Added on 4/8/2026

Streambank erosion site on Santa Rosa Creek

REQUEST FOR PROPOSAL

Design, Environmental, and Permitting

Santa Rosa Creek Streambank Stabilization Project

MARCH 2026

PREPARED FOR
Cambria Community
Services District
Tristan Reaper
treaper@cambriacsd.org

PREPARED BY
Stillwater Sciences
1203 Main Street
Morro Bay, CA 93442
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Stillwater Sciences

COVER LETTER

Tristan Reaper
Program Manager – Utilities & Engineering
Cambria Community Services District (CCSD)
5500 Heath Lane, Cambria CA 93428
treaper@cambriacsd.org

RE: Design, Environmental, and Permitting of the Santa Rosa Creek Stabilization Project

Dear Tristan,

Thank you for the opportunity to present this technical proposal to collaborate with CCSD to stabilize and restore the western streambank of Santa Rosa Creek to support endangered species, habitat, water quality, recreation, emergency access, and infrastructure maintenance.

Stillwater Sciences (Stillwater) works with local agencies, water districts, and nonprofit organizations, including the cities of Morro Bay, Paso Robles, and San Luis Obispo; San Simeon Community Services District; San Luis Obispo County Flood Control and Water Conservation District; and Coastal San Luis Resource Conservation District, to implement large-scale habitat restoration design projects. This work includes hydrologic and hydraulic modeling, technical studies, restoration design, and assessments to guide siting and streamline state and federal permitting (e.g., biological resource evaluations, protocol-level species surveys, habitat assessments, and aquatic resources delineations). Additionally, our subcontractor **Yeh and Associates** has specialized expertise in geotechnical services for water conveyance, creek restoration, and flood infrastructure projects and has worked with local agencies including the cities of Morro Bay and Atascadero, and the County of San Luis Obispo.

Scott Smith, PE (Professional Civil Engineer, CA License #96443) based in Morro Bay, will have overall technical responsibility for this project. **Ken Jarrett**, who currently provides management of other projects for CCSD, will be the project manager and point of contact for CCSD to maintain cohesion and efficiency to support CCSD in the Santa Rosa Creek watershed.

We appreciate working with CCSD on a range of water resources, habitat, and infrastructure-related projects that support both community water supply reliability and protection of sensitive aquatic ecosystems and we look forward to the opportunity to support CCSD on this streambank stabilization project. As residents of the Central Coast with an office in Morro Bay, we genuinely understand and support CCSD's vision to restore and stabilize the streambank while protecting the natural environment. We are familiar with the project location from our habitat surveys in support of CCSD's instream flow assessment, and we have designed other streambank stabilization projects that have been constructed in the watershed. Based on this experience, we are aware that due to the flashy flows in Santa Rosa Creek and the threat to the CCSD sewer trunkline, an approach is needed that includes both an aggressive schedule to allow construction by summer 2027, and a long-term solution to address the source of bank erosion in this section of Santa Rosa Creek. To meet the aggressive schedule, we will rely heavily on local staff who are familiar with the watershed and will be able to focus on this project and begin field work directly following contracting. Our dedicated team will be able to coordinate efficiently between the CCSD, design, and permitting staff, which will be critical in keeping to a tight schedule. Due to the historical and ongoing erosion issues along this reach of Santa Rosa Creek, we have incorporated additional technical studies along with the hydraulic modeling to ensure that we design a robust and durable long-term solution that will prevent further erosion at this site.

Stillwater values our continued relationship with CCSD and is excited for the opportunity to apply our team's diverse skillsets and be an integral part of this important restoration and stabilization project, delivering meaningful and lasting improvements to the watershed in which we all live and work. Please contact us with any questions. We look forward to hearing from you.

Sincerely,

Ken Jarrett
Fisheries Biologist, Proposed Project Manager
ken@stillwatersci.com

Sapna Khandwala
Authorized Signatory
sapna@stillwatersci.com

EXECUTIVE SUMMARY

Stillwater is a 120-person science and engineering consulting firm founded in 1996 in the San Francisco Bay Area. Stillwater was founded on the principle that sound science results in better guidance for the actions taken by water and land managers, an approach that has been successfully applied on projects throughout the Central Coast and beyond. Since its founding, Stillwater has expanded to 9 offices throughout the west, with our Morro Bay office (within 20 miles of the CCSD's offices and facilities) established in 2013. Stillwater has specialists in habitat restoration design, fish passage, aquatic and terrestrial biology, wetland ecology, water quality, geomorphology, and environmental compliance and permitting. Stillwater routinely works with water districts and local agencies and non-governmental organizations to conduct feasibility and planning-level studies for large-scale habitat restoration and enhancement planning and design. This work includes surveys and assessments to help guide siting and streamline state and federal permitting (e.g., biological resource evaluations, protocol-level species surveys, habitat assessments, and wetland delineations); hydrologic and hydraulic modeling; and fish passage alternative analyses. With extensive experience along the Central Coast, Stillwater is currently working with the City of Morro Bay to improve stormwater and surface water management in the Morro Creek watershed; assisting the County of San Luis Obispo with permitting the operations of Lopez Dam; permitting and providing engineering design for streambank stabilization and habitat restoration at several locations in Arroyo Grande Creek; and designing fish passage and hydraulic connectivity projects at Meadow Creek in Arroyo Grande Lagoon. Stillwater and our subconsultant Yeh and Associates hold the appropriate licenses and certifications to perform this work. An organization chart for the project team is included in the **Key Staff** section below. Resumes begin on page 21.

Exhibit C: Proposer's Business Information

Length of time firm has been in business	30 years (founded in 1996)
Length of time at current location	16 years (Morro Bay office established in 2013)
Types and business license numbers	Stillwater, a 100% employee-owned and a California-certified small business (DGS #14919), holds business licenses in the following cities in California: Morro Bay (BL26-0002), Sacramento (1121631), Berkeley (BL-035817), Arcata (602819), Los Angeles (3019808-0001-6), Ventura (130019124)
CA State Contractor's License Number	N/A
Names and titles of officers of the firm	Sapna Khandwala, President and CEO | Maia Singer PhD, Chief Financial Officer | Joel Monschke, PE, Vice President
Sole Proprietorship doing business under a different name?	No
Federal Tax ID	94-3241861
Is your firm incorporated?	Yes. Stillwater is an employee-owned S Corporation.
Name and remittance address for invoices	Accounts Receivable, 2855 Telegraph Ave, Ste 400, Berkeley CA 94705
Local address	1203 Main St, Morro Bay, CA 93442

STATEMENT OF QUALIFICATIONS

Qualifications and Experience

Much of Stillwater's work regularly involves restoration design and support of biological and environmental compliance of infrastructure upgrades. This includes hydrologic and hydraulic modeling; topographic surveys; design of streambank stabilization projects, development of planning documents, and associated studies (e.g., biological resource evaluations, protocol-level species surveys and habitat assessments, wetland delineations, and/or permitting); restoration and revegetation planning (e.g., native planting palette development and design, installation, monitoring); construction-related environmental compliance (e.g., construction monitoring, fish rescue, turbidity monitoring during in-water work); and post-project monitoring (e.g., effectiveness monitoring, mitigation monitoring, compliance monitoring). Key staff have expertise and experience in the following services.

Design of streambank stabilization projects: With extensive expertise in streambank stabilization, our engineers can deliver projects that integrate geomorphic science, hydraulic engineering, and habitat restoration to address erosion and enhance ecological function. Based on designing similar projects in the Santa Rosa Creek watershed, we are familiar with the challenges of a flashy hydrology and habitat restoration opportunities. Our team designs and implements nature-based stabilization solutions—such as large wood structures, bioengineered soil lifts, floodplain grading, and targeted rock ballast and armoring—that reduce sediment loading, improve channel stability, and create high-quality habitat for salmonids and other aquatic species. Our staff routinely advances projects from alternatives analysis through 100% design, permitting, construction oversight, and as-built certification, with designs rigorously evaluated for flood performance and long-term resilience. Our science-driven, collaborative approach ensures streambank stabilization projects meet regulatory requirements and delivering durable, watershed-scale benefits.

Streambank restoration on Tenmile Creek. This photo highlights Stillwater's engineered design in action. The bioengineered coir soil lifts and strategically placed boulder/large wood structures replace traditional rock armoring to stabilize eroding banks and create critical habitat for ESA-listed salmon and steelhead. See ***References*** *for more information on this project.*

Preparation of applicable technical studies: Our approach to technical studies is grounded in scientific rigor, interdisciplinary collaboration, and regulatory alignment. Our scientists typically conduct a comprehensive desktop assessment of a project area (i.e., the project site and adjacent areas that may be affected by project activities) to classify vegetation types, assess the potential presence of special-status species, and identify and conduct any required species-specific surveys. This approach allows our staff to focus the surveys on areas that would be affected by the proposed project. Any required sampling permits would be obtained from the appropriate agency (if not already held), such as CDFW and USFWS, prior to implementing special-status species surveys. Our scientists have expertise conducting thorough wetland delineations, habitat assessments, and special-status plant surveys within short time frames to facilitate early communication with design planners and regulatory agencies. Our approach emphasizes collaboration, targeted studies, and the integration of scientific expertise to provide maximum environmental resource benefits and to balance ecosystem needs with infrastructure and water management.

Preparation of CEQA documents: Our permitting specialists have extensive experience preparing CEQA documents that support informed decision-making and regulatory compliance for complex water, energy, and habitat restoration projects. Based on years of work in the watershed, we have experience with the local species and habitats and have strong relationships with agency staff. We have prepared Initial Studies and completed related CEQA analyses in accordance with the most current CEQA regulations to systematically evaluate all environmental resource areas and clearly document impact significance, cumulative effects, and mandatory findings. Our staff excels at integrating technical studies, permitting documentation, and the best available science to develop defensible environmental analyses, mitigation measures, and monitoring approaches that meet agency requirements that withstand public and regulatory scrutiny.

✓ *Completing both permitting and design by a single Stillwater team provides added efficiency through streamlined coordination and data sharing, allowing timely design refinements in response to permitting needs and expediting a demanding project schedule.*

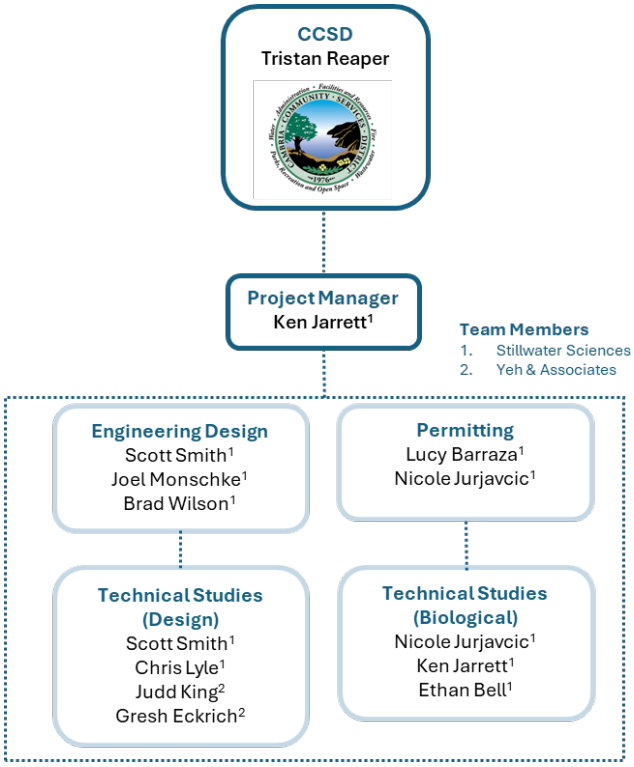
Acquiring applicable regulatory agency permits: Our experience includes evaluation of environmental impacts resulting from various projects and development of mitigation and monitoring plans for wetlands and sensitive species. From initial scoping to preparation of permits and final documentation, our staff have developed excellent working relationships with agencies and non-governmental organizations to identify and screen issues, develop measurable objectives, and specify a range of project alternatives and mitigation measures. Our permitting experience enables us to anticipate realistic timelines for agency approvals and ensure construction begins on schedule. Because agencies know our reputation and trust our work, permitting can be greatly facilitated.

Exhibit B: Subcontractor

Name under which subcontract is licensed	**Yeh and Associates, Inc.** Yeh has specialized expertise in providing geotechnical services for water conveyance, creek restoration, and flood infrastructure projects and have worked with local agencies including the cities of Morro Bay and Atascadero, and the County of San Luis Obispo, on streambed restoration and flood hazard projects
License number	GE2903 / PE 68257
Contact information	391 Front St, Grover Beach CA 93433 | 805-481-9590
Specific description subcontract	Geotechnical Evaluations

Key Staff

With a local team based in Morro Bay and Grover Beach, our scientists are familiar with and highly committed to CCSD and the Cambria community. We carefully selected our team members because of their expertise relevant to the proposed project, existing relationship with CCSD, and their availability to fully commit to this project. Our Project Team Organization Chart is provided below, followed by summarized qualifications of key staff. Resumes begin on page 21.



Ken Jarrett (*BS, Fisheries Biology*) is an experienced fisheries biologist and project manager with 22 years of experience. He has expertise in aquatic ecology with focused experience in fish population monitoring and fish habitat assessments. In addition to his technical background, Ken has strong project management experience, overseeing scopes, schedules, and budgets for complex aquatic resource studies and permitting support efforts. He has extensive experience working with CCSD, including as project manager for both the Santa Rosa Creek Instream Flow Study and the Lower San Simeon Creek Instream Flow Study. Ken will serve as project manager and provide aquatics support.

Ethan Bell (*MS, Fisheries Biology*) is a senior fisheries biologist with expertise in aquatic ecology and restoration design. For over 25 years, Ethan has led interdisciplinary projects, including instream flows, large-scale watershed assessments, fish passage analysis, population dynamics modeling, limiting factors analysis, restoration design, and endangered species consultation. He has extensive experience working on projects that combine restoration design

with ecological benefits to aquatic species throughout California. Ethan will provide oversight, assist with staffing recommendations, and provide senior review.

Scott Smith, PE (*MS, Civil & Environmental Engineering, Emphasis: Water Resource Engineering*) is a licensed civil engineer (PE# 96443) with expertise in engineering design of floodplain, river, tidal wetland, and coastal restoration projects. His experience includes surveying, coastal geomorphic assessments and monitoring, risk assessments, one- and two-dimensional (1D and 2D) hydraulic models, drafting and grading in AutoCAD Civil three-dimensional (3D) software, geospatial analyses, agency coordination, and construction oversight. He is currently developing the hydrologic and hydraulic model and flood resiliency designs for Morro and Lower Chorro Creeks. Scott lives in the Santa Rosa Creek watershed and will serve as lead for engineering designs and technical lead for engineering field surveys with overall responsibility for this project.

Joel Monschke, PE (*MS, Geotechnical Engineering*) is a licensed civil engineer (PE# 79688) with expertise in restoration engineering, hydrology and hydraulics, engineering geology, geotechnical engineering, and geomorphology. Joel has directed and developed projects that upgrade public access infrastructure and enhance fisheries and aquatic habitat. He has focused on the planning, design, and implementation of complex projects, including flood control, fish habitat and riparian restoration, hydrologic planning, groundwater recharge, landslide stabilization, and restoration effectiveness analyses. Joel will provide senior engineering QA/QC reviews.

Brad Wilson, PE, QSD (*BS, Environmental Resources Engineering*) is a licensed civil engineer (PE# 83428) whose specialty is working in AutoCAD Civil 3D to design complex projects, stakeholder outreach, and overseeing construction planning and implementation. He has expertise in industrial site decommissioning, planning, restoration and reuse with emphasis in permitting and regulatory compliance within the California Coastal Zone, design and operation of Low Impact Development Storm Water Management Systems, and application of HEC-RAS to evaluate hydrology and hydraulic aspects of design. Brad will support engineering designs.

Judd King, PE, GE (*BS, Civil Engineering*) is a licensed civil engineer and senior geotechnical engineer (PE# 68257, GE# 2903) with 25 years of experience in the planning, design, and construction of public works projects. He was project manager and lead geotechnical engineer for the repair of Unit G on the Nacimiento Water Project where the Salinas River laterally migrated and washed out ~600 feet of pipeline. He has also been project engineer or managed geotechnical services for water and wastewater facilities throughout the Central Coast, including a CCSD water and wastewater pipeline replacement project. Judd will serve as lead hydrogeologist and senior geotechnical engineer.

Chris Lyle (*BS, Geology*) has 17 years of experience in restoration engineering, restoration construction, geology, surveying, sediment transport and hydraulic modeling. He is an experienced modeler for fish passage, dam removal, and habitat enhancement, including basin-scale hydrologic and hydraulic modeling of the Los Angeles River, 1D and 2D hydraulic and sediment-transport modeling for the Matilija and Rindge Dam removals, and 2D hydraulic modeling of Lower Chorro Creek. Chris will provide hydrologic and hydraulic modeling support.

Nicole Jurjavcic (*MS, Ecology*) has 30 years of experience as a botanist/plant ecologist in riparian ecosystems throughout California. Her areas of expertise include special-status and invasive plant surveys, vegetation mapping and classification, wetland delineation, restoration design and plant monitoring, and environmental permitting. Nicole has been involved in preparing numerous environmental documents, including state and federal environmental permit applications, and has led baseline vegetation surveys, revegetation design, and monitoring protocol design tasks. Nicole will serve as wetland delineation and biological studies lead and will support design.

Lucy Barraza (*BS, Evolution and Ecology*) has over 20 years of experience managing and preparing technical reports and conducting investigations in compliance with CEQA, NEPA, CWA, ESA, and related regulatory requirements. Lucy has managed complex and controversial infrastructure projects and has managed and prepared environmental documents and state and federal permits for river restoration projects throughout California. Lucy has significant experience coordinating with federal and state agencies, including USACE, USFWS, USEPA, CDFW, Caltrans, and Regional Water Quality Control Boards. She is currently leading environmental review and permitting for flood resiliency projects in Lower Chorro Creek and Morro Creek. Lucy will serve as the permitting and regulatory lead.

Gresh Eckrich, PE, CEG (*MS, Civil and Environmental Engineering*) has 20 years of experience in engineering geology and geotechnical engineering (PE# 75208, CEG# 2684) with experience in overseeing geotechnical and geological services for assessing coastal geologic hazards. His experience with restoration and infrastructure projects has

included evaluations for liquefaction, slope stability, earthquake hazards, seepage, scour, seismic response, and mitigation of those hazards for local, state, and federal projects. Gresh will serve as senior engineering geologist.

Availability

Because effective management of both the administrative and scientific aspects of this project will be critical, we have selected an experienced project manager in Ken Jarrett to manage this time-sensitive project. Ken has been leading projects for CCSD for several years, brings a depth of experience in project management, a well-honed approach that includes an ability to listen and communicate effectively, the skill to rapidly assess problems and direct the appropriate people and resources to their resolution in a timely manner, excellent organizational and budget management skills, and the experience with and understanding of CCSD and local regulatory agencies. Additionally, Ken will be supported by Ethan Bell, who will provide oversight, assist with staffing recommendations, and provide senior review. Ethan has also been working with CCSD for several years and will be a secondary point of contact if Ken is unavailable (i.e., in the field or out of the office). Stillwater has successfully worked with Yeh and Associates on local projects. This structure provides CCSD with consistency, responsiveness, and reliability from a familiar team grounded in the local community.

Exhibit A: References

Our team has decades of experience with projects of the same scale and complexity as the scope requested in the RFP. For the projects described below, we successfully worked within available budgets and time frames, while problem-solving for various contingencies. These projects illustrate our understanding and experience with the scope of services, collaborative approaches to problem-solving, and ability to assist clients and diverse stakeholder groups with meeting their specific project goals.

Client: County of San Luis Obispo | 976 Osos St, San Luis Obispo, CA 93408 | 805-781-1046
Contact: Lisa Bugrova, Public Works | LBugrova@co.slo.ca.us
Project: Meadow Creek Lagoon Habitat Restoration | San Luis Obispo County, California
Completion Date: Spring 2026 | Contract Amount: $500,000

The Meadow Creek Lagoon Habitat Restoration Project fulfills a Jeopardy Biological Opinion issued by NMFS for the Arroyo Grande Creek Waterway Management Program, addressing risks to federally threatened South-Central California Coastal steelhead and habitat for tidewater goby and California red-legged frog. Stillwater is leading a multidisciplinary team (including Yeh and Associates) to develop lagoon restoration alternatives that improve habitat conditions without increasing flood risk, while supporting environmental impact report (EIR) preparation and permitting. The team developed and evaluated five alternatives, including setback levee and non-setback options, with measures such as improved tide gate function, levee and outfall modifications, and geotechnical risk considerations. Habitat enhancements include large wood placement, excavation and grading to meet species-specific habitat criteria, and improved hydrologic connectivity to support fish movement and water quality. Based on Stillwater's alternatives analysis, the county is currently advancing a preferred alternative for 60% design.

Client: Santa Clara Valley Water District, Dam Safety and Capital Deliver Division | 5750 Almaden Expressway, San Jose, CA 95118 | 408-630-2478
Contact: Wendy Young, Environmental Services Manager | wendyyoung@valleywater.org
Project: Live Oak Restoration | Santa Clara County, California
Completion Date: 12/2027 | Contract Amount: $652,323

Stillwater is supporting a habitat enhancement project in Coyote Creek, downstream of Anderson Dam in San Jose, as part of the mitigation requirements for the Anderson Dam Seismic Retrofit. This reach was categorized by NMFS and CDFW as deficient in suitable gravels and pool riffle morphology necessary to provide steelhead and other aquatic animal habitats. Tasks included hydraulic modeling, alternative designs, and conceptual designs through final 100% design plans and specifications. These designs are being developed to increase the amount of spawning and fry rearing habitat for California Coastal steelhead by introducing suitable spawning gravel, creating in-channel cover, and creating channel complexity through the introduction of large wood structures. Construction is planned for summer 2026, with Stillwater providing oversight.

Client: Eel River Recovery Project | PO Box 214, Loleta CA 95551 | 707-223-7200
Contact: Patrick Higgines, Managing Director | phiggin@sonic.net
Project: Tenmile Creek Streambank Restoration | Laytonville, Mendocino County, California
Completion Date: 02/2026 | Contract Amount: $100,000

The Tenmile Creek Streambank Restoration Project stabilized 594 feet of eroding streambanks in the South Fork Eel River watershed to reduce sediment pollution and improve habitat for ESA-listed salmonids, including coho, Chinook, and steelhead. Stillwater completed full engineered designs and construction oversight for a bioengineering-focused restoration approach emphasizing large wood and natural materials. The project incorporated coir soil lifts, rootwad logs, boulder armor/ballast, floodplain grading, and riparian planting to enhance habitat complexity, bank stability, and riparian function, with designs verified for 100-year flood conditions. Construction was completed in summer 2025, culminating in as-built documentation and project certification.

SCOPE OF WORK

Task 1. Project Coordination

Project coordination will be led by project manager Ken Jarrett with assistance from Ethan Bell. As project manager, Ken will coordinate a project kickoff meeting with CCSD staff. Ken, Ethan, and Scott Smith, the engineering design lead, will attend the kickoff meeting. This meeting will serve to clarify project goals and objectives, refine project approach and schedule, and identify any potential project constraints and challenges. This project will require an aggressive schedule with multiple interconnected deliverables; therefore, we will prepare a project schedule that highlights project milestones. To ensure we stay on schedule while allowing sufficient input from agencies and stakeholders on our design development, we will hold up to six meetings with stakeholders and agencies during key phases in the designs and permitting applications. Meetings with the CCSD Board or other CCSD representatives will be held after the project kickoff meetings and following the 65% design submittal.

General project administration is also covered under this task and will include activities associated with project administration, including regularly submitting invoices and progress reports, coordinating with CCSD, and finalizing contracts and scope of work. We will provide regular updates and monthly invoices. The Stillwater Morro Bay office is near CCSD facilities, and we will gladly meet in person to facilitate a positive working relationship and maintain effective communication and collaboration.

Deliverables

- Meeting agendas and notes; project schedule; monthly status and budget reports

Assumptions

- One kick-off meeting with CCSD
- Attendance at monthly meetings with CCSD throughout the Project (up to 21 months) by the project manager
- Participation at up to 8 monthly meetings by additional technical leads (e.g. design, permitting, and/or biological)
- Attendance at up to 6 meetings with Project stakeholders and agencies by the project manager and the project technical leads (design, permitting, and biological)
- Attendance at up to two CCSD Board and other CCSD meetings by the project manager and the design lead

Task 2. Preliminary Design

Task 2.1. Project Study Area and Planning

This Project task includes up to two meetings with CCSD and a site visit with CCSD to assess existing conditions and establish a project area that will encompass the full range of potential outcomes for project designs, construction access, and staging. Following conversations and assessments by technical leads, the maximum project area will be drawn in AutoCAD civil 3D and circulated to the technical leads responsible for various subtasks.

Deliverables

- Project study area map for planning

Task 2.2. Hydrology and Hydraulic Modeling Memo

This task covers preparing a memo to document the hydrology and hydraulic model results from Task 3.3. The memo will include short summaries of the hydrology analysis, including study area definition, description of data sources, low-flow results, and flood frequency analysis results as described in Task 3.3. Additionally, the memo will describe the hydraulic model domain, inputs, QA/QC reviews, and results for the flows analyzed in the hydrology study. The memo will also include discussion of and comparison to FEMA effective models to support the discussion and confirmation of "no-rise" conditions. The memo will include an appendix with up to 8 figures showing the hydraulic model results for key recurrence interval flows (flood flows), seasonal storm flows, and baseflows to support future ecological impact and benefit discussions and to support permitting.

Deliverables

- Hydrology and hydraulic modeling memo

Task 2.3. Preliminary Design Report

We will prepare a preliminary design report that includes three design alternatives to repair the bank and protect existing infrastructure in the project area. The three alternatives will be developed to meet the project goals as outlined in the RFP. These alternatives may range from least to most extensive, or they may present different methodologies to relieve erosional pressure on the bank. Based on recent site visits and descriptions in the RFP, this could range from grouted rock revetment to vegetated rock slope protection with larger floodplain modifications such as a secondary channel to reduce the overall hydraulic forces on the bank. The use of engineered log structures may support habitat and provide for upstream wood racking. Depending on findings in the hydrology and hydraulic modeling memo (Task 2.2), recontouring of the bank may extend as far as 200 feet upstream and/or downstream to ensure elimination of debris catch points and adequate design life. A draft preliminary design report will be developed to present the three design alternatives; show plan, profile, and typical sections for the three alternatives; and provide a discussion of the pros and cons, rough order of magnitude cost estimates, permit requirements, and general construction approach for each alternative. The report will include a table that summarizes the three alternatives under each of these categories. We will engage with the CCSD team to develop recommendations and select a preferred alternative. Once CCSD and other project stakeholders have reviewed the draft preliminary design report, we will finalize the report, which will include a section describing the selected alternative and next steps, as well as with the preliminary design drawings outlined in Task 2.4 as an appendix to the final report.

Deliverables

- Draft preliminary design report
- Final preliminary design report (includes selected alternative section and preliminary design drawings)

Assumptions

- One round of formal comments from CCSD and project stakeholders between the draft and final versions of the preliminary design report
- Informal preliminary report design comments to be catalogued and incorporated into the 65% design phase

Task 2.4. Preliminary Design Drawings (Selected Alternative)

We will prepare preliminary design drawings in AutoCAD Civil 3D using the surveyed topography and depicting existing utilities, staging, access, and dewatering sheet. The drawings will include site plan, profiles, typical sections, and schematic details for key design features.

Preliminary Design Drawings Sheet List

1. Title Sheet
2. Existing Conditions
3. Construction Access, Staging, and Water Management Plan
4. Site Plan and Profile
5. Typical Sections
6. Design Details (TBD)

Deliverables

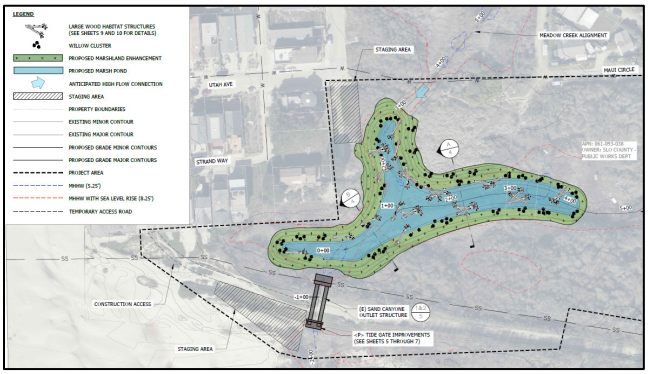
- Preliminary design drawings (up to seven sheets) as appendix to preliminary design report

Assumptions

- CAD drawings to be prepared in Stillwater standard styles

Task 2.5. Geomorphic Assessment

We will document geomorphic features and creek morphology including channel widths, gradients (profile), substrate, erosive or depositional areas, and general riparian vegetation conditions. The previous 2005 bank stabilization project location and extents will be identified, and the overall condition will be evaluated. Results from the survey will be used to inform project design and to tie in the current designs with the existing stabilization project. The initial geomorphic assessment will also establish survey controls and provide reconnaissance for subsequent topographic surveys.



Example preliminary design from a stream restoration project on Meadow Creek

Deliverables

- Section in preliminary design report with geomorphic design recommendations

Assumptions

- Attendance at a site visit by geomorphologist and engineer
- Desktop analysis to understand creek channel geometry
- Assess streambed soil samples collected under Task 3.2

Task 2.6. Existing Document Review

We will review the existing documents for the Fiscalini Ranch, Development Plan, and Coastal Development Permit, and other existing watershed documents (e.g., Santa Rosa Creek Watershed Management Plan [Stillwater 2012]) to inform project design and help address project permitting needs. We will supplement this information with publicly available data through sources such as USGS and the California Natural Diversity Database (CNDDB), where appropriate. We will leverage these documents to inform design under Tasks 2 and 6 and prepare the Biological Resources Report under Task 3.5.

Task 3. Technical Studies

We will conduct the following technical studies to inform project design, CEQA documentation, and environmental permitting. Cultural resource information from the Fiscalini Ranch Master Plan (FRMP) Final EIR is assumed to still be valid for use in the necessary CEQA document if the project does not qualify for a CEQA exemption.

Task 3.1. Topographic Surveys and Project Basemap (Memo)

Under this task, we will establish existing conditions site topography using a combination of GPS and optical Total Station surveys. We will tie into nearby National Geodetic Survey (NGS) benchmarks and establish onsite control points that can be used as local control for topographic surveys and basis of bearing and elevation in the construction implementation phases. This task includes desktop time to create an existing site conditions map.

We will use the latest in surveying hardware and software in the collection, processing, and depiction of surface features. Our team will utilize American Society of Civil Engineers Standard Guidelines for Investigation and Documenting Existing Utilities (ASCE 38-22) to characterize existing utilities. Our team will use the Trimble S7 robotic total station, R12i Global Navigation Satellite System receivers coupled with the TSC7 & TSC5 data collectors to observe surface data. Trimble Business Center will be used to review, process, and adjust observation data. All data will be horizontally fixed to the California State Plan Coordinate System, North American Datum of 1983, 2011 realization, Epoch 2010. The data will be vertically fixed to the North American Vertical Datum of 1988.

Survey Control Network: We will establish the survey control network for use as described above and additional ground surveying as required by project needs. The primary control network will consist of a minimum of four permanent monuments established by 24-inch x 0.5-inch (4) rebar with caps marked SWS SURVEY, or other permanent monument as conditions dictate. The position of these points will be observed using the Static Differential Global Positioning System method. Each position will have a minimum of 2 hours of observation time. These static observations will be post-processed in Trimble Business Center, using the NGS Continuous Operating Reference

Stations active control network. The secondary control network will be established on-site using Real Time Kinematic (RTK) surveying procedures and be calibrated to a minimum of four positions within the primary control network. The secondary control network will establish additional ground control points in the project area to facilitate the collection and depiction of the site topography and bathymetry.

Aerial Imagery: We will purchase high-resolution optical imagery of the project area through SkyWatch. Skywatch offers accurate and precise, high-resolution orthorectified imagery at competitive market prices.

Topographic and Utilities Surveys: We will complete a topographic and bathymetric survey along approximately 800 linear feet of Santa Rosa Creek to encompass the project area. The survey will sample elevations along top, toe, thalweg, major grade breaks, utilities, roads, culverts, and overbank/floodplain areas. Following the survey, the data will be post-processed in Trimble Business Center and brought into AutoCAD Civil 3D to develop a triangulated irregular network (TIN) surface to represent existing grades. The TIN surface will be exported from CAD to be used to support other technical studies for the project. A one-page memo will be issued that describes the project control network, basis of bearing, and basis of elevation for the project.

Topographic survey with total station in Santa Rosa Creek.

Project Basemap: We will combine existing grades, aerial imagery, utilities, infrastructure, land ownership, Fiscalini Ranch Preserve boundaries, rights-of-way, and planimetrics information in CAD to create a precise project basemap to be used for project planning and technical studies. The project basemap will be formatted as a drawing sheet and will later be incorporated into the design drawings as the existing conditions sheet. A pdf of the project basemap will be circulated to the project team to support planning efforts.

Deliverables

- Survey memo; Project base map (11x17 pdf)

Assumptions

- Ground surveys to be conducted by a two-person survey crew over 7 business days
- Attendance at two site visits by a licensed professional land surveyor and attendance at four short site visits by overseeing engineer

Task 3.2. Geotechnical Evaluations and Design Recommendations

This task includes reviewing existing geotechnical information, conducting site reconnaissance, and collecting streambed soil samples to support scour analyses. Other work will include preparing health and safety documentation, coordinating permits, and scheduling field activities. A one-day subsurface exploration will be performed, consisting of drilling two borings along the trail to depths of about 40 feet using a hollow stem auger rig, and one hand auger boring at the streambank to approximately 5 feet. Soil samples will be collected at regular intervals for laboratory testing. Testing will include compaction, moisture content, soil classification, grain size, and strength in accordance with ASTM standards, with test types determined by subsurface conditions.

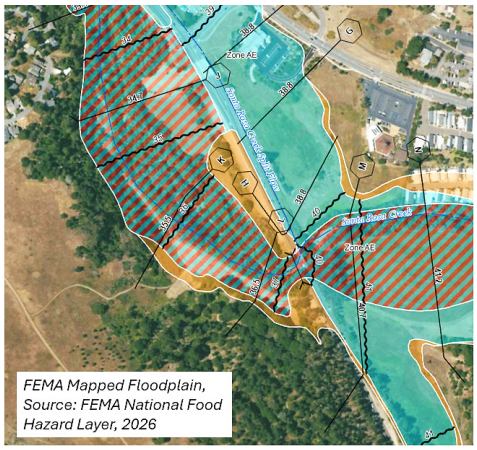
We will analyze field and laboratory data and prepare a geotechnical report summarizing site geology, subsurface conditions, grain size results, erosion and scour potential, and slope stability, including rapid drawdown considerations. The report will also provide recommendations for streambank stabilization design—such as RSP, keyway depths, and erosion control—as well as construction considerations related to excavation, shoring, and groundwater. After receiving review comments, we will issue a final report and provide geotechnical support during final design and bidding, including review of plans and specifications as needed.

Task 3.3. Hydrology Gage Analysis and 2D Hydraulic Modeling

We will analyze site hydrology using nearby gage data and prior streamflow studies and build a 2D HEC-RAS model of the project area. The outcome of this task will be a calibrated hydraulic model with model results for seasonal baseflows, seasonal storm flows, statistically derived flood recurrence interval flows, and FEMA flood flows.

Hydrologic Analysis: We will begin this task by establishing the hydrologic study area. This study area will encompass the reach from the Santa Rosa Creek stream gage at Main Street downstream to the project area. Using the USACE statistical software HEC SSP, we will run a Bulletin 17C analysis on the yearly peak flows at the Santa Rosa Creek stream gage. This analysis will provide the peak flows for 1-, 2-, 5-, 10-, 25-, 50-, 100-, and 200-year recurrence interval flood events at that gage. However, to gain a greater understanding of the hydrological dynamics between the upstream boundary of the project area and the Main Street gage, we will need to factor in contributions from ungaged inputs to the system downstream of the gage. To achieve this, we will use the area ratio method to adjust the outputs of the Bulletin 17C analysis at the gage and create a new set of recurrence-interval flood events at the upstream boundary of the project area. We will also analyze seasonal storm flows and baseflows to inform understanding of ecological conditions.

Hydraulic Model Build and Existing Conditions: We will use USACE HEC-RAS 2D to model the hydraulics through the project area. We will use topographic and bathymetric survey data to create the existing conditions terrain for the project area. The 2D model domain will begin approximately 400–500 feet upstream in the vicinity of FEMA cross section G. The model domain will be represented using a high-resolution 2D mesh developed in HEC-RAS. The mesh will apply fine cell sizes within the active channel corridor (approximately 5–20 feet) to accurately capture flow velocities, shear stresses, and backwater effects. Overbank and floodplain areas will use moderately larger cells (on the order of 20–50 feet) to balance spatial resolution with computational efficiency. The mesh will be supported by a detailed terrain raster, expected to be 3-foot resolution or finer, derived from the topographic and bathymetric survey of the creek channel. Land cover will be delineated at a detailed scale to support spatially variable roughness assignments across the stream channel, bars, irrigated fields, urbanized areas, and vegetated floodplain surfaces. These land-cover polygons will be included in the hydraulic modeling memo.



FEMA Mapped Floodplain, Source: FEMA National Food Hazard Layer, 2026

Hydrograph inputs generated from the hydrologic analysis will be applied at the 2D interface nodes. Inflow hydrographs will be applied as bulk flows distributed across the local terrain to achieve comparable accuracy for mapped flood extents. The downstream boundary condition for all simulations will use the normal depth method. Calibration will be completed using two to three calibration storm events from the hydrologic model, representing low-, medium-, and high-magnitude flow stream gage records. Once calibrated and reviewed with CCSD, we will use the model to simulate the full suite of statistical peak flows derived in the hydrologic analysis.

We will incorporate 65% and 95% design grades developed in AutoCAD Civil 3D into the 2D HEC-RAS model terrain to simulate proposed (with-project) conditions and confirm no rise in flood elevations due to the project implementation. Flood flow results for proposed conditions may also be used to refine design analysis such as scour depths and rock sizes. Low flow and seasonal flow results for proposed conditions will be evaluated to support understanding of biological impacts and benefits due to the project. Figures will be generated for key existing and proposed condition model results and included in the modeling memorandum and basis of design (BOD) report.

Deliverables

- Existing conditions hydraulic model in 2D HEC-RAS
- Proposed conditions modeling at 65% and 95% design
- Draft and final hydrologic and hydraulic modeling memo (*as part of Task 2.2*)

Assumptions

- The 2D model domain to be limited to the project area, along approximately 1000 linear feet of Santa Rosa Creek
- Designs to be developed to avoid the need for LOMR (Letter of Map Revision) and CLOMR (Conditional Letter of Map Revision) such that no FEMA-effective model updates are required

Task 3.4. Design Analysis (Rock Sizing, Scour Depth, Large Wood Structure Stability)

We will use industry standard equations for rock sizing, scour depth, and, if required, large wood stability to develop design criteria for the project. The design criteria will be used to refine the design at the 65% and 95% phases to

support meeting design life targets and goals. Calculations conducted under this task will be presented as appendices to the BOD report, with summary sections in the main report body.

Task 3.5. Biological Resource Assessment

We will prepare a BRA to inform the CEQA process and permitting for the project. We will review the following databases to identify special-species and sensitive natural communities that may be near the project: CDFW's CNDDB, California Native Plant Society's Inventory of Rare and Endangered Plants, USFWS's Information for Planning and Conservation (IPaC) planning tool, and NMFS's California species list online tool. We will also review existing spatial data, including aerial imagery and vegetation datasets (e.g., the USDA, Forest Service's Cal Veg, CDFW's VegCAMP) along with soils and topography information as a baseline for updating vegetation boundaries in the field.

One reconnaissance-level wildlife assessment survey will be conducted to assess wildlife species with the potential to occur. Given the compressed timeline, a comprehensive botanical survey will also be conducted following USFWS (2000) guidelines and CDFW (2018) protocols; this will provide definitive answers on what special-status plants are documented in the project area such as Hickman's onion (*Allium hickmanii*), Arroyo de la Cruz manzanita (*Arctostaphylos cruzensis*), or San Simeon baccharis (*Baccharis plummerae* subsp. *glabrata*). During the botanical survey, we will also refine vegetation communities based on CNPS (2026) guidelines and document any existing sensitive natural communities and Environmentally Sensitive Habitat Areas. The BRA will also include measures for avoiding impacts on these sensitive biological resources, for refinement and incorporation into the CEQA document.

Habitat assessment for San Simeon Creek instream flow study.

Deliverables

- Draft and Final Biological Resources Assessment (BRA)

Assumptions

- CCSD will secure access to the site.
- The reconnaissance-level wildlife assessment survey can be conducted by one wildlife biologist in a half day (4 hours) excluding travel. The first comprehensive botanical survey will be conducted concurrently by two botanists; two 8-hour surveys, excluding travel (i.e., one in spring and one in summer) will be necessary to capture the bloom periods of all special-status plants with the potential to occur.
- Protocol-level wildlife surveys will not be conducted as part of this task.
- A fisheries assessment, including an assessment of steelhead rearing habitat, can be completed based on existing information.
- The BRA will suffice for federal ESA consultation; thus, a separate BA will not be required.

Task 3.6. Wetland Delineation

Stillwater will delineate potential Waters of the U.S. (WOUS), using methods and protocols described in the USACE's *Wetland Delineation Manual* (1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008) (which covers the project area), the *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams: Final Version* (USACE 2025), and the *Rapid Ordinary High Water Mark Field Identification Data Sheet* (USACE 2024). In addition, guidance from USACE and USEPA on proper interpretation of continuous surface water connection under the CWA will be consulted (USACE and EPA 2025). The wetland delineation will capture features potentially subject to the jurisdiction of USACE under Section 404 of the Clean Water Act. The extent of water features will be delineated in the field by mapping indicators of the ordinary high water mark (OHWM) at representative cross-sections or transects and will be extrapolated using hydrological and topographic data. Stillwater will also delineate any additional waters of the State that may be subject to the jurisdiction of the Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), and the California's Coastal Zone (CCC), by delineating the top of bank (TOB) and extent of riparian vegetation. We will prepare

an Aquatic Resource Report for appending to the necessary permits. The report will include information on hydrology, mapped soils, and vegetation types along with the results of the field delineation.

Deliverables

- Draft and Final Wetland Delineation Report

Assumptions

- CCSD will provide all background materials and secure access to the site.
- There are no adjacent wetlands present at this site; thus the wetland delineation will focus on WOUS only.
- The wetland delineation can be conducted by two wetland delineators in one 8-hour day, excluding travel.
- To provide efficiencies, the wetland delineation can be completed concurrent with the second botanical survey.

Task 3.7. Tree Survey/Inventory

Stillwater will conduct an inventory of all trees that have the potential to removed, noting their location using submeter accuracy (i.e., RTK GPS or similar), species, and diameter at breast height (DBH).

Deliverables

- Incorporation of GPS point data into final design drawings (see Task 6).

Assumptions

- The survey will be inclusive enough to capture all trees with the potential to be removed.
- The survey will include one surveyor and one botanist and will not exceed 8 hours, excluding travel.

Task 4. CEQA Determination

The main project goal of bank stabilization appears to be consistent with and included in the FRMP, and the FRMP Final EIR identifies bank stabilization and invasive and non-native vegetation removal as actions included within the plan. Further evaluation will be conducted to determine if the FRMP Final EIR is still valid and can be used with no further CEQA action. Since this evaluation won't be completed until after the project begins, we have included two contingency tasks: Contingency Task 1 covers effort required if the FRMP is no longer valid or is no longer being pursued; and Contingency Task 2 covers effort required if the FRMP Final EIR is still valid, but the project either (a) includes a substantial change from what is described in the FRMP Final EIR or (b) results in a significant impact not previously identified in the FRMP Final EIR. No contingency tasks would be used if the project is covered under the existing FRMP Final EIR; if the project does not fit under the existing FRMP Final EIR, only one contingency task would be required. CCSD will make the final decision on selecting which of these three approaches will be used for CEQA.

Deliverables

- Brief consistency evaluation with the Final EIR

Assumptions

- CCSD's legal counsel will provide input regarding the validity of the FRMP and Final EIR and whether further action is required under CEQA.

Contingency Task Option 1: If the FRMP is no longer valid or it is no longer being pursued, this task would be used to prepare and file a Notice of Exemption (NOE) under Categorical Exemption (CE), Class 33 Small Habitat Restoration Projects.

Deliverables

- An NOE, if project meets CE Class 33 criteria

Assumptions

- The FRMP is no longer valid and/or no longer being pursued.
- The project meets the criteria for use of Class 33 Categorical Exemption under CEQA.

Contingency Task Option 2: If the project includes a substantial change or a significant impact not identified in the FRMP Final EIR, this task would be used to prepare a Supplemental Initial Study/Mitigated Negative Declaration (IS/MND). The Supplemental IS/MND would include a description of the substantial changes to the stabilization and restoration activities described in the FRMP Final EIR for Santa Rosa Creek and/or analysis of new significant impacts

not previously identified in the FRMP Final EIR. The Stillwater Team will prepare the Supplemental IS/MND following State CEQA guidelines, with the CCSD acting as the Lead Agency. All CEQA thresholds will be evaluated, but the technical analysis will focus on key environmental topics, including biological resources, hydrology, and water quality. The IS/MND process would take approximately 9 months to complete and could delay project construction until Summer 2028.

Deliverables

- Draft and Final Supplemental IS/MND (electronic versions)
- Notice of Completion (NOC)
- Notice of Intent to Adopt (NOI) the Draft IS/MND for distribution, Notice of Availability (NOA), Notice of Determination (NOD), and Mitigation Monitoring and Reporting Program (MMRP)

Assumptions

- CCSD's legal counsel confirms that an IS/MND needs to be prepared.
- Only the technical studies in this proposal are needed; FRMP Final EIR cultural resources information is still valid.
- Any new impacts associated with the project can be mitigated to a level of less than significant.
- CCSD will handle public notifications of the IS/MDN; Stillwater Team will file submittals to the Co. and the SCH.

Task 5. Permit Compliance

To ensure a focused, efficient permitting process, an interagency pre-application meeting will be held early in the design and planning process. During this meeting, an overview of proposed actions associated with the restoration and stabilization of the western streambank of Santa Rosa Creek will be presented along with a permit strategy. The purpose of this interagency pre-application meeting is to solicit feedback from regulatory agencies regarding the appropriate permit pathways for the project, forge relationships with the regulatory agency staff, understand any environmental or regulatory concerns early on, and strategize potential permitting efficiencies.

Construction of streambank restoration project in Santa Rosa Creek.

Using the expedited CDFW Cutting the Green Tape permitting pathways for restoration projects, we will prepare the following permit applications for the project: (a) USACE Section 404 NWP 27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities, or NWP 60, Activities to Improve Passage of Fish and Other Aquatic Organisms; (b) RWQCB Section 401 Statewide Restoration General Order (SRGO) WQC; (c) CDFW Restoration Management Permit (RMP) including take authorization for any state-listed species and authorization of impacts on rivers, streams, and lakes that would otherwise be subject to a Lake or Streambed Alteration Agreement; (d) USFWS application for use of the Statewide Restoration Programmatic BO; and (e) informal consultation under Section 7 of the ESA with NMFS.

Deliverables

- (1) USACE Section 404 NWP 27 or 60, (2) RWQCB Section 401 SRGO WQC, (3) CDFW RMP, (4) USFWS Restoration Programmatic BO application, and (5) informal consultation under Section 7 of the ESA with NMFS.

Assumptions

- Permit fees will be paid by CCSD.
- CCSD and applicable agency will provide one round of review and revision of each draft permit application.
- The project qualifies for the permit pathways listed above.
- Federal agency engagement is subject to federal government funding.
- There is no guarantee that all permits will be received by CCSD.
- Any potential take of steelhead can be avoided through relocation of the species during construction and other avoidance measures.
- CCSD will prepare the Coastal Development Permit and Caltrans Encroachment Permit.

Task 6. Final Project Plans/Specifications/Estimate/Report

We will refine the preliminary design, focusing on enhancing the overall precision of the design. This task will include preparation of design drawings, specifications, and a BOD report (with cost estimates) for the selected alternative. This task includes 65% (**Task 6.1**), 95%, (**Task 6.2**) and 100% design (**Task 6.3**) submittals with review cycles between each submittal.

Design Drawings

Stillwater will prepare the design drawings in a manner that conveys the design clearly and effectively to the contractor for implementation. Design drawings will be refined and submitted based on comments from CCSD and stakeholders at the 65%, 95% and 100% design phases. The project engineer's stamp will be included on the final 100% design drawings. The general organization of the design drawing sheets are shown below.

Final Design Drawings Sheet List

1. Title Sheet
2. General Notes, Symbols, Abbreviations
3. Existing Conditions Plan (See Project Basemap Section 3.1)
4. Demolition and Tree Removal Plan
5. Tree Removal Tables
6. Construction Access, Staging, and Water Management Plan
7. Horizontal Control Plan and Alignment Tables
8. Site Plan and Profile
9. Detailed Plan and Profile
10. Typical Sections
11. Grading Sections (1 of 2)
12. Grading Sections (2 of 2)
13. Erosion Control and Planting Plan
14. Planting Details and Seeding Tables

15–17. Design Details (TBD)

Specifications

We will prepare specifications in Construction Specification Institute (CSI) format for the 65%, 95%, and 100% design submittals. Specifications will follow CSI Master Format and include standard and technical specifications to accommodate all design and construction elements.

Basis of Design Report (including Cost Estimate)

We will submit a concise draft BOD report to accompany the 65% design report, and a final BOD report to accompany the 95% design. The BOD report will summarize all data collection, technical studies, and design criteria developed to support design refinements. The BOD will describe the overall construction approach, including detailed quantities, construction timing, materials, water management, and construction cost estimates. The engineers' estimate of probable cost (cost estimate) will be prepared using current interest rates, Caltrans cost data, SLO County cost data, region specific as-bid information provided by Stillwater and CCSD, and professional judgment.

Bid Package

The bid package will include the final 100% design drawings, final specifications, cost estimate, and bid sheet as an organized set of PDFs specifically for bid posting, following recommendations from Caltrans Ready to List guide.

Deliverables

- 65% design drawings (11x17) and specifications (3 hard copies, 1 electronic copy)
- Draft BOD report (includes cost estimate) (3 hard copies, 1 electronic copy)
- 95% design drawings (11x17) and specifications (3 hard copies, 1 electronic copy)
- Final BOD report (includes cost estimate) (3 hard copies, 1 electronic copy)
- Bid package: 100% design drawings (11x17), specifications, cost estimate, bid sheet (5 hard copies, 1 electronic copy)
- AutoCAD Civil 3D drawing files package with "read me" document for styles and navigation of drawing files

Assumptions

- Design drawings may include up to 18 sheets, with 17 sheets estimated to be required.
- Specifications will be in CSI format.

PROPOSED SCHEDULE

Project Task	2026									2027											
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Task 1. Project Coordination																					
1.1 Project Coordination	C																				
CCSD meetings	KO	BM										BM									
Stakeholder and Agency Meetings		S/A #1		S/A #2			S/A #3			S/A #4		S/A #5		S/A #6							
Task 2. Preliminary Design																					
2.1 Project Study Area and Planning																					
2.2 Hydrology and Hydraulic Modeling Memo				HHM																	
2.3 Preliminary Design Report						DPDR	FPDR														
2.4 Preliminary Design Drawings (Selected Alternative)							PDD														
2.5 Geomorphic Assessment																					
2.6 Existing Document Review																					
Task 3. Technical Studies																					
3.1 Topographic Surveys and Project Basemap (Memo)		Recon	Topo																		
3.2 Geotechnical Evaluations and Design Recommendations				DGR	FGR																
3.3 Hydrology Gage Analysis and 2D Hydraulic Modeling																					
3.4 Design Analysis (Rock Sizing, Scour, Large Wood Stability)																					
3.5 Bio Resource Asessment								DBRA	FBRA												
3.6 Wetland Delineation								DWD	FWD												
3.7 Tree Survey/Inventory																					
Task 4. CEQA Determination *																					
FRMP Final EIR Review																					
Task 5. Permit Compliance																					
USACE 404 Permit																					
Sect. 7 USFWS and NMFS																					
RWQCB 401 Cert																					
CDFW Streambed Alteration Agreement																					
Caltrans Encroachment Permit																					
Apply for Permits											Perm A										
Permits Issued																Perm R					
Task 6. Final Project Plans/Specifications/Estimate																					
6.1 65 % Design									65%												
6.2 95% Design											95%										
6.3 100% Design													100%								
Construction period (others)																	Constuction Period				

Symbols: C= Contract, KO = Kickoff, BM = CCSD Board or other District Meeting, S/A = Stakeholder/Agency Meeting, HHM = H&H Memo, GA = Geo Assessment, DPDR = Draft Preliminary Design, FPDR = Final Preliminary Design, DGR = Draft Geo Tech Report, FGR = Final Geo Tech Report, DBRA = Draft Biological Resource Assessment, FBRA = Final Biological Resource Assessment, DWD = Draft Wetland Delineation, FWD = Final Wetland Delineation, CEQA = CEQA Exemption (if needed), Perm A = Permit application submittal, Perm R = Permits Recieved, 65% = 65% Plans, Specs, Est, & Report, 95% = 95% Plans, Specs, Est, & Report, 100% = 100% Plans, Specs, Est, & Report.

* Timeline for CEQA assumes project will be covered under existing Master Plan Final EIR
- Under CEQA Contingency Optional Task 1 CEQA Exemption would be filed in Dec 2026 (assuming no Board approval)
- Under CEQA Contingency Optional Task 2 IS/MND would be filed and Board approval in September 2027.

PROJECT FEE PROPOSAL

Labor Class	Billing Rate	Staff	Task 1. Project Coordination HOURS	Task 2. Preliminary Design HOURS	Task 3.1 Survey and Basemap HOURS	Task 3.2 Geotech HOURS	Task 3.3. Hydrolgy/ Hydraulics HOURS	Task 3.4 Design Analysis HOURS	Task 3.5 BRA HOURS	Task 4 CEQA Determination HOURS	CEQA Contingency Optional Task 1 HOURS	CEQA Contingency Optional Task 2 HOURS	Task 5. Permit Compliance HOURS	Task 6.1. 65% Plans Spec Est HOURS	Task 6.2. 95% Plans Spec Est HOURS	Task 6.3. 100% Plans Spec Est HOURS	TOTAL HOURS	LABOR COST
S/E 12	$ 183	Jarrett, Ken	91	14	0	0	0	0	8	0	2	20	24	20	12	4	195	$35,685
S/E 15	$ 212	Smith, Scott	34	138	58	0	81	40	8	2	4	22	36	150	84	98	755	$160,060
S/E 13	$ 193	Barraza, Lucy	24	0	0	0	0	0	18	32	16	136	84	0	0	0	310	$59,830
S/E 17	$ 244	Burger, Holly	5	0	0	0	0	0	14	0	0	22	16	4	2	2	65	$15,860
S/E 15	$ 212	Jurjavcic, Nicole	19	0	0	0	0	0	25	0	0	22	34	24	14	4	142	$30,104
S/E 19	$ 270	Bell, Ethan	11	2	0	0	0	0	0	0	0	0	0	0	0	0	13	$3,510
S/E 20	$ 286	Monschke, Joel	0	2	0	0	0	0	0	0	0	0	0	8	4	16	30	$8,580
S/E 12	$ 183	Johnson, Coreen	0	0	0	0	0	0	8	0	0	24	0	30	20	10	92	$16,836
S/A 03	$ 113	Michelsen, Patrick	0	40	64	0	160	0	0	0	0	0	0	40	0	0	304	$34,352
S/E 05	$ 127	Denson, Gianni	0	60	104	0	0	48	5	0	0	0	0	150	100	20	487	$61,849
S/E 18	$ 255	Renfro, James	0	4	32	0	0	0	0	0	0	0	0	0	0	0	36	$9,180
S/E 16	$ 224	Braudrick, Christian	0	16	0	0	0	0	0	0	0	0	0	4	0	0	20	$4,480
S/E 08	$ 148	Jadeski, Emily	0	30	0	0	80	0	190	0	0	22	0	0	0	0	322	$47,656
S/E 06	$ 134	TBD S/E 06	20	0	0	0	0	0	10	0	0	0	0	0	0	0	30	$4,020
S/E 10	$ 162	Bilodeau, Carina	0	0	0	0	0	0	0	0	16	336	80	12	0	0	444	$71,928
S/E 05	$ 127	CantoAdams, Joelle	0	0	0	0	0	0	80	0	0	0	0	0	0	0	80	$10,160
S/E 05	$ 127	Roxbrough, Brianne	0	0	0	0	0	0	62	0	0	24	52	0	0	0	138	$17,526
TOTAL STILLWATER HOURS			204	306	258	0	321	88	428	34	38	628	326	442	236	154	3463	
TOTAL STILLWATER LABOR COST			**$39,391**	**$54,114**	**$40,896**	**$0**	**$47,092**	**$14,576**	**$64,943**	**$6,600**	**$6,894**	**$109,732**	**$58,912**	**$75,712**	**$40,964**	**$31,790**		**$591,616**
SUBCONTRACTOR LABOR																		
Sr. Project Manager - Sr. Engineer or Geologist	$ 244	Judd King	0	0	0	41	0	0	0	0	0	0	0	0	0	0	41	$10,004
Sr. Staff Engineer or Geologist	$ 146	Gresh Eckrich	0	0	0	88	0	0	0	0	0	0	0	0	0	0	88	$12,848
Engineer Intern	$ 94	Intern	0	0	0	44	0	0	0	0	0	0	0	0	0	0	44	$4,136
TOTAL SUBCONTRACTOR HOURS			0	0	0	173	0	0	0	0	0	0	0	0	0	0	173	$26,988
SUBCONTRACTOR LABOR MARK-UP		10%	$0	$0	$0	$2,699	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0		$2,699
TOTAL SUBCONTRACTOR LABOR COST			**$0**	**$0**	**$0**	**$29,687**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**		**$29,687**
TOTAL LABOR COST			**$39,391**	**$54,114**	**$40,896**	**$29,687**	**$47,092**	**$14,576**	**$64,943**	**$6,600**	**$6,894**	**$109,732**	**$58,912**	**$75,712**	**$40,964**	**$31,790**		**$621,303**

STILLWATER EXPENSES:	Unit Price	Task 1. Project Coordination Units	Task 2. Preliminary Design Units	Task 3.1 Survey and Basemap Units	Task 3.2 Geotech Units	Task 3.3. Hydrolgy/ Hydraulics Units	Task 3.4 Design Analysis Units	Task 3.5 BRA Units	Task 4 CEQA Determination Units	CEQA Contingency Optional Task 1 Units	CEQA Contingency Optional Task 2 Units	Task 5. Permit Compliance Units	Task 6.1. 65% Plans Spec Est Units	Task 6.2. 95% Plans Spec Est Units	Task 6.3. 100% Plans Spec Est Units	Total Unit	Cost
Rental Vehicle SUV-Standard (Day)+Fuel	$111	0	0	0	0	0	0	12	0	0	0	0	0	0	0	12	$1,332
LODGING (pp per day):	$150	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11	$1,650
MEALS (pp per day):	$55	0	0	0	0	0	0	17	0	0	0	0	0	0	0	17	$935
GNSS	$100	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	$100
SKYWATCH ORTH IMAGERY	$965	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	$1,930
GPS RTK GNSS Survey Package (daily)	$600	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	$1,800
Survey Package Robotic Total Station	$300	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	$1,500
Tablet Field Data Collector (daily)	$15	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	$60
Camera Digital Video (daily)	$20	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	$80
Wetland Delineation Package (daily)	$6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	$6
STILLWATER EXPENSES COST:		$0	$0	$4,630	$0	$0	$0	$4,763	$0	$0	$0	$0	$0	$0	$0		$9,393
ODC MARK-UP:	10%	$0	$0	$463	$0	$0	$0	$476	$0	$0	$0	$0	$0	$0	$0		$939
SUBCONTRACTOR EXPENSES:	**Unit Price**																
TRAVEL	$210	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	$210
Subcontract Drilling Services	$10,971	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	$10,971
Well Permits	$678	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	$678
Outside Laboratory testing	$2,230	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	$2,230
SUBCONTRACTOR EXPENSES COST:		$0	$0	$0	$14,089	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0		$14,089
SUB. EXPENSES MARK-UP	10%	$0	$0	$0	$1,409	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0		$1,409
TOTAL EXPENSES:		**$0**	**$0**	**$5,093**	**$15,498**	**$0**	**$0**	**$5,239**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**		**$25,830**
PROJECT COST:		**$39,391**	**$54,114**	**$45,989**	**$45,185**	**$47,092**	**$14,576**	**$70,182**	**$6,600**	**$6,894**	**$109,732**	**$58,912**	**$75,712**	**$40,964**	**$31,790**		**$647,133 ***

* Note that the total cost estimates for the three scenarios described in this proposal are given in the table below, as only one or neither of the contingency tasks will be required.

Budget Summary

Project Approach	Assumptions	Cost
Assumes Project Covered under FR Master Plan Final EIR	Includes costs for all tasks except CEQA Contingency Optional Task 1 and CEQA Contingency Optional Task 2	**$530,507**
Contingency Task Option 1 is Required for CEQA	Includes costs for all tasks except CEQA Contingency Optional Task 2	**$537,401**
Contingency Task Option 2 is Required for CEQA	Includes costs for all tasks except CEQA Contingency Optional Task 1	**$640,239**

Billing Rates

Stillwater Sciences Billing Rates	
Billing Classification	**Hourly Rate**
S/A 1	$86
S/A 2	$100
S/A 3	$113
S/E 4	$121
S/E 5	$127
S/E 6	$134
S/E 7	$142
S/E 8	$148
S/E 9	$156
S/E 10	$162
S/E 11	$172
S/E 12	$183
S/E 13	$193
S/E 14	$203
S/E 15	$212
S/E 16	$224
S/E 17	$244
S/E 18	$255
S/E 19	$270
S/E 20	$286

S/A = Scientist/Administrator;
S/E = Scientist/Engineer

Rates are applied for labor-hour level-of-effort contracts with reimbursement for expenses (including travel expenses and subcontractors) at cost plus 10%.

Yeh & Associates Billing Rates	
Billing Classification	**Hourly Rate**
Principal	$250
Senior Project Manager, Engineer, or Geologist	$235
Senior Project Specialist	$220
Project Manager, Associate Engineer, or Geologist	$210
Senior Project Engineer or Geologist	$175
Project Engineer or Geologist	$150
Senior Staff Engineer or Geologist	$140
Engineer or Geologist Intern	$90
Resident Construction Engineer	$225
Construction Manager	$205
Construction Observer	$165
Laboratory Supervisor	$155
CAD Designer	$170
Project Controller	$170
Administrative Assistant	$105

Overtime rates for Construction Observation and Office Staff are 1.5 x rates shown.
Laboratory tests are quoted on separate schedule or cost-plus 10 percent for outside laboratory testing when applicable.
Fees for expert witness preparation, testimony, court appearances, or depositions will be billed at the rate of $400 per hour.
Rates do not include prevailing wages for field services. Prevailing wages will be determined on a project-by-project basis.

EXHIBIT D: CONTRACTUAL TERMS EXCEPTIONS

Stillwater requests the following exceptions to the draft agreement for consultant services for the Santa Rosa Creek Streambank Repair and Enhancement Project.

1. In Section 3. PERFORMANCE, Stillwater requests to strike the words, "and to the best of his/her ability,
experience, and talent," as this requirement represents an uninsurable standard of care that is inconsistent with the basic
principles of negligence law.
2. In Section 10, OWNERSHIP OF DOCUMENTS, subsection (b), Stillwater requests to add, "All such documents
are not intended or represented to be suitable for reuse by District or others for purposes other than those stated in this
Agreement. Any reuse without written verification or adaptation by Consultant for the specific purpose intended will be at
District's sole risk and without liability or legal exposure to Consultant."

3. In Section 10, OWNERSHIP OF DOCUMENTS, Stillwater requests to add subsection (c), as follows: "Except as may be expressly set forth in this Agreement, all inventions, techniques, methods, and improvements held or developed by either Party prior to or independent of the services rendered under this Agreement are and will remain the property of the Party who held or developed the invention, computer programs, macro, script, model, program, map tools technique, method, or improvement ("Independent Work") and to the extent Consultant's Independent Work has been incorporated into the instruments of the services provided, Consultant shall grant the District a non-exclusive, non-assignable, royalty free, irrevocable license to use these instruments solely with respect to the Project and for no other purpose."
4. In Section 11. INDEMNIFICATION, Stillwater requests to strike the inclusion of "agents" in Indemnified Parties because the term is overly broad.
5. In Section 11. INDEMNIFICATION, Stillwater requests to strike the obligation to "defend" prior to a final determination of proportional fault. If it is preferrable to the District, Stillwater proposes the addition of the following language to subsections (a) and (d), "If Consultant is found to be the proximate cause of such claims or damages, Consultant agrees to reimburse District's defense fees and costs. Such indemnification shall be proportional to, and only to the extent that, Consultant is found to be the proximate cause of such claims or damages."
6. In Section 11. INDEMNIFICATION, subsection (b), Stillwater requests to replace, "where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part," with "to the extent the same arises out of…" because this modification will fairly allocate the risks for all parties.
7. In Section 11. INDEMNIFICATION, subsection (c), Stillwater requests to replace, "which arise out of, pertain to, or relate to", with "to the extent any arise out of…" because this modification will fairly allocate the risks for all parties.
8. Stillwater requests the addition of a waiver of consequential damages clause, as follows:
"13. CONSEQUENTIAL DAMAGES
Notwithstanding any other provision of this Agreement, in no event shall either Consultant or District be liable to the other Party for indirect, incidental, punitive or consequential damages of any nature (collectively consequential damages), including, but not limited to, loss of use, loss of revenue, or loss of income, whether arising in contract, tort (including negligence) or other legal theory, even if the possibility of such damages is known at the time of the execution of this Agreement."
9. In Section 21. TIME, Stillwater requests to replace, "time is of the essence" with "time is of the utmost importance" or a project schedule that allows for adjustments due to circumstances beyond Consultant's control.

Added on 4/8/2026

Ken Jarrett

Fisheries Biologist

Ken Jarrett (*B.S., Fisheries Biology*) is a fisheries biologist and project manager with 22 years of experience in aquatic ecology with focused experience in fish population monitoring and fish habitat assessments. Mr. Jarrett experience with fish habitat assessments and instream flow studies have required establishing and working closely with Technical Advisory Committees and resource agency staff to define objectives, monitoring approach, and project timelines. He is also experienced in numerous field sampling techniques such as (1) biological monitoring for construction projects, (2) fish scale aging and growth analysis, (3) fish movement studies using PIT tags and acoustic radio tags and fish migration traps, as well as (4) water quality and water temperature monitoring. In addition to his technical background, Mr. Jarrett brings strong project management experience, overseeing scope, schedule, and budgets for complex aquatic resource studies and permitting support efforts.

AREAS OF EXPERTISE

- Fisheries Biology
- Water Quality Monitoring
- Water Temperature Monitoring
- Aquatic Invertebrate Studies

YEARS OF EXPERIENCE

At Stillwater:22 years
In Total: 22 years

EDUCATION

B.S., *Fisheries Biology,* Humboldt State University, 2006

PERMITS

NMFS Section 10(A)(1)(A) (Permit #20085-3A) for take of listed South-Central California Coast steelhead

California Department of Fish and Wildlife (CDFW) Scientific Collecting Permit (SCP) (#20023-001) for South-Central California Coast steelhead

USFWS 10(a)1(A) recovery Permit #98536C-0.2 for California freshwater shrimp

ESA Section 10(a)(1)(a) permit #ES98536C for California freshwater shrimp

CESA 2081(a) permit/MOU for California freshwater shrimp

AFFILIATIONS

American Fisheries Society

SELECTED PROJECT EXPERIENCE

Santa Rosa Creek Instream Flow Study, Cambria, CA (*Client: CCSD*): Mr. Jarrett is serving as project manager and technical lead for this Instream Flow Study. His role involves working with staff from CDFW and the Coastal Commission as part of the project TAC to develop and implement an instream flow study in Santa Rosa Creek using the Instream Flow Incremental Methodology. This study will assess the relationship between surface flows and groundwater pumping within the watershed to identify streamflow thresholds needed to support various life stages of steelhead in Santa Rosa Creek. Results from this study will be used to inform the CCSD's pumping operations in the Santa Rosa Creek basin.

Lower San Simeon Creek Instream Flow Study, Cambria, CA (*Client: CCSD)*: Mr. Jarrett served as project manager and technical lead to work with a TAC including representatives of the Coastal Commission, CDFW, and State Parks to develop and implement an instream flow study in San Simeon Creek to assess the relationship between streamflow and habitat for federally listed steelhead and California Red-legged frog. The Instream Flow Incremental Methodology was used for assessing steelhead habitat conditions and habitat suitability surveys were conducted for California Red-legged Frog over a range of streamflow conditions. Results from the study were used to inform CCSD pumping operations and supported permitting for long-term operation of the CCSD Water Reclamation Facility.

Pico Creek Instream Flow Management Plan, San Simeon, CA *(Client: San Simeon Community Services District*): Mr. Jarrett worked with a TAC to develop and implement an instream flow study in Pico Creek. The study involved monitoring stream flow and aquatic habitat conditions within lower Pico Creek during critical seasons for federally listed steelhead and California red-legged frog. Mr. Jarrett worked closely with regional groundwater experts to assess the relationship between surface flows and groundwater pumping within the lower watershed to inform the District's operation of the two wells located along Pico Creek. Results from this study were used to balance water needs for special status species and inform pumping operations.

Added on 4/8/2026

Ethan Bell

Senior Fisheries Ecologist

Ethan Bell (*M.S, Fisheries Biology*) is a fisheries biologist with expertise with Pacific salmonids and trout. He is an experienced project manager and has provided technical expertise on a wide variety of interdisciplinary projects, including large-scale watershed assessments, fish passage analysis, population dynamics modeling, limiting factors analysis, restoration design, and endangered species consultation. Mr. Bell is also instrumental in coordinating and managing field studies, analyzing collected field data, as well as researching and writing reports and proposals. He is serving as Chair of the Morro Bay National Estuary Program's Executive Committee.

AREAS OF EXPERTISE

- Watershed assessments
- Instream Flows
- Steelhead limiting factors
- Aquatic Ecology

YEARS OF EXPERIENCE

At Stillwater: 26 years
In Total: 28 years

EDUCATION

M.S., *Fisheries Biology*, Humboldt State University, 2001
B.S., *Ecology and Evolution*, University of California at Santa Barbara, 1990

PERMITS

USFWS Section 10(A)(1)(A) (Permit #ES98536C) for tidewater goby

NMFS Section 10(A)(1)(A) (Permit #20085) for take of listed species for – South Central California Coast Steelhead

California Department of Fish and Wildlife (CDFW) Scientific Collection Permit (#20023-001) for Central California Steelhead

TRAINING

- Tidewater goby training. U.S. Fish and Wildlife Service, September 2009

PROFESSIONAL AFFILIATIONS

- American Fisheries Society
- Morro Bay National Estuary Program Executive Committee (Chair)
- California Advisory Committee on Salmon and Steelhead (Chair of Steelhead Subcommittee)

SELECTED PROJECT EXPERIENCE

Live Oak Restoration Reach, 100% Design, Morgan Hill, CA (*Client: Valley Water*): Stillwater is developing engineering designs for a habitat enhancement project in Coyote Creek. The project designs are being developed to increase the amount of spawning and fry rearing habitat for California Coastal Steelhead by introducing suitable spawning gravels and creating in-channel cover and complexity through the introduction of large wood structures. Mr. Bell is project manager, and provides technical support including biological criteria to guide design, monitoring and maintenance methods, and leads coordination with agencies for permitting.

Lower San Simeon Creek Instream Flow Study, Cambria, CA (*Client: CCSD)*: Mr. Bell served as project director for an Instream Flow Study on San Simeon Creek. The study objective was to assess the relationship between streamflow and habitat for federally listed steelhead and California Red-legged-Frog to inform CCSD pumping operations and support permitting for the Water Reclamation Facility. Mr. Bell coordinated closely with a TAC to determine the best study approach. The approach included the Incremental Flow Instream Flow Methodology for steelhead and habitat suitability surveys for California Red-legged Frogs.

Meadow Creek Lagoon Habitat Restoration, San Luis Obispo County, CA (*Client: San Luis Obispo County Flood Control & Water Conservation District*): Stillwater leads a multidisciplinary team to provide environmental and engineering services to develop a lagoon habitat restoration alternative to meet the project goals and support the District's preparation of an EIR and subsequent permitting. The scope includes identifying alternatives that restore lagoon habitat and not to increase flood risk. Mr. Bell is project director and aquatics technical lead.

Lower Chorro Creek Floodplain Resilience Project, San Luis Obispo County, CA (*Client: Coastal San Luis Resource Conservation District):* The Project goal is to enhance floodplain resilience in the lower Chorro Creek watershed by developing nature-based solutions to benefit aquatic resources and protect coastal communities and infrastructure. Stillwater supports the assessment phase of this project, including preparing existing conditions technical reports and assisting with the TAC. Mr. Bell is biological resources lead, guiding restoration designs to protect and restore sensitive species.

Added on 4/8/2026

Scott A. Smith, PE

Restoration Engineer

Scott Smith (*M.S., Civil & Environmental Engineering, Emphasis: Water Resource Engineering*) is a Restoration Engineer with a background in engineering design of river, tidal wetland, and coastal restoration projects in Northern California. He has worked on multidisciplinary teams to plan, develop design, and support complete construction of restoration projects. Mr. Smith's experience also includes surveying, coastal geomorphic assessment and monitoring, post-fire hydrology and risk assessment, 1D and 2D hydraulic models, drafting and grading in AutoCAD Civil3D, Geospatial analysis (GIS), agency coordination, and construction oversight.

AREAS OF EXPERTISE

- Restoration Project Design
- Topographic and Bathymetric Survey
- Coastal Monitoring and Data Collection
- Post-Fire Hydrology and Risk Assessment
- Hydraulic analysis and modeling (1D & 2D)
- AutoCAD Civil3D Modeling
- Geospatial Analysis with GIS
- Matlab Programming
- Data Management and Analysis

YEARS OF EXPERIENCE

At Stillwater: 4 years
In Total: 8 years

EDUCATION

M.S., *Civil & Environmental Engineering,* California Polytechnic State University, San Luis Obispo, 2018

B.S., *Civil Engineering,* California Polytechnic State University, San Luis Obispo, 2016

CERTIFICATION

Civil Engineer, CA 96443

PROFESSIONAL AFFILIATIONS

Surfrider Foundation

SELECTED PROJECT EXPERIENCE

Lower Chorro Creek Floodplain Enhancement Project, Morro Bay, CA (*Client: Coastal San Luis Conservation District*): Stillwater is supporting the planning and design of this floodplain resiliency project with the objective of enhancing flood and climate change resiliency to coastal communities and enhance aquatic and riparian habitat for aquatic organisms and the overall ecology within the project area. Stillwater provides topographic and bathymetric surveying, hydraulic and sediment transport modeling, preliminary design, and 65% level designs and permitting support. Mr. Smith is serving as project manager and lead engineer for the project.

Live Oak Restoration Reach, 100% Design, Morgan Hill, CA *(Client: Valley Water)*: Stillwater is developing engineering designs for a habitat enhancement project in Coyote Creek. The project designs are being developed to increase the amount of spawning and fry rearing habitat for California Coastal Steelhead by introducing suitable spawning gravels and creating in-channel cover and complexity through the introduction of large wood structures. Mr. Smith provides technical support including engineering design, topographic and bathymetric surveying, and hydrologic analysis.

Meadow Creek Lagoon Habitat Restoration, San Luis Obispo County, CA (*Client: San Luis Obispo County Flood Control and Water Conservation District*): Stillwater is providing environmental and engineering services to develop a lagoon habitat restoration alternative to meet the goals detailed above and support the District's preparation of an EIR and subsequent project permitting. The project scope includes identifying alternatives that both restore habitat in the lagoon, as well as not to increase flood risk. In his role as restoration engineer, Mr. Smith is leading design alternatives.

Red Cap Creek Floodplain Restoration Project at Schnable Diggings, Phase 1, Six Rivers National Forest, CA *(Client: Mid Klamath Watershed Council):* Mr. Smith supported 30% design of a floodplain and in-stream restoration project focused on rearing and spawning habitat for coho and chinook salmon. The project includes several in-stream large wood habitat structures, large wood bank protection, and a channel-adjacent low-invert alcove designed to capture seepage flow and provide rearing and refugia habitat.

Added on 4/8/2026

Joel Monschke, PE

Engineering Geomorphologist

Joel Monschke, PE *(M.S., Geotechnical Engineering)* is a licensed Civil Engineer with expertise in restoration engineering, hydrology and hydraulics, engineering geology, geotechnical engineering, and geomorphology. He has directed and developed projects that upgrade public access infrastructure and enhance fisheries and aquatic habitat, including fish passage. Mr. Monschke has focused on the planning, design and implementation of complex projects, including dam removal, flood control, fish habitat and riparian restoration, hydrologic planning, groundwater recharge, landslide stabilization, and restoration effectiveness analyses.

AREAS OF EXPERTISE

- Restoration Planning, Design, and Implementation
- Watershed and Channel Assessment
- Hydrologic and Hydraulic Modeling
- Geotechnical Engineering
- Geology/Hydrogeology

YEARS OF EXPERIENCE

At Stillwater: 12 years
In Total: 24 years

CERTIFICATIONS

Licensed Civil Engineer, California (#C79688); Arizona (#59454); Colorado (PE.0065031); Oregon (#89863PE); Washington (#25010902)
Qualified SWPPP Developer (QSD), California

EDUCATION

M.S., *Geotechnical Engineering*, University of California, Berkeley, 2002

B.S., *Engineering Geology and Hydrogeology*, Stanford University, California, 2000

AWARDS

2025 Golden Pipe Award from the Salmonid Restoration Federation for innovations in the salmon restoration field.

SELECTED PUBLICATIONS

Cui, Y., D. B. Booth, **J. Monschke,** S. Gentzler, J. Rodifer, B. Greimann, and B. Cluer. 2016. **Analyses of the erosion of fine sediment deposit for a large dam-removal project: an empirical approach.** International Journal of River Basin Management DOI: 10.1080/15715124.2016.1247362.

SELECTED PROJECT EXPERIENCE

Live Oak Restoration Reach Design, Morgan Hill, CA (*Client: Santa Clara Valley Water District*): Mr. Monschke is lead engineer for a 0.5-mile restoration reach on Coyote Creek downstream of Anderson Dam, as part of the Anderson Dam Seismic Retrofit Project. He led development of the 60% and 90% designs utilizing gravel augmentation, floodplain grading and large wood structures to improve steelhead habitat. Mr. Monschke provided design guidance and senior review/approval for the basis of design report and drawings at each project phase. His contributions included input on graded channel features to achieve habitat objectives and large wood stability analysis to maximize habitat function while reducing cost and risk. He was also a lead author of the flood impacts report.

Tenmile Creek Streambank Restoration Project, Laytonville, CA (*Client: Eel River Recover Project and North Coast Regional Water Quality Control Board*): Mr. Monschke was the lead design engineer for development of 60% and 100% design plans and basis of design report for three multi-benefit bank stabilization and habitat enhancement projects along Tenmile Creek, tributary to South Fork Eel River. The design included large wood and boulder toe/deflector structures with bioengineered coir lifts rebuilding the upper streambank. The project was constructed in 2025 and Mr. Monschke provided on-the-ground engineering support during construction.

Santa Rosa Creek Bank Rehabilitation and Habitat Enhancement Project, San Luis Obispo County, CA *(Client: Upper Salinas-Las Tablas Resource Conservation District):* Mr. Monschke performed a topographic field survey, combined new survey data with existing data, modeled hydraulics, calculated wood stability, and prepared conceptual to 100% restoration designs for extensive biotechnical treatments as well as large wood/boulder structures designed to enhance aquatic habitat and stabilize an eroding streambank that is undermining Santa Rosa Creek Road. Funding was secured for the project and construction was completed during the summer of 2020.

Lower Chorro Creek Flooplain Resilience Project, San Luis Obispo County, CA (*Client: Coastal San Luis Resource Conservation District*): Mr. Monschke provided senior engineering and geomorphic guidance during the existing conditions assessment and 35% design development including analytical review of modeling results, recommendations on locations and types of multi-benefit habitat enhancement and flood mitigation features, and landowner outreach strategies.

Added on 4/8/2026

Brad Wilson, P.E.

Civil/Restoration Engineer

Brad Wilson, P.E. and Q.S.D. (*B.S., Environmental Resources Engineering*) is a Civil/Restoration Engineer whose specialty is working in AutoCAD Civil 3D to design complex projects, conducting stakeholder outreach to support project development, and overseeing construction planning and implementation in the field. He has expertise in nuclear and industrial site decommissioning, planning, restoration and reuse with emphasis in permitting and regulatory compliance within the California Coastal Zone, design and operation of Low Impact Development (LID) Storm Water Management Systems, and application of HEC-RAS to evaluate hydrology and hydraulic aspects of design.

AREAS OF EXPERTISE

- Restoration and Civil Design with AutoCAD Civil 3D
- Permit, Stakeholder, and Regulatory Coordination
- Technical Writing and Documentation

YEARS OF EXPERIENCE

At Stillwater: 6 years
In Total: 16 years

EDUCATION

B.S., *Environmental Resources Engineering,* Humboldt State University, 2011

CERTIFICATIONS

- California Professional Civil Engineer (P.E., License #83428)
- Qualified Storm Water Designer (Q.S.D. License #83428)

SELECTED WORK EXPERIENCE

Marshall Ranch Stream Flow Enhancement Project, Briceland, CA (*Client: Salmonid Restoration Federation and WCB*): Mr. Wilson supported key infrastructure-related design components for a project involving 10 million gallons of off-channel water storage that will provide 30 gallons per minute of dry-season flow augmentation to 5.5 miles of Redwood Creek mainstem, a major tributary to the South Fork Eel River. He designed diversion intake structures, conducted engineering analysis for 90,000-gal water tank, and developed an electrical and plumbing plan for the project. Implementation funding of $4.2 million was approved in 2022 and construction was largely completed in 2023 with ~8 million gallons of water released into Redwood Creek between July and November 2024.

Humboldt Bay Power Plant — Nuclear Decommissioning and Site Restoration, Humboldt County, CA* *(Client: PG&E):* Mr. Wilson supported several phases of the Humboldt Bay Power Plan Nuclear Decommissioning Project including serving as a Civil Project Engineer during the decommissioning phase and serving as Lead and Lead Senior Civil Engineer during the permitting, design, and implantation phases of Site Restoration following decommissioning. His roles included engineering support for the design, planning, and field activities required to complete heavy civil aspects of nuclear decommissioning, civil engineering design inputs to an interdisciplinary permitting team; produced the conceptual through 100% restoration plan set used to obtain permits along with bidding and procurement. Mr. Wilson also supported field construction and planning plan execution phases ensuring methods and restored configuration achieved the specifications of the permits and documents;

Little Case Creek Fish Passage Design, Mendocino County, CA (*Client: Eel River Watershed Improvement Group and CDFW*): Mr. Wilson was project engineer during development of conceptual to 100% design plans and basis of design report for two culvert-to-bridge fish passage upgrade sites and associated instream aquatic habitat enhancement treatments. He led hydraulic modeling and CAD design for complex roughened channel segments under the proposed bridges and new 40 ft length bridges. He compiled construction cost estimates, used to support implementation fundraising. Construction was funded in 2023, and the bridges were constructed in 2024.

Yeh and Associates, Inc.
Geotechnical • Geological • Construction Services

Added on 4/8/2026

Judd J. King, PE, GE
Senior Geotechnical Engineer

Education
BS Civil Engineering, Cal Poly State University, San Luis Obispo, CA, 2001

Registrations
Registered Civil Engineer:
CE 68257, California;
23851, Nevada; 18170, Hawaii;
72151: Arizona

Registered Geotechnical Engineer:
GE 2903, California

Professional Affiliations
- American Society of Civil Engineers
- CalGeo, Past Board of Directors
- American Public Works Association

Publications
"Reducing Static Settlement Potential Using Prefabricated Wick Drains – a Case History." Seventh International Conference on Case Studies, Geotechnical Engineering, Chicago, Illinois, April 29-May 4, 2013

Joined Yeh
7/2015

Professional Experience
Judd is the lead geotechnical engineer and project manager for infrastructure, bridge, interchange, and restoration projects on the coast of California. He is experienced in the planning, design and construction of water, wastewater and water reuse, bridge, and restoration projects. He is familiar with local, state, and federal design requirements for infrastructure including Caltrans and AASHTO. Judd also teaches soil mechanics laboratory classes part time in the Civil Engineering Department at Cal Poly, San Luis Obispo.

He is experienced with the design of shoring, dewatering, foundation support, excavations adjacent to existing structures, and other geotechnical aspects commonly encountered at wastewater facilities. Judd has specialized expertise in geotechnical investigations for restoration and bridge projects. He also specializes in soft ground, mitigation of liquefaction, mechanically stabilized earth walls, reinforced soil slopes, ground improvement, tunneling, rock coring, and local projects ranging from land development to public works and infrastructure. He has 24 years of experience in the planning, design and construction of public works and has been the geotechnical engineer for projects throughout the central coast region.

Relevant Work History

Mid-Higuera Street Bypass Channel and Bianchi Bridge, San Luis Obispo, CA
Lead geotechnical engineer and project manager for preparation of a Geotechnical Report for the design of additional auxiliary channels to the San Luis Obispo Creek to provide additional flow capacity along the creek and to reduce flooding. The project also involved replacing the existing 60-foot long single span bridge on Bianchi Lane, and providing streambank protection and erosion control measures including vegetation and rip-rap in areas of the bypass channels and existing creek banks.

Morro Bay Lift Stations and Pipelines, Morro Bay, CA, 2023
Geotechnical Engineer and Project Manager for the design and construction of approximately 3 miles of pipelines to connect pump stations to the City's new water reclamation facility. Exploration focused on geotechnically challenging areas including the area around the existing wastewater treatment plant. Assisted with siting studies and initial feasibility studies for the new pipeline route and preparation of a preliminary geotechnical and geologic hazards report that considered faulting, sidehill grading, slope stability and seismic hazards.

Black Lake Restoration, Nipomo, CA, 2023
Project Manager and Senior Geotechnical Engineer for the design of a restoration at Black Lake on the Arroyo Grande Mesa. The Land Conservancy of San Luis Obispo County manages the site and obtained grant money to remove sediment and invasive species from the lake to improve the riparian environment. Yeh performed a geotechnical investigation to assess the stability of slopes for equipment to traverse during sedimentation removal. Judd also assisted in providing support to the Conservancy during permitting phase with San Luis Obispo County.

Chris Lyle

Hydraulic/Sediment Modeler

Chris Lyle (*B.S., Geology*) is an ecohydrologist with 17 years of experience in stream, river and estuary restoration, geomorphology, hydrology and hydrodynamic modeling. He specializes in river restoration, geomorphology studies, interdisciplinary watershed assessments, and hydrodynamic modeling. He has worked on ecosystem rehabilitation projects in a range of river and coastal settings throughout the west.

AREAS OF EXPERTISE

- Hydraulic, geologic/geotechnical analysis and modeling
- Stream restoration design
- CAD modeling
- CAD/GIS database management
- Geology

YEARS OF EXPERIENCE

At Stillwater: 9 years
In Total: 17 years

EDUCATION

B.S., *Geology*, California State University Long Beach, 2012

CERTIFICATION

SRH-2D — Two-Dimensional Hydraulic Modeling of Rivers (FHWA-NHI-135095)
Delft-3D FM — Coastal Hydrodynamic Modeling (Deltares)
Certified Remote Pilot, Federal Aviation Administration (FTN #C112946)
QSP — Qualified SWPPP Practitioner
CISEC — Certified Inspector in Sediment and Erosion Control
HAZWOPER — OSHA 40 Hour HAZWOPER
Nuclear Gauge — Portable Nuclear Density/Moisture Density Gauge Use & Training

SELECTED PROJECT EXPERIENCE

Lower Chorro Creek Floodplain Resilience Project, San Luis Obispo County, CA (*Client: Coastal San Luis Resource Conservation District):* The goal of the Project is to enhance floodplain resilience in the lower Chorro Creek watershed by developing nature-based solutions to benefit aquatic resources and protect coastal communities and infrastructure. Stillwater is supporting the assessment phase of this project, including preparing existing conditions technical reports and assisting with the TAC. Mr. Lyle served as lead hydraulic modeler of the 2D hydraulic and sediment transport modeling used to evaluate floodplain function and geomorphic response under current and proposed restoration scenarios. He provided senior technical oversight on nature-based design concepts, guided alternatives screening, and contributed to technical documentation.

Los Trancos Creek Instream Habitat Enhancement, San Mateo County, CA *(Client: Private Landowner)*: Mr. Lyle provided engineering designs, conducted topographic surveys, hydraulic modeling and development of conceptual to 100% design plans and basis of design report for streambank stabilization utilizing large wood features to enhance flows and instream aquatic habitat.

Redwood Creek (South Fork Eel River) Instream Habitat Enhancement Design, Briceland, CA (*Client: Eel River Watershed Improvement Group and CDFW*): Mr. Lyle oversaw topographic field survey data collection, created 100% design plans, and conducted hydraulic modeling. Mr. Lyle further developed modeling and utilized exports to conduct wood stability analysis for instream aquatic habitat enhancement treatments along mainstem Redwood Creek near the town of Briceland.

Pescadero Marsh Restoration Project, North Marsh North Pond Phase 1, Pescadero, CA (*Client: San Mateo Resource Conservation District*): Mr. Lyle conducted 2D hydraulic modeling for the project, simulating steady-state and variable tidal fluctuations over selected water years. He also provided design review and coordinated with complementary 3D modeling efforts to ensure an integrated approach. This project aims to restore the Pescadero North Marsh and Pond to improve water quality and enhance marsh habitats by reducing tidal influences in the north marsh and pond. The work includes site assessment, topographic and bathymetric surveying, and advancing the preferred conceptual alternative to 100% design, with construction in summer 2025.

Added on 4/8/2026

Nicole L. Jurjavcic

Senior Botanist/Plant Ecologist

Nicole Jurjavcic (*M.S., Ecology*) has 30 years of experience as a botanist/plant ecologist in various ecosystems across the west. Her areas of expertise include special-status plant species research and surveys; invasive plant surveys and assessments; vegetation mapping and classification; wetland delineation; restoration design and plant monitoring; database design and analyses; environmental permitting; and plant identification. Ms. Jurjavcic has been involved in preparing numerous environmental documents and state and federal environmental permit applications that include implementing Cutting the Green Tape pathways. She has led baseline vegetation surveys; revegetation design and implementation; and monitoring design and implementation tasks.

AREAS OF EXPERTISE

- Comprehensive botanical surveys
- Special-status species mitigation and monitoring
- Vegetation mapping and classification
- Delineation of waters of the U.S., including wetlands
- Revegetation design and ecosystem restoration
- Vegetation monitoring study design, implementation, and analysis
- Environmental permitting
- Plant identification, including sedges and grasses
- Vegetation and weed management plans
- Field and database design and analyses

YEARS OF EXPERIENCE

At Stillwater: 22 years
In Total: 30 years

EDUCATION

M.S., *Ecology (Conservation Biology),* University of California at Davis, 2000
B.A., *Biological Sciences (Ecology and Evolution),* University of California at Davis, 1995

PERMITS

California Endangered Species Act and Native Plant Protection Act Plant Voucher Collecting Permit (#2081(a)-20-032-V)

SELECTED PROJECT EXPERIENCE

Lower Chorro Creek Floodplain Resilience Project, San Luis Obispo County, CA (*Client: Coastal San Luis Resource Conservation District):* The Project goal is to enhance floodplain resilience in the lower Chorro Creek watershed by developing nature-based solutions to benefit aquatic resources and protect coastal communities and infrastructure. Stillwater is supporting the assessment phase of this project, including preparing existing conditions technical reports and assisting with the TAC. Ms. Jurjavcic is lead for botanical resources and the wetland delineation including review of the Biological Resources Evaluation and the Wetland Delineation reports. She is also supporting the planting design and permitting phases of the project.

Rindge Dam Removal — Malibu Creek Ecosystem Restoration, Malibu Creek, CA (*Client: California Department of Parks and Recreation and CalTrout], as a subconsultant to McMillen)*: Stillwater is providing planning, design, and engineering services supporting the removal of Rindge Dam and eight upstream barriers including leading the sediment transport and hydraulic analyses, geomorphic analysis, fisheries science, and environmental compliance phases of the Project. Ms. Jurjavcic is serving as biological resources lead, responsible for overseeing reconnaissance-level surveys and a wetland delineation of the eight upstream barriers. She is botanical lead for design including development of the planting schedule and sections of the specifications documents; development of the Revegetation and Management Plan; and drafting of the botanical sections of the Monitoring and Adaptive Management Plan.

Dos Rios State Park General Plan Project, Stanislaus County, CA *(Client: PlaceWorks for California State Parks)*: Ms. Jurjavcic is Project Manager for studies on an approximately 1,603-acre unclassified parcel located at the confluence of the Tuolumne and San Joaquin Rivers that includes the preparation of a General Plan and classifying and naming this new State Park property. She oversees the biological resources evaluation, which includes as assessment of sensitive natural communities, special-status plants, fish, and wildlife, and wetlands. This information will be utilized to inform planning and conceptual design of recreation, user facilities, and resource protection areas, as well as the next steps in biological surveys. She also provides regulatory guidance and preliminary assessment of Standard Project that will be implemented.

Added on 4/8/2026

Lucila Barraza

Regulatory Permitting Specialist

Lucila Barraza (*B.S., Evolution and Ecology*) is a Senior Project Manager, regulatory permitting specialist, and qualified biologist with over 20 years of experience managing and preparing technical reports and investigations in compliance with California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and preparation and acquisition of environmental resource permits in compliance with CWA, ESA, CESA, Fish and Game Code Section 1602 and other related regulatory requirements. She has extensive experience managing complex and controversial infrastructure projects.

AREAS OF EXPERTISE

- Managing, preparing, and reviewing CEQA and NEPA studies and permits including Cutting the Green Tape CEQA exemptions and restoration permits, IS, EA, EIR, EIS, mitigation monitoring plans and standard environmental permits
- Agency coordination and regulatory compliance
- Jurisdictional delineations, nesting birds, vegetation and wildlife surveys, and nesting bird construction buffers
- Biological surveys and fieldwork

Highly Proficient:

- California Environmental Quality Act (CEQA)
- National Environmental Policy Act (NEPA)
- Clean Water Act (CWA)
- Endangered Species Act (ESA)
- Project Management (PM)
- Project Planning/Scheduling
- Quality Assurance/Quality Control
- Public Outreach

YEARS OF EXPERIENCE

At Stillwater: 6 years
In Total: 22 years

EDUCATION

B.S., *Evolution and Ecology*, University of California, Davis, 2004

PROFESSIONAL AFFILIATIONS

California Society for Ecological Restoration (member)

SELECTED PROJECT EXPERIENCE

Lower Chorro Creek Floodplain Resilience, San Luis Obispo County, CA (*Client: Coastal San Luis Resource Conservation District):* The Project goal is to enhance floodplain resilience in the lower Chorro Creek watershed by developing nature-based solutions to benefit aquatic resources and protect coastal communities and infrastructure. Stillwater is supporting the assessment phase, including preparing existing conditions technical reports and assisting with the TAC. Ms. Barraza is leading the CDFW Statutory Exemption for Restoration (SERP) Projects CEQA process and the environmental resource permitting process including coordination with USACE, CDFW, and RWQCB.

Axios Winery Bridge Restoration, Napa, CA *(Client: Axios Winery)*: The project involved replacement of incised and eroding streambanks at the Axios Winery Bridge crossing over Blossom Creek with an engineered stabilized bank and a widened floodplain bench and layback streambank, including native plantings. Ms. Barraza managed and prepared the Small Habitat Restoration Project Notice of Exemption under CEQA and the following permits: USACE Section 404 NWP PCN Permit; CDFW Habitat Restoration Enhancement Act (HREA) permit; Notice of Intent to use the State Water Resources Control Board's Order for Clean Water Act Section 401 General Water Quality Certification for Small Habitat Restoration Projects (SHRP); and the County of Napa Grading Permit. Ms. Barraza led coordination meetings with all permit agencies, and all above-mentioned permits were successfully obtained.

Newhall Pass I-5 Wildlife Crossing Design, Los Angeles County, CA (*Client: Resource Conservation District of the Santa Monica Mountains*): The Project goal is to enhance regional wildlife connectivity between the Santa Susana and San Gabriel Mountains by developing a wildlife crossing across Interstate 5 (I-5) in the Newhall Pass region. The team will conduct a Feasibility Study to determine the optimal location(s) for crossings and associated habitat enhancements, including the adjacent State Route 14 freeway, followed by Caltrans environmental scoping documentation, CEQA environmental review and design to 60% of an overhead wildlife crossing structure across Interstate 5 in the Newhall Pass Region near Santa Clarita on approximately 1 acre of land in Los Angeles County. Ms. Barraza is leading preparation of the Caltrans Preliminary Environmental Analysis Report, CEQA documentation and permitting for the Project.

Added on 4/8/2026

Yeh and Associates, Inc.
Geotechnical • Geological • Construction Services

Gresham D. Eckrich, PE, CEG
Senior Geological Engineer

Education
MS, Civil and Environmental Engineering, University of California, Berkeley, 2007

BS, Geological Sciences, University of Michigan - Ann Arbor, 2003

Registrations
- Registered Professional Civil Engineer: California No. 75208
- Certified Engineering Geologist: California No. 2601
- Registered Professional Geologist: California No. 8789
- LEED Accredited Professional

Professional Associations
- American Society of Civil Engineers
- American Public Works Association
- American Council of Engineering Companies, Officer
- American Rock Mechanics Association

Joined Yeh
11/2016

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Grover Beach, CA 93433
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Professional Experience
Mr. Eckrich has more than 20 years of experience in engineering geology and geotechnical engineering. He has specialized experience in the evaluation of dams and levee systems, seepage and slope stability analyses, seismic hazard analyses, and the mapping and assessment of geologic hazards. He has managed geotechnical services for high-profile onshore and nearshore infrastructure projects across the western US, including the design and construction of dam rehabilitations, flood control levees, storm damage repairs, bridges, and geologic hazard mitigation projects. Mr. Eckrich also has experience in construction and laboratory testing, interpretation of field and laboratory data, and preparation of geotechnical, engineering geology, and geologic hazard reports.

He has expertise in onshore field exploration for geotechnical investigations. He is experienced with hollow stem auger and mud rotary drilling, backhoe trenching, cone penetration technology, well installation, and undisturbed sampling using thin-walled samplers.

He is well-versed in flood protection design guidelines and has worked closely with the US Army Corps of Engineers, multiple regulatory agencies, and a number of local counties, cities and service districts. He has international project experience in Panama, Saudi Arabia, Abu Dhabi, Dubai, and Canada.

Relevant Work History

Arroyo Grande Creek Levee Emergency Repair, San Luis Obispo County, CA, 2023-2024
Gresh is serving as *Project Manager* for the geotechnical evaluation of four hydraulic barriers proposed to repair areas along the Arroyo Grande Creek Levee that were damaged by high creek flows during the January 2023. Burrowing animals caused extensive void systems in the levee embankments that generally shortened seepage flow paths and increased the potential for seepage-related hazards and slope instability. The geotechnical evaluation included reviewing as-builts and previous studies, advancing eleven cone penetration test (CPT) soundings along the north and south levees, and performing seepage and slope stability analyses to meet typical design criteria and reduce the potential for seepage-related damage to the levee during a flood event with a 10-year recurrence interval. Construction of the barriers is anticipated to start in February 2024.

Meadow Creek Restoration, San Luis Obispo County, CA,2021-present
Gresh is serving as *Project Manager* for the geotechnical evaluation to increase connectivity between Arroyo Grande Creek and Meadow Creek Lagoon and restore/enhance the Meadow Creek Lagoon. The potential restoration area encompasses Meadow Creek Lagoon, Arroyo Grande Creek Lagoon, and the earthen Arroyo Grande Creek Levee that separates those two waterbodies. The evaluation consisted of a site reconnaissance, review of previous studies, an evaluation of geologic hazards, and preliminary geotechnical analyses to provide the design team with preliminary considerations and recommendations for selecting a preferred restoration alternative.

Arroyo Grande Creek Levee Waterway Management, San Luis Obispo County, CA, 2012-2020
Gresh served as *Project Manager* for the geotechnical evaluation of alternatives to raise the levees along a portion of Arroyo Grande Creek and proposed improvements to the north levee. The geotechnical studies included seepage, slope stability, liquefaction, and settlement analyses to evaluate potential deficiencies relative to the existing and proposed levee system.