE, Faraday Repower Project CMGC (OR)
- USFWS, Don Edwards NWR Restoration D-B Project (CA)

#### **Sediment/Material Disposal**



#### € **2 2 2** City of Boise, Esther Simplot Park DB Project (ID) Required over 400,000 cy of excavation, extensive dewatering and flow bypass system, and over \$1M in plantings. Challenges included the removal of

100,000 cy of contaminated soil, construction in an urban area with nearby neighborhoods and pedestrians, and coordination with several agencies and stakeholders.

- Avista Utilities, Nine Mile Dam Sediment Bypass DB (WA)
- USACE, John Martin Reservoir, Sediment Removal and Dewatering Project (CO)
- USFWS, Napa Salt Marsh Ponds Construction Project (CA)

#### **Construction Management Services**



#### *₽*₽₹ ₹ City of Sika, Blue Lake Dam Hydroelectric Expansion CM Project (AK) - McMillen Jacobs served as the Construction Manager which included a powerhouse, raising

the dam, a 300-foot deep surge shaft, and three 5.3 MW turbine/generators. We provided direct oversight for the contractors and despite several challenges, the team was able to deliver this project 3 months ahead of schedule with change orders under 5% of the total cost.

- SFMTA, Central Subway in San Francisco (CA)
- NYDEP, Gilboa Dam Reconstruction (NY)
- Since the 1970s when we provided CM services on the Melbourne Metro

#### FERC/Regulatory/Permitting



### Seattle City Light, Mill Pond Dam Removal (WA)

- McMillen Jacobs completed a preliminary environmental assessment of the recommended alternative for dam removal and stream restoration to comply with NEPA requirements during SCL's FERC relicensing process. The preliminary design and environmental assessment were submitted to FERC and approved with no conditions.

• PacifiCorp Energy, Yale Dam Intake and Spillway Entrainment Nets (OR) • PacifiCorp Energy, Prospect PRV Flow Deflector (OR)

• Pend Oreille PUD, Box Canyon Hydroelectric Project (WA)

#### Dewatering/Reservoir Drawdown



• PGE, Faraday Repower Project CMGC (OR)

Bridges/Roads/Infrastructure

• Northwestern Energy, Hegben Dam Spillway Construction (MT)

SMUD, South Fork Powerhouse and Boating Flow Release Facility (CA)

Avista Utilities, Long Lake Spillway Improvements (WA) - Scope included dewatering for spillway toe repair, construction of platform/plunge pool backfill, removal of temporary road from the riverbed and shoreline, reshaping of the former construction disturbance area with excess fill materials to create a more natural streambank, and revegetation of the construction site and impacted areas.

CVEA, Allison Creek Hydroelectric DB Project (AK) -

New concrete gravity dam with a conventional intake

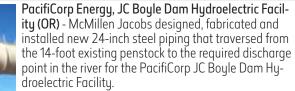
and buried/surface penstock, to a run-of-river project

with a diversion structure further downstream and a

- USFWS, Coleman Hatchery Project (CA)
- BPA, Walla Walla Hatchery EPC (OR)

#### **Stream, Estuary and Habitat Restoration**





- - BUREC, Navajo Gallup Water Supply Construction Project (NM) (4.25 miles of 42-inch pipeline)
  - Pend Oreille PUD, Sullivan Dam CWR Pipeline (WA) (intake submerged 130-ft of 54-inch pipeline)
  - Silicon Valley Clean Water, Bair Island Force Main (CA) (trenchless pipeline)

#### Flood Analysis



#### Fish Passage Repair



#### **Fish Hatchery**



powerhouse with more than 2 miles of access roads in steep and remote terrain. McMillen Jacobs self-per-

formed 90% of the design and construction.

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- USFWS, Don Edwards NWR Habitat Restoration DB (CA) • USFWS. Minidoka NWR. Road Reconstruction 17 Miles (SD)
- Avista Utilities, Long Lake Dam Spillway Improvements (WA)

### Additional Bridges:

- USACE, Paradise Creek Restoration DB (ID) (pedestrian/traffic/utility bridges)
- IDPC, Thousand Springs Dam Snowbank Bridge Construction (ID)
- USACE, Permanent Repairs to Garrison Dam Bridge Pier DB Project (NB)

### Waterline Jobs





# Figure 5.1

Image: A marked block in the second seco



#### USACE, Warm Springs Dam Inundation Study (CA)

Evaluated the adequacy of the Warm Spring Dam Spill way. Analysis determined the downstream inundation caused by both with and without failure analysis of the dam for the Probably Maximum Flood, as well as the 50-, 100-, 200-, and 500-year frequency based storms. The study also included mapping of the various failure analyses.

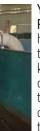
• USFWS. Don Edwards NWR Habitat Restoration DB (CA) • USACE, American River Common Features (CA) • 20+ Flood Analysis Task Orders for the USACE (Nationwide)



Pend Oreille PUD, Box Canyon Trout Habitat Restoration Program (THRP) (WA) - Encompasses active instream volitional fish passage enhancement for 164 miles of tributaries of the Pend Oreille River spanning over a 20-year period. We provided design and served as Owners Representative during construction, assisting to develop a process to evaluate streams, provide recommendations, and manage construction.

• USACE, Sacramento River GCID Fish Passage and Hydraulic Analysis/Design (CA) • USACE, Elk Creek Dam Removal and Restoration DB Project (OR) Sonoma County Water Agency, Potter Valley Project (CA)





Yakama Nation, Melvin R. Sampson Coho Hatchery EPC Project (WA) - Implemented hatchery strategies to increase harvest levels, natural spawning abundance, and spatial/ temporal distribution of <u>coho and Chinook salmon</u> in the Yakima Subbasin. McMillen Jacobs was responsible for early concept design, final design, and is currently self-performing the construction. Primary project components include development of new groundwater and surface water supply and treatment systems along with new hatchery facility.

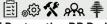
• PacificCorp Energy, Speelyai Hatchery Modifications (WA)



USACE, Elk Creek Dam Removal and Restoration DB Project (OR) – The channel was designed to become more protected in the future as the vegetation slows the flood velocity and anchors the bank materials with roots. The thick cobble blankets provide a rougher fish passable surface while resisting significant erosion over time. The channel provides volitional passage function and adjust to changes in runoff and flow conditions by providing mobile coarse sediment.

• Pend Oreille PUD, Box Canyon Trout Habitat Restoration Program (WA) • USFWS, Napa Salt Marsh Ponds Construction Project (CA) • USFWS, Don Edwards NWR Restoration D-B Project (CA)







### 5.2 Subconsultants/Subcontractors

At this time, McMillen Jacobs is not proposing to include any specific subconsultants to our team. We believe we can cover the Owner's Representatives roles and responsibilities with in-house staff. As we work with KRRC and become more familiar with the Project Company's proposal, staffing, and organization, additional resources may be recommended to KRRC for inclusion on our team. We believe these would be specialty subconsultants that would provide a specific technical support function. One example is a third-party material testing firm which could conduct independent QA/QC confirmation testing of the Project Company's field work. If we believe the addition of a subcontractor would be beneficial to the team, we would provide a written proposal to KRRC outlining the technical skills, key personnel, benefit, and cost for approval. Where possible, we would propose to utilize local subconsultants/subcontractors to supplement our team capabilities.

## 5.3 Disciplines, Offices, and Capacity to Perform Work

Our technical skills include all areas of specific disciplines required for the Owner's Representative role on the Project. We employ civil, structural, mechanical, fisheries, electrical, dam, and geotechnical engineers; specialists in hydraulics and hydrology; tunnel/underground engineers; permitting, regulatory, and environmental specialists; and construction managers, inspectors and risk management experts. Currently, McMillen Jacobs employs Professional Registered Engineers (PE) in every state. We currently serve clients from 20 offices located throughout the United States, Canada, New Zealand, and Australia with over 500 staff members worldwide. For the Project, we plan to utilize our staff in our Pacific Northwest and California offices to supplement our field-based construction management staff. We believe we have the depth and breadth of resources to fully meet the Owner's Representative roles and responsibilities. Our capacity allows us to provide the resources for a project of this size, yet we are small enough to provide flexibility and cost-efficient services.

### 5.4 Insurance Requirements

McMillen Jacobs maintains the basic insurance coverages as outlined below. We have also provided additional project specific insurance coverage, as required, to meet specific client/project requirements for both our professional engineering as well as construction contracts. Table 5-1 provides our insurance coverage.

Insurance Coverage Type	Policy Value	Deductible				
General Liability/Prod Comp Ops	1/2/2 Mil	\$0 Employee Benefits Liability \$1,000				
Auto Liability	1 Mil each accident/CSL	\$250/\$500 Comp/Collision				
Workers' Compensation / Employers Liability	Statutory / 1 Mil-1 Mil-1 Mil	None				
Umbrella Liability	25/25 Mil each occ/aggregate	None				
Professional/Pollution Liability	15/15 Mil per claim/aggregate	\$200,000 Each Claim SIR				
Property/Inland Marine						
Real Property	\$320,000	\$2,500				
Blanket Business Personal Property	\$3,307,500	\$2,500				
Blanket Business Income	\$5,530,000	<b>\$</b> O				
Owned Equipment	\$3,637,500	\$2,500				
Leased/Rented Equipment	\$750,000	% min of \$5,000 \$2,500				
Catastrophe Limit	\$9,157,500					
Management Liability						
Directors & Officers Liability	3 Mil	\$25,000				
Employment Practices Liability	3 Mil	\$50,000				
Fiduciary Liability	3 Mil	<b>\$</b> 0				
Crime	1 Mil	\$10,000				
Hull & Machinery	Agreed Value					
Protection & Indemnity	1 Mil	\$5,000				

Table 5-1. Insurance Coverage

## 5.5 Financial Stability

McMillen, LLC, dba McMillen Jacobs Associates (McMillen Jacobs), is an employee-owned company, with our corporate headquarters located in Seattle, Washington. With over 500 employees located in 2 offices within the United States,





Canada, New Zealand, and Australia, our annual revenue exceeds \$100 million. McMillen Jacobs Associates represents the merging of McMillen LLC and Jacobs Associates that was completed in 2014. Our combined company has an operating history of over 60 years. Bank references or additional financial information are available upon request.

### 5.6 Litigation

October 25, 2019, our legal entity, McMillen LLC submitted a request for arbitration with Sacramento Municipal Utility District on the Slab Creek Powerhouse and Boating Flow Release Facility. We encountered a differing site condition (DSC) that arose related to bedrock elevation from what we encountered versus what was stated in the request for bid. We have not received a response back to this request so this could be settled without going to arbitration, however, since it is a possibility, we wanted to include this.

# 6. Proposer Fees

McMillen Jacobs prefers a time-and-material contract. We have prepared a detailed budget breakdown for the Project Owner's Representative scope of services as outlined in the KRRC RFP and our proposal. Our proposed hourly rates are all inclusive covering all salary costs, fringe benefits, payroll taxes, general and administrative expenses, and profit. The estimated total range of hours for each calendar year, along with the associated assumptions and qualifications, are provided. **Our assumptions related to the budget are presented on our budget worksheets in Appendix C.** 

### 6.1 Potential Savings by Choosing McMillen Jacobs

Our approach to managing this project will provide an opportunity for savings that other firms may not be able to provide. Elements of our approach include:

- a) High time commitment of an experienced project manager who can effectively direct the work ensuring efficient and cost-effective work execution.
- b) Efficient team organization that will ensure the right staff is allocated at the appropriate time with an efficient budget.
- c) Smaller field construction team supported by a bench of experienced staff that can be accessed for specific needs.
- d) Control of field expenses by maintaining a smaller base team with major Project Controls from our Boise office.
- e) Utilize local subcontractors as much as possible to minimize subsistence cost and maximize local knowledge and business, where appropriate.

# 7. References

We have included five client references from projects with similar components to the Project. Per RFP requirements, we have included the name of the project and the name of the individual with their role on the project, email, and phone number. Additional references are available upon request.

Project / Client	Point of Contact					
<b>Copper Valley Electric Association</b>	John Duhamel, CEO					
Allision Creek Hydroelectric DB Project	(907) 882-8301 <u>duhamel@cvea.org</u>					
Homer Electric Association	Mike Salzetti, Manager of Fuel Supply & Renewable Energy Development					
Grant Lake Hydroelectric Project	(907) 283-2375 msalzetti@HomerElectric.com					
Avista Utilities Corporation	Andy Vickers, Director Generation Production & Substation Support					
Nine Mile Dam SB DB Project	(509) 489-0500 (main) (509) 495-4616 (direct) and <u>vickers@avistacorp.com</u>					
Monterey County Water Resources Agency	Ron Drake, VP; COWI North America, Inc. (Owner's Representative)					
Interlake Hydro Project	(805) 440-5777 (cell) or (510) 839-8972 <u>mdk@cowi.com</u>					
Pend Oreille PUD	Tim McMaster, Power Production Manager					
Box Canyon Hydroelectric Dam Improvement Projects	(509) 615-9900 (cell) (509) 447-3137 (office) mcmaster@popud.org					

#### Table 7-1. References



# BLUE LAKE DAM HYDROELECTRIC EXPANSION CM PROJECT (AK)

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**City of Sika** McMillen Jacobs served as the Construction Manager, providing direct oversight for the contractors and despite several challenges, the team was able to deliver this project 3 months ahead of schedule with change orders under 5% of the total cost.



#### Education

 MS, Civil Engineering Stanford University

#### Years of Experience

33 years

### Registrations/Licenses/Certs

- PE, California (#79290)
- PE, Oregon (#16047)
- PE: AK, AZ, CO, HI, ID, IN, MD, NE, NV, OH, PA, SD, WA, WY

### Areas of Specialty

- Participation in over 50 projects at dams and 110 fisheries projects (volitional fish passage & fish hatcheries)
- Extensive experience and outstanding reputation as client liaison for high-profile projects
- Led efforts for dam removal and managed mitigation of impacts
- Habitat restoration
- Working relationship with PacifiCorp and other relevant stakeholders
- Technical and management skills from planning through start-up
- Development of and adherence to contract terms and GMP
- History of delivering complex projects on time and within budget
- Dewatering, sediment management, and civil works



# Mort McMillen, PE, P.Eng.

# Owner's Engineer - Project Manager

Mort McMillen understands the complexity of multi-disciplined projects and is ideally suited to serve as the Project Manager for the Owners Representative role on the Klamath River Dam Removal Project. Mr. McMillen is the founder of McMillen LLC and is a Registered Professional Engineer in Oregon and California with over 33 years of experience. He brings extensive experience in all aspects of this project including dam removal/demolition; volitional fish passage; hatcheries; habitat restoration; flood analysis; heavy civil works including dewatering, roads, and sediment/material disposal, and challenging water conveyance. He also has extensive experience in fostering collaborative relationships with stakeholders, coordinating with FERC and permitting agencies, and mitigating environmental impacts. He has worked with PacifiCorpspecifically on the JC Boyle Dam Project and most of the stakeholders interested in this project and he has contributed to or led the design and/or construction of projects containing dams (50), fish passage (50), and fish hatcheries (60). His highly technical engineering expertise has enabled him to assist in the planning stages and feasibility with accurately assessing cost (capital and O&M) and understanding the impact on local Indian Tribes or neighboring properties and managing the complex nuances of dam removal.

### Management of Large and Complex Projects & FERC/Multiple Stakeholders-

Because of his vast technical experience and his effective management, he has successfully served as Project Manager and Owner's Rep on several large and complex projects where he managed multiple groups, contractors, and stakeholders and delivered projects on schedule and within budget.

Examples: On the \$53M Allison Creek Hydro Project, he was responsible for all aspects of design, FERC coordination, collaboration with interest groups, self-perform construction, and startup. Despite short construction work windows, extreme Alaskan weather, technically challenging elements, and remote location, his team met all milestones throughout the project and delivered a fully operating facility in November 2016 as scheduled and \$10M under the original budget. In 2019, this project received an Engineering Excellence ACEC Award. Additional examples where he has worked closely with clients as a strategic advisor, represented client objectives, and coordinated with FERC and permitting agencies include his collaboration with Pend Oreille PUD for \$106M of FERC-mandated improvements; Wallowa Lake Irrigation District for dam and reservoir rehabilitation where he represented the client to congress for funding; and Kauai Island Utility Cooperative for a new pumped storage project that spans across property owned by 3 different organizations, a State Reserve, a State Park, and local highways/roads. He also led the preliminary design and EA for the Mill Pond Dam Removal for FERC licensing. Additional examples include managing simultaneous projects for SEAPA, Absaroka Energy, and the Monterey County Water Resources Agency. He also served as the owner's representative for the Blue Lake Dam Raise and Reservoir Expansion Project where he provided oversight of the General Contractor. Another example is his Napa Dry Bypass Project where he managed more than 23 stakeholders.

**Dam Removal/Demolition –** Mr. McMillen has worked on several projects that required demolition of large structures (including dams) requiring blasting, massive earthwork, and analysis of sediment impacts. Challenges have included removal of contaminated soils, mitigating the impact to fish, and extraordinary safety precautions, while accommodating the unique issues of demolishing structures dating back to the early 1900s.

# Mort McMillen, PE, P.Eng.

**Examples:** Mr. McMillen is serving as Engineer-of-Record for the removal of the top 12 feet of *Honk Dam* in New York which will require refacing after demolition. As a design-build partner for the removal of the *Elk Creek Dam*, his team finished in 6 months, meeting the instream work window requirements to enable fish passage. He provided preliminary design for the removal of the *Mill Pond Dam* with 6 alternatives and options to relocate accumulated sediment, create a stream channel, and restore newly exposed areas. As technical advisor, he assessed sediment impacts of the decommissioning of *Scott & Cape Horne Dams* for the Sonoma County Water Agency. At the *Faraday Repower CM/GC Project*, Mr. McMillen's team completed the demolition of a high-profile powerhouse built in 1919 that is located directly on the river.

**Fish Hatchery Projects –** Mr. McMillen has participated in over 60 fish hatchery projects and led the feasibility studies, master planning, design development, presentation submittals and coordination with agencies and FERC, and overall execution. Mr. McMillen has been instrumental in the development of new or renovations of fish hatchery facilities which have included adult trapping, holding, spawning, and rearing facilities. Elements have included raceways, circular tanks, access roads, water treatment/re-use (PRAS) systems, incubators, site civil preparations, housing, and administrative buildings. He has worked extensively with Indian Tribes, BPA, USFWS, local stakeholders, and agencies to navigate the complex issues involved with fish hatcheries.

**Examples:** Yakama Nation and BPA-*Melvin R. Sampson Coho Hatchery D-B Project*, CTUIR & BPA-*Walla Walla Hatchery* D-B, Spokane Tribal Hatchery, IDFG-Springfield Hatchery D-B, Puget Sound Energy-Baker Fish Hatchery, USFWS-Carson, Hotchkiss, Leavenworth, *Quinault, Lyons Ferry Tanks, & Magic Valley Raceway Mods* Fish Hatcheries, Shoshone Bannock Tribe-Crystal Springs Fish Hatchery, PacifiCorp-Speelyai modifications, and WDFW-Naselle Renovations.

Habitat Restoration / Volitional Fish Passage - Due to his focus providing analysis, design, and/or construction on rivers, streams, lakes, and reservoirs, Mr. McMillen fully understands the requirements for integrating the environmental aspects with the design, construction, and operations and has been involved with multiple restoration projects. He has participated in the removal of dams with considerations for impacts to the fish.

**Examples:** Every civil project has included a measure of environmental controls. In addition, examples where the primary objective of the project was restoration include the *Box Canyon Stream and Habitat Restoration Projects* which encompassed active instream volitional fish passage enhancements for 164 miles of tributaries, *Paradise Creek Restoration Project, Napa Salt Marsh Restoration, Don Edwards National Wildlife Refuge, Kilauea National Wildlife Refuge, Elk Creek Channel rehab, and Swan Cove Restoration Project.* His *Elk Creek Dam* removal created fish passage and he developed alternatives for volitional fish passage on the *Skagit River* near Baker Dam.

**Flood Control/Hydraulics/Hydrology** - Mr. McMillen started his career with the USACE working as a hydraulic engineer responsible for detailed hydraulic analysis and design of hydraulic structures including river modeling and gravity and pressure flow conduits. Since the establishment of his own firm, he has continued to provide expertise in hydraulics and hydrology for rivers, reservoirs, streams, with a variety of hydraulic structures.

**Examples:** Warm Springs Dam Inundation Study, Don Edwards National Wildlife Refuge D-B, American River Flood Study, and 20+ Flood Analysis task orders for USACE in California, Oregon, Idaho, and Washington.

Heavy Civil (Dewatering, Material Disposal, Roads/Bridges, & Pipelines) – Due to the focus on water resources and dam projects, every project contained some type of civil element—especially roads in remote areas with difficult terrain and earthwork, excavation, and material disposal. Dewatering has included diversion of rivers and streams—both temporary and permanent, control of ground water in construction, and the development of sophisticated cofferdams, piping, and pumping systems. Due to the location, the pipes have been installed using trenchless technology.

**Examples:** At times, projects have required the diversion on an entire river. That was the case on the *Boise Whitewater Park* where crews diverted the Boise River to enable construction of structures on the riverbed. At the *Long Lake Dam Project*, the scope included dewatering for spillway toe repair and his *Faraday Repower Project* required extensive dewatering of portions of the river via a cofferdam. At his *Esther Simplot Park Project*, crews moved over 400,000 cy of material and discovered contaminated material (~100,000 cy) at depths 30 feet below groundwater. Mr. McMillen's team coordinated with EPA, IDEQ, City of Boise, Ada County, and other agencies very closely during the discovery period and inspection/testing of this material. The property had previously served as a gravel pit and asphalt plant where the pits had been filled with construction debris. Examples of pipeline projects include the *Navajo Gallop Water Pipeline, JC Boyle elevated piping, Sullivan Dam Cold Water Release System, Solomon Gulch Water Supply Upgrade*, and two projects that required trenchless technology (*Post Falls Outlet and Pasco/Columbia River Outlet*).





#### Education

- MS, Construction Management, Ira Fulton School of Engineering, Arizona State University (2004)
- BS, Business Management, Miami University, Oxford, OH (1996)

#### Years of Experience

23 years

#### Affiliations & Organizations

 American Society of Civil Engineers (ASCE) United States Society on Dams (USSD)

#### Areas of Specialty

- Hydropower, dams and heavy civil design and construction projects
- Construction Management
- Project Management
- Construction administration services
- Expertise on EPC, Owners Representative, Construction Management, Engineer of Record
- Environmental Programs

# Josh Gerard Field Construction Manager/Inspector

Josh Gerard brings more than 23 years of international hydropower and dams' construction and design project knowledge. Josh has experience being the liaise with all the project participants; including EPC contractors, Owners, Lenders, Dam Safety Panel, DAB and engineering and construction staff. His background also consists of working and living in remote and difficult international environments.

He has served as the senior Construction Engineer for the Olmsted Dam Project, a \$830 Million construction project, where he communicated daily with the owner to resolve operations, design, and contractual issues. He also monitored change orders, NCRs, and design revisions. On the Bujagali Hydroelectric Project on the Nile River in Uganda, East Africa, he served as the Resident Engineer for Owner of this \$900 Million EPC Contract. He led the onsite constructability design review of contractors change orders and engineering designs when they conflicted with the EPC contractor and owner. Josh coordinated social and environmental programs, including compensation programs for project affected persons, social/environmental plan monitoring, and community status meetings and reports.

Josh brings a strong work ethic with a proven track record of completed projects. His field construction experience coupled with his engineering background allow him to provide valuable input at all stages of a project.

1

### Registrations/Licenses/Certs

OSHA 8 and 10 Hour Safety Trained Supervisor Certificate 2005 USCG Boasters License CPR/First Aid Certified Competent Person-Excavation Certificate



# Josh Gerard

# Relevant Experience

PROJECT INFORMATION (Client, Project Title and Location, Role, Value, Contract Period)	Technical Management	Site Management	Environmental/Permitting	Design/Design Review	Program Coordination	Dams/Hydropower	Complex/Multifaced
Volobe Hydroelectric Project, Madagascar - Technical Director/Construction Manager*. (\$500M; 2019)	•	•	•	•	•	•	•
Adjaristsqali Hydroelectric Project, Republic of Georgia, Eastern Europe - Project Director*. (\$500M; 2014-2018)	•	•	•	•	•	•	•
Amaila Falls Hydroelectric Project, Guyana, South America - Deputy Construction Manager for Owner*. (\$680M EPC contract; 2013-2014)	•	•	•	•	•	•	•
Bujagali Hydroelectric Project, Nile River, Uganda, East Africa - Resident Engineer for Owner. (\$900M EPC contract; 2008-2012)	•		٠	٠	٠	•	•
Olmsted Dam Project, Ohio River, OH - Senior Construction Engineer for Contractor*.	•	•		•	•	•	•
San Roque Hydroelectric Project, Philippines - Assistant Business Manager for Contractor (\$750M EPC contract; 2000-2002)	•	•			•	•	•
Virgin Island Department of Education-Hurricane Recovery Project, St. Croix, US Virgin Islands – Construction/Project Manager(\$125M; 2018-2019)	•	•			•		•





#### Education

 BS, Construction Management, University of Nebraska, Lincoln, (2005)

#### Years of Experience

- 19 years in Heavy Civil Construction
- 11 years Managing Construction

#### Registrations/Licenses/Certs

- OSHA 30, 10
- Fall protection
- Rigging
- First aid & CPR

### Areas of Specialty

- Hydro improvement projects
- Design-Build & CM/GC Contracts
- Heavy civil projects
- Working near and over water
- Working in tight workspaces
- Performing construction during existing operations
- Managing multiple types of crew members and subcontractors
- Installing mechanical equipment
- Demolition
- Flood control projects
- Transportation projects
- Marine projects
- Work in restricted areas requiring a high level of security
- Massive concrete placement (over 540k cy)



# Dave Holt

# Project Controls and Administrative Lead

Dave Holt has 19 years of heavy civil construction experience and more than 11 years' experience managing large-scale heavy civil construction operations from \$10M to \$1.4B. Currently, he serves as McMillen Jacobs' Construction Operations Manager responsible for the management of day-to-day Construction Operations and oversees the Project Management team. He works closely with our on-site construction personnel to ensure the delivery of our core objectives of safety, quality, schedule, and equipment utilization.

When serving as a Project Manager or Construction Manager, he has earned a strong reputation for delivering projects safely, within budget and on time. Responsibilities include managing and updating daily and weekly schedules, tracking cost, and effectively resolving and communicating any field-related issues to project owners.

He has managed work on some of the most prestigious projects constructed in North America, including the Gulf Intracoastal Waterway West (GIWW) Closure Complex for the U.S. Army Corps of Engineers (USACE) in Louisiana after Hurricane Katrina. He has also managed the construction of hydropower improvement projects, a pumping plant retrofit, waste water systems, supporting infrastructure at national parks, transportation projects, a variety of flood control projects, and heavy civil construction projects. Mr. Holt has also worked on projects requiring a security clearance for such clients as DOD, DOE, and the Port Allen Authority.

## Work History

McMillen Jacobs, Various Locations (2018-Current) Kiewit, Various Locations (2005-2017) Kueger Development, Civil and Heavy Construction (2000-2005)

### Awards

Award and certification of appreciation, September 2011, USACE, for milestone achievement on the Gulf Intracoastal Waterway West Closure Complex, Belle Chasse, LA

# Dave Holt

# Relevant Experience

<b>PROJECT INFORMATION</b> (Client, Project Title and Location, Role, Value, Contract	Project Controls	٩	Change Orders	Permitting	Hatcheries	Water Lines	us	Habitat Restoration
Period)	Proj	GMP	Cha	Peri	Hat	Wat	Dams	Hab
Sacramento Municipal Utility District (SMUD); South Fork Powerhouse and Boating Flow Release Facility (BFRF), aka Slab Creek Design-Build Project, Sacramento, CA – Construction Manager. (\$14.2M; 06/2016 – 10/2019)	•	•	•	•		•	•	
ENEL Green Power; Dietrich Drop Hydro Power Facility (Intake Gate Replacement and Miscellaneous Repairs), ID – Onsite Construction Manager. (Intake Gate: \$135k; Miscellaneous Repairs \$55k; 10/2018 – Ongoing)	•	•	•	•		•		
ENEL Green Power; Dietrich Drop Emergency Bypass Tainter Gate Replacement, Dietrich, ID – Construction Manager. (\$414k; 08/2017 — 09/2017)	•	•	•	•				
USACE; John Martin Reservoir (Stilling Basin Sediment Removal and Dewatering Project), CO – Construction Manager. (\$4.8M; 10/2018 – 05/2019)	•	•	•	•		•	•	•
Avista Utilities; Nine Mile Dam Cooling Water System Design Build, Spokane County, WA – Construction Manager. (\$1.1M; 2018)	•	•	•	•		•	•	
Metropolitan Water District of Southern California; Colorado River Aqueduct Pumping Plants Seismic Retrofit Project, CA – Project Manager. (\$9M; 01/2018 – 08/2018)	•	•	•	•		•	•	
Yakama Nation and BPA; Melvin R. Sampson Coho Hatchery EPC Project, Ellensburg, WA – Construction Manager. (\$1.6M Design/\$16.7M Construction; 09/2018- est. 06/2020)	•	•	•	•	•	•	•	•
USACE; Gulf Intracoastal Waterway West Closure Complex, Belle Chasse, LA, - Superintendent. (\$1.07B; ECI contract 06/2009 – 12/2010)	•	•	•	•		•	•	
USACE; Empire Flood Gate, Empire, LA - Project Manager. (11/2013 and 08/2014 – 09/2015)	•	•	•	•		•	•	





#### Education

- MS, Geological University of Idaho (2001)
- BS, Geology Washington State University (1998)

#### Years of Experience

21 years

#### Registrations/Licenses/Certs

- GE: OR
- PE: AK, OR, WA

### Areas of Specialty

- Geotechnical Engineering
- Geological Engineering
- Led multi-discipline design teams as Project Manager
- Provided engineering support during construction
- Slope stability analysis
- Mining projects
- Lock and dam projects
- Emergency repairs with accelerated schedule
- Tunnels
- Geological analysis on the feasibility of dams up to 700 feet high; and geotechnical assessment for embankment dams up to 350 feet high
- Concrete dams and earthen embankments
- FERC requirements



# Paul Richards, PE, GE Engineering Support Lead

Licensed Civil and Geotechnical engineer with 21 years of experience working on water resources, locks and dams, and hydroelectric projects. Leads designs during the design phase, serving as the lead geotechnical engineer, and delivering a variety of engineering services on site during construction and startup and commissioning. Supports bid packages for contractors, permitting, and instrumentation. Additional responsibilities include site exploration, computer modeling, project scoping, and cost estimates, review and preparation of plans and specifications, and project management.

Provided evaluations ranging from emergency repairs of critical structures, geologic hazards, seismic and liquefaction remediation, soil and rock slope stability, seepage, grouting, deep and shallow foundations, permitting, and instrumentation. Extensive experience with foundation evaluation of wet infrastructure projects including work on the Big Tujunga Dam, Asana Barrier, Susitna-Watana Hydroelectric Project, Panama Canal, and Stetson Creek Diversion Dam.

Considerable experience with cofferdams including review of structures used on the Panama Canal Third Set of Locks, Cooper Lake Outlet and Stetson Creek Diversion, and Big Tujunga dam, as well as work on the preliminary cofferdam design the Susitna-Watana Hydroelectric Project.

# Work History

McMillen Jacobs, Geotechnical Engineer (11/2018- Current) MWH (Now Stantec), Associate Geotechnical Engineer (2007-2018) AMEC Earth & Environmental, Geotechnical Engineer (2005-2007) GeoDesign, Geotechnical Engineering Staff (2001-2005) Kleinfelder, Temporary Field Engineer (1999-2000) University of Idaho, Research Assistant (1998-2001)

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# Registrations/Licenses/Certifications

GE, Oregon (#77336) PE, Alaska (#13635) PE, Oregon (#77336) PE, Washington (#46738)

# Paul D. Richards, PE, GE

# Relevant Experience

<b>PROJECT INFORMATION</b> (Client, Project Title and Location, Role, Value, Contract Period)	Engineering Support Lead	Design Lead	Construction Liaison	Permitting	Hatcheries	Water Lines	Dams	Habitat Restoration
Gridflex; Badger Pumped Storage Project, WA – Geotechnical Engineering Lead. (\$600M total installed cost; (08/ 2019 – Ongoing)	•	•	•	•		•	•	•
USFWS Lyons Ferry Fish Hatchery, New Rearing Ponds, Architect-Engineer (A-E) Design and Construction Management Services, WA- Geotechnical Engineer. (\$249k; 08/2018-09/2019)	•	•	•	•	•	•		•
Farmers Conservation Alliance (FCA) (owned by BUREC); Derby Dam Horizontal Fish Screen Design and Construction Support, NV – Geotechnical Lead. (\$435k; 2019-Ongoing)	•	•	•	•	•		•	•
Northern Colorado Water Conservation District; Chimney Hollow Reservoir, Loveland, CO - Geotechnical Engineer and Portal Technical Lead. (\$570M; 2018)	•	•	•	•		•	•	•
BC Hydro; Ruskin Dam Left Abutment Slope Stability, Mission, BC – Civil Engineer. (\$748M; 2009 – 2016)	•	•	٠	•		•	•	•
Chugach Electric; Stetson Creek Diversion and Cooper Lake Dam Bypass Project Alternatives Analysis and Design, Cooper Landing, AK - Geotechnical Engineer-of- Record, Design/Technical Lead. (\$22.2M; 2010 - 2015)	•	•	•	•	•	•	•	•
Grant County PUD; Wanapum Dam Monolith No. 4 Repair, Vantage, WA – Geotechnical Engineer and Resident Field Engineer, and Design Lead During Construction. (\$61M; 2015)	•	•	•	•		•	•	•
LA County Department of Public Works; Big Tujunga Dam Seismic Rehabilitation and Spillway Improvement Project, Tujunga, CA – Lead Geotechnical Engineer and On-Site Managing. (\$80M; 2008 - 2011)	•	•	•	•		•	•	•
CA Coastal Conservancy; San Clemente Dam Removal and Carmel River Re-route Project, Carmel, CA - Geotechnical Engineer. (\$30M; 2008)	•	•	•	•		•	•	•





#### Education

BS, Wildlife Ecology, Washington State University (2004)

#### Years of Experience

14 years

#### Areas of Specialty

- National Environmental Policy Act
- Aquatic Resource Permitting
- Compliance with regulations and environmental standards during construction
- Development and implementation of environmental plans
- USACE Section 10 and 404 permitting
- NOAA/USFWS Section 7 Endangered Species Act (ESA) consultation-BA/BE and BO preparation
- Habitat assessments and management plans
- Wildlife surveys
- Preparation and implementation of monitoring plans
- Erosion control and stormwater management
- Construction environmental compliance
- Monitoring plans during construction for environmental compliance and permits

# **Greg Allington** Regulatory, FERC, & Environmental Lead

Over 14 years of experience as a biologist specializing in natural resource permitting with local, state, and federal agencies. Unique expertise in offering support during the design phase but also in monitoring compliance during construction. Manages complex issues involving complicated engineering components in sensitive areas, preparing technical permit documents, and developing mitigation plans. Specializes in agency coordination and negotiation during the permitting process, as well as implementation and oversight of permit regulations during construction.

The Natural Resources Conservation Service (NRCS) contracted McMillen Jacobs to complete NEPA analysis for various projects located throughout Utah. Mr. Allington has worked on NRCS projects which focused on modifying dams to meet current NRCS and Utah State Dam Safety regulations and engineering standards as well as fixing damage to structures from extreme flood events. McMillen Jacobs has or is currently leading the preparation of Environmental Assessments (EAs) and an Environmental Impact Statement (EIS) for NRCS to address and analyze environmental impacts from the projects. The NEPA process includes public involvement, public meetings, environmental analysis, and the documentation of alternatives development. Endangered Species Act (ESA) listed species were documented to occur within many of the project areas and McMillen Jacobs is assisting NRCS consultation with the USFWS for potential impacts. McMillen Jacobs is the project lead with assistance from NRCS and the local project sponsors.

## Work History

McMillen Jacobs Associates, Environmental Permitting (2008-now) GeoEngineers, Staff Biologist (2005-2008)

## **Registrations/Licenses/Certifications**

38-Hour USACE Wetland Delineation and Management Training Program USACE Wetland Delineation Arid West Supplement Training

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Western WA Wetland Rating System Training

40-Hour OSHA Health & Safety Certification (29 CFR 1910.120)

Washington State Certified Erosion & Sediment Control Lead



# Greg Allington

# Relevant Experience

<b>PROJECT INFORMATION</b> (Client, Project Title and Location, Role, Value, Contract Period)	Regulatory Team Lead	Permitting Lead	Field Inspection Lead	Permitting	Hatcheries	Water Lines	Dams	Habitat Restoration
Kauai Island Utility Cooperative (KIUC); Pu'u Opae Energy Pumped Storage EPC Project (25 MW), Kauai, HI – Environmental/Permitting Lead. (\$125M; 10/2018 - 02/2020)	•	•	•	•		•		
Yakama Nation and BPA; Melvin R. Sampson Coho Hatchery EPC Project, Ellensburg, WA – Permitting Lead. (\$15.8M; 02/2016 - 10/2019)	•	•	•	•	•	•		•
Shoshone-Bannock Tribes; Crystal Springs Hatchery, Springfield, ID – Environmental. (2012-2014)	•	•	•	•	•	•		
Idaho Department of Fish & Game (IDFG); Redfish Lake Creek Collection Facility Design-Build, Stanley, ID – Permitting Support (\$2M; 12/2016 – 10/2017)	•	•	•	•	•	•		
Idaho Department of Fish and Game (IDFG); Springfield Fish Hatchery, Springfield, ID – Permitting Support. (\$14.6M; 2011 – 2013)	•	•	•	•	•	•		
PacifiCorp; Yale Dam Powerhouse Intake Bull Trout Entrainment Reduction Net, Clark County, WA – Environmental Permitting. (2011)	•	•	•	•	•	•	•	
Avista Utilities; Nine Mile Dam Sediment Bypass System, Spokane County, WA – Environmental Permitting Compliance. (\$8.3M; 12/2016 – 2017)	•	•	•	•		•	•	
USACE; Napa Salt Pond Restoration Ponds 6, 6A, 7, and 7A, Napa County, CA – Environmental Permitting. (2014- 2015)	•	•	•	•		•	•	•





#### Education

 BS, Construction Management, Boise State University (2008)

#### Years of Experience

- 14 years in construction
- 9 years as cost estimator

#### Registrations/Licenses/Certs

- LEED Accredited Professional (Legacy)
- AIC Associated Constructor Level 1 Certification

#### Areas of Specialty

- Design-Build, EPC, and CM/GC delivery method
- GMP approach
- Construction Management
- Site access and layout logistics
- Major earthwork operations
- Structural concrete construction
- Heavy equipment selection
- Drilling and blasting
- Piling and Foundation Support
- Estimates for complex hydro projects over \$125M in value
- Drainage systems
- Flood prevention
- Storm water systems
- Gate structures

# Curtis Neibaur, LEED AP Project Controls / Cost Estimating

14 years of construction experience including nine years of estimating and scheduling of heavy civil construction work in the hydroelectric, dams, fisheries, and water resources markets.

Due to the combined experience of his current role as McMillen Jacobs' lead construction Cost Estimator, as well as previously serving as an onsite Project Manager for various civil works projects, he brings a unique understanding of construction costs, work sequencing, and realistic scheduling to projects. This has resulted in accurate cost estimates that are well thought out, reliable, and constructible. An outstanding example of his accuracy in estimating is the Springfield Fish Hatchery where it was constructed for \$13.7M—within the GMP budget that was established over 2 years prior.

Responsible for all aspects of preconstruction services and construction cost estimating for McMillen Jacobs and manages our estimating team during competitive bidding for proposals using a variety of contract methods such as construction only contracts, design-build, EPC, and CMGC delivery methods. Performs comparisons of scope to past projects, quantities and cost data between historical and active projects, which further refine McMillen Jacobs' historical cost libraries to help produce future estimates with greater accuracy. Maintains long-standing relationships with subcontractors and negotiates with suppliers to provide the best value to our clients.

Supports our design teams by providing construction cost estimates of our design packages. Helpful with collaborative efforts in value engineering studies and analyzing the cost/benefit of design alternatives. He provides suggestions related to cost effectiveness, constructability, operability, and alternative materials and approaches to determine the overall best value for clients.

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# Work History

McMillen Jacobs Associates, Cost Estimator (2010 – Current) M.A. Mortenson Construction, Field Engineer (2008-2010) Washington Group, Project Management Intern (2007-2008) DRP Construction, Project Engineer Intern (2007) Dilgard Construction, Residential Framer (2005-2006)



# Curtis Neibaur, LEED AP

# Relevant Experience

JACOBS ASSOCIATES

PROJECT INFORMATION (Client, Project Title and Location, Role, Value, Contract Period)	Project Controls	Cost Estimating	GMP Negotiation Support	Permitting	Hatcheries	Water Lines	Dams	Habitat Restoration
Yakama Nation and BPA; Melvin R. Sampson Coho Hatchery EPC Project, Ellensburg, WA – Cost Estimating Lead. (\$15.8M; 02/2016 - 10/2019)	•	•	•	٠	•	•		•
Avista Utilities; Nine Mile Dam Sediment Bypass System, Spokane County, WA – Cost Estimating Lead. (\$8.3M; 12/2016 – 2017)	•	•	•	•		•	•	
Idaho Department of Fish & Game (IDFG); Redfish Lake Creek Collection Facility Design-Build, Stanley, ID – Cost Estimating Lead (\$2M; 12/2016 – 10/2017)	•	•	•	•	•	•		
Idaho Department of Fish and Game (IDFG); Springfield Fish Hatchery, Springfield, ID – Cost Estimating Lead. (\$14.6M; 2011 – 2013)	•	•	•	•	•	•		
Sacramento Municipal Utility District (SMUD); South Fork Powerhouse and Boating Flow Release Facility (BFRF), aka Slab Creek Design-Build Project, Sacramento, CA – Cost Estimating Lead. (\$14.2M; 06/2016 – 10/2019)	•	•	•	•		•	•	
Avista Utilities; Nine Mile Dam Cooling Water System Design Build, Spokane County, WA – Cost Estimating Lead. (\$1.1M; 2018)	•	•	•	•		•	•	
USACE; Napa Salt Pond Restoration Ponds 6, 6A, 7, and 7A, Napa County, CA – Cost Estimating Lead. (\$16.8M; 2014-2015)	•	•	•	•		•	•	•
BC Hydro; Site C Clean Energy Project, Upstream Trap and Haul Fish Passage Design, BC, Canada – Cost Estimating Lead. (\$20M CAD est.; 2013 - 2019)	•	•	•	٠	•	•		



#### Years of Experience

26 years

#### Areas of Specialty

- Development, Implementation, and Monitoring of QA/QC Programs
- Constructability Reviews and Value Engineering
- CM/GC, D-B, & DB&O Contracts
- Demolition & Dewatering
- Civil, Structural, Architectural and Earthworks
- Mechanical, Electrical and Process
- Utility Relocation
- Systems Controls
- Piping
- Startup and Commissioning and FAT

# **J'hon-Paul Fronatt** Quality Assurance/Quality Control (QA/QC)

26 years of experience and specializing in developing, implementing, and monitoring QA/QC programs on complex construction projects. Serves as the client's representative, resident project representative, QA/QC manager, construction manager, project manager, and superintendent for general contractors as well as directly for clients. Experience includes construction of power plants and environmental remediation. Challenges on construction projects have included constructing at facilities during active operations while maintaining regulatory compliances and structural integrities of adjacent facilities; working with underground utilities including water, sewer, sludge, gas, electric, communications, crude oils and jet fuels; demolition in tight workspaces; and extensive dewatering.

## Work History

McMillen Jacobs Associates, QC/Project Manager (2018-now) Kennedy Jenks, Sr. Construction Manager (2015-2018) West Valley Construction, Project Manager (2014-2015) CH2M Hill Inc, Construction Manager (2002-2014)

### Registrations/Licenses/Certs

40-Hour Hazardous Waste Certification Asbestos Awareness and Waste Management Behavior Based Loss Prevention Systems (BBLPS) Safety Certified Fork Truck Operator Certified Forklift Operator Confined Space Supervisor Certification CPR and First Aid /AED Training Liability IQ for Architects and Engineering National Association of Corrosion Engineers Certification (CP-1) NFPA 70E Risk Cat 2 Qualified Person (electrical safety) Safety Coordinator Construction and Hazardous Waste Site Safety Trainer Supervisor

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# J'hon-Paul Fronatt

# Relevant Experience

<b>PROJECT INFORMATION</b> (Client, Project Title and Location, Role, Value, Contract Period)	QA/QC Plans	Independent/Field Testing	QA/QC Program Lead	Permitting	Hatcheries	Water Lines	Dams	Habitat Restoration
County of Hawaii, Department of Environmental Management Wastewater Division, Hilo WWTP Outfall Repair, Hilo, HI - Senior Construction Manager. (11/2015-05/2016)	•	•	•	•		•		•
City of Oklahoma City; (PAST05) Lake Hefner Water Treatment Plant Expansion, Oklahoma City, OK – QA/QC Lead / Resident Client Representative / Construction Manager. (02/2011 – 10/2012)	•	•	•	•		•		
Alderwood Water and Wastewater District; Picnic Point Wastewater Treatment Facility, Edmonds, WA - Project Consultant. (10/2009 - 05/2010)	•	•	•	•		•		
City of Fort Wayne; Wastewater Pollution Control Plant Dechlorination Facilities Improvements, Fort Wayne, IN - Construction Manager/Project Representative. (02/2006 - 08/2007)	•	•	•	•		•		
Buncombe County Soil and Water Department; Site Remediation and Restoration Project, North Western Buncombe County, NC - Project Consultant*. (\$2.3M; 08/2005 - 12/2005)	•	•	•	•		•	•	•





#### Education

 BS, Biological Studies, University of Idaho, Moscow

#### Years of Experience

19 years

#### Registrations/Licenses/Certs

- Certified Instream Flow Assessment Training
- Certified Hydroacoustic Sampling and Analysis Training
- Certified Electrofishing Training

#### Affiliations & Organizations

American Fisheries Society

#### Areas of Specialty

- Licensing and Natural Resource Project Management
- Licensing/Relicensing and Compliance
- FERC Regulatory Process and Permitting
- Meeting Facilitation
- Natural Resource Study Program Development and Implementation
- Fisheries Resource Consultant

# Cory Warnock FERC Support

Over 19 years of experience and leads the Regulatory, Licensing, and Environmental Services Group at McMillen Jacobs. He specializes in FERC licensing, relicensing, and natural resource study program development and implementation. Provides clients with strategic and technical support related to all aspects of hydro licensing and compliance and has extensive experience collaborating with and presenting to federal and state agencies.

Provides clients with strategic and technical support in licensing and permitting and has extensive experience collaborating with and presenting to federal and state agencies. Extensive experience developing comprehensive study programs for hydroelectric licensing's and relicensing's designed to define existing conditions and potential impacts associated with fish/aquatics, water resources, terrestrial, cultural and recreation and visual resources. Regularly coordinates and collaboratively manages the technical leads associated with the resource areas from initial strategic and study planning phases through logistical preparation, in-field data collection, analysis, report development and incorporation into the fundamental licensing documents.

His fisheries background lends itself to firm understanding of the aquatic assessments that typically come to the forefront when dealing with hydroelectric study programs. Experience with fish behavior impacts related to hydroelectric facilities and possesses experience in native salmonid habitat suitability evaluations and preference curve development, instream flow studies, anadromous and resident salmonid presence and abundance evaluations.

### Work History

McMillen Jacobs Associates, Senior Licensing/Regulatory Consultant (01/2013 - Current)

Devine Tarbell & Associates, Fisheries/Instream Flow Biologist (2005 - 2013)

Chelan County's Wenatchee, Fisheries Resources Consultant (2005 - 2007)

Douglas County Public Utility District, Aquatic Resource Consultant (2005-2007)

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# **Cory Warnock**

# **Relevant Experience**

#### **PROJECT INFORMATION**

(Client, Project Title and Location, Role, Value, Contract Period)

Borough of Petersburg; Blind Slough Hydro Project Upgrades, Petersburg, AK – FERC Support. (\$159k (study) and \$547k (design) 2017 – Ongoing; est. completion 06/2020)

Kenai Hydro; Grant Lake Project, Kenai Peninsula, AK – Licensing and Natural Resources Project Manager. (\$4.5M; 04/2013 – Ongoing)

Energy Northwest; Packwood Hydroelectric Project Relicensing Compliance and Implementation, WA – Project Manager, Natural Resources Study Lead, and Fisheries Resource Technician. (\$7M; 04/2013 – Ongoing)

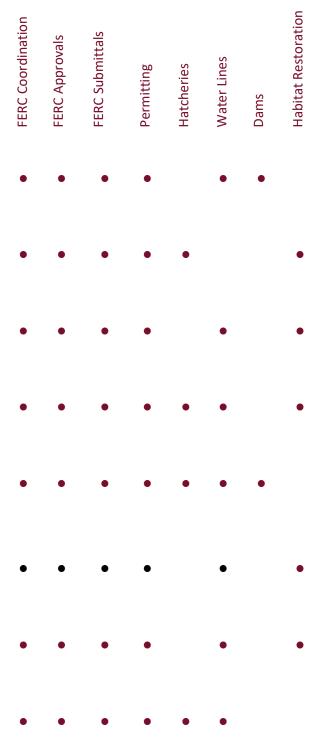
Nushagak Cooperative; Nuyakuk Falls Project, Dillingham, AK – Licensing and Natural Resources Project Manager (\$300k; 06/2018 – Ongoing)

Alaska Electric Light and Power; Salmon Creek and Annex Creek Project (Relicensing Study Development and Coordination), Juneau, AK – Natural Resources Study Program Lead. (\$477k; 01/2013 – 02/2016)

Southeast Alaska Power Agency; Swan Lake Pool Raise, FERC License Amendment and Associated Natural Resource Studies, Ketchikan, AK – Natural Resource Studies Lead. (\$375k; 11/2013 – Ongoing)

Avista Utilities; Spokane River Project (Implementation Team), Spokane, WA – Aquatic Resource Consultant. (\$75k; 03/2010 – 05/2010)

Pend Oreille Public Utility District; Box Canyon Hydroelectric Project, Compliance Study Development and Implementation, Newport, WA – Fisheries Resource Technician. (\$2M; 2013 –Ongoing).







#### Education

- BSE, Construction Engineering
- Western Michigan University (2006)

#### Years of Experience

12 years

#### Registrations/Licenses/Certs

- PE: WA
- Safety Trained Supervisor (STS-C)
- OSHA 10 Hour Construction
- Certified Erosion Prevention and Sediment Control Inspector (CEPSCI), South Carolina

#### Areas of Specialty

- Heavy civil
- Scheduling of complex construction projects with up to 2700 activities and 3-year duration
- Unique skillset due to work in engineering and construction
- Participated in pre-construction phase
- Project Management
- Design-Build cost plus reimbursable, hard bid/fixed price, unit price

# Paul Rader, PE Project Controls / Scheduler

Professional Engineer and Construction Scheduler with more than 14 years of construction experience, having noted successes in Critical Path Method Scheduling for design-build, EPC, and Design-Bid-Build contracts. Broad base of experience in project management (CPM scheduling, forecasting costs, quantity tracking, estimating, progress reporting), engineering (plan review, conceptual design, consultant management), and agency coordination (USACE, FHWA, DOT, various state, local, municipal and metro agencies). Participates in collaborative efforts during planning phases to identify impacts to the schedule and provides updates during construction and startup. Scheduling tasks include very complex construction projects up to three years in length with over 2,700 activities. Cost estimator for heavy-civil, hydropower, navigable dam, structural steel, and bridge projects.

# Work History

McMillen Jacobs, Construction Estimator (2017-Current) PCL Civil Constructors, Project Engineer / Design Build Coordinator (2012-2017) URS Energy and Construction, Construction Engineer (2007-2012) Administrative Controls Management, Scheduler / Estimator (2006-2007) Michigan Department of Transportation, Construction Technician (2004-2005)

### Awards

2015 Alliant Build America Merit Award (AGC) - SR520 Project Team Top 10 Roads for 2015 - #7 - Roads and Bridges Magazine - SR520 Project Team

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# Paul Rader, PE

# **Relevant Experience**

### **PROJECT INFORMATION**

(Client, Project Title and Location, Role, Value, Contract Period)

Gridflex; Badger Pumped Storage Project, WA – Cost Estimator and Project Scheduler. (\$600M total installed cost; (08/ 2019 – Ongoing)

USFWS Lyons Ferry Fish Hatchery, New Rearing Ponds, Architect-Engineer (A-E) Design and Construction Management Services, WA- Cost Estimator and Project Scheduler. (\$249k; 08/2018-09/2019)

Portland General Electric; Faraday Repower Project, Estacada, OR Cost Estimator and Project Scheduler. (\$60M; 12/2018 – Ongoing)

Kauai Island Utility Cooperative (KIUC); Pu'u Opae Energy Pumped Storage EPC Project (25 MW), Kauai, HI – Cost Estimator and Project Scheduler. (\$125M; 10/2018 -02/2020)

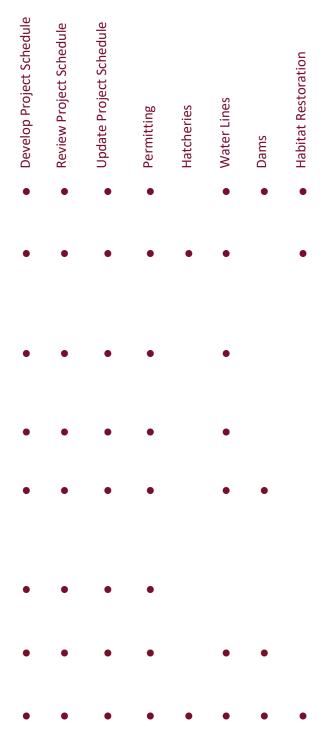
Sacramento Municipal Utility District (SMUD); South Fork Powerhouse and Boating Flow Release Facility (BFRF), aka Slab Creek Design-Build Project, Sacramento, CA – Cost Estimator and Project Scheduler. (\$14.2M; 06/2016 – 10/2019)

ENEL Green Power; Dietrich Drop Emergency Bypass Tainter Gate Replacement, Dietrich, ID – Cost Estimator and Project Scheduler. (\$414k; 08/2017 — 09/2017)

Avista Utilities; Nine Mile Dam Cooling Water System Design Build, Spokane County, WA – Cost Estimator and Project Scheduler. (\$1.1M; 2018)

Yakama Nation and BPA; Melvin R. Sampson Coho Hatchery EPC Project, Ellensburg, WA – Cost Estimator and Project Scheduler. (\$1.6M Design/\$16.7M Construction; 09/2018- est. 06/2020)







#### Education

- MA, Business and Human Resource Management, National University, San Diego, CA
- BA, Business Administration

#### Years of Experience

12 years

#### Registrations/Licenses/Certs

- OSHA Trainer
- OSHA 500, 502, 510, and OSHA 29 CFR 1910 General Industry
- CPR Instructor and Certified
- EM 385 Certified
- Hazardous Materials GHS
- HAZWOPER 40
- Construction Safety Management
- Crane Safety
- OSHA Scaffold Training
- Trench and Excavation Safety
- Fall Prevention and Protection
- Rigging Principles and Load Control
- Forklift Training
- Confined Spaces
- Mining and Tunneling
- MUTCD Traffic Control
- NFPA 70E

# William (Bill) Mitchell Corporate Health & Safety Director

Bill Mitchell is a hands-on safety professional with 12 years of experience in the safety and health management, emergency management services, and safety prevention programs on construction projects. With a record of success overseeing and managing the safety of crews of up to 500 at one time, he brings experience in dam, water resources, highway/bridge and rail improvements, hazardous waste abatements, and a variety of other heavy civil construction /demolition projects. Much of his experience has included large and complex bridge construction—many of which were across water and in densely populated urban areas such as San Diego. His safety plans have included precautions and proactive tasks to protect workers while working over water or at heights, in confined spaces (tunnels, excavated areas, or large-diameter pipe), and at an operating facility.

He has the proven ability to design, direct, and implement effective safety programs resulting in a consistently low EMR rate for his projects. He has the demonstrated experience in monitoring facilities and processes for adherence to OSHA and CAL OSHA, and EM 385 guidelines by overseeing compliance, inspections, and recommending corrective measures.

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# Work History

McMillen Jacobs Associates, Intern (06/2018-Current) Geo Tek, LLC, Field Technician (Summer 2015/2016/2017) BCR Land Service, Laborer (06/2014-09/2014)



# William (Bill) Mitchell

# **Relevant Experience**

#### **PROJECT INFORMATION**

(Client, Project Title and Location, Role, Value, Contract Period)

Portland General Electric; Faraday Repower Project, Clackamas River, OR – Health and Safety (12/2018 – Ongoing)

USACE Albuquerque District; John Martin Reservoir (Stilling Basin Sediment Removal and Dewatering Project), CO – Health & Safety (10/2018 – 05/2019)

Yakama Nation and BPA; Melvin R. Sampson Coho Hatchery EPC/Design-Build Project, Ellensburg, WA – Safety Director (09/2018 – Ongoing)

Metropolitan Water District of Southern California (MWD); Colorado River Aqueduct Pumping Plants Seismic Retrofit Project, San Bernardino, CA – Safety Director (12/2016 – 08/2018)

California Department of Transportation; I-15 Corridor Managed Lanes Projects, San Diego, CA – Safety Manager (\$200M; 2006-2012)

San Francisco Public Utilities Commission; Mountain Tunnel Inspection and Rehabilitation, CA – Corporate Safety (2016 - 2017)

