

Pursuant to Government Code Section 54953(e), members of the Resources & Infrastructure Standing Committee and staff will participate in this meeting via a teleconference. Members of the public can submit written comments to the Board Secretary at boardcomment@cambriacsd.org.



CAMBRIA COMMUNITY SERVICES DISTRICT

Karen Dean, Chair of the Resources & Infrastructure Committee, hereby calls a Special Meeting pursuant to California Government Code Section 54956. The Special Meeting will be held: **Wednesday, April 20, 2022, 2:30 PM**, . The purpose of Special Meeting is to discuss or transact the following business:

NOTICE OF SPECIAL MEETING

CAMBRIA COMMUNITY SERVICES DISTRICT RESOURCES & INFRASTRUCTURE COMMITTEE

**Wednesday, April 20, 2022
2:30 PM**

Please click the link below to join the webinar:

<https://us06web.zoom.us/j/81525992920?pwd=Z1VTa0hlOGc0SUVQTUk4dDNJK3ErZz09>

Passcode: 190064

Or One tap mobile:

US: +16699006833,,81525992920# or +12532158782,,81525992920#

Or Telephone:

Dial (for higher quality, dial a number based on your current location):

US: +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799 or +1 929 205 6099 or +1 301 715 8592 or +1 312 626 6799

Webinar ID: 815 2599 2920

International numbers available: <https://us06web.zoom.us/j/81525992920>

Copies of the staff reports or other documentation relating to each item of business referred to on the agenda are on file in the Office of the Board Secretary, available for public inspection during District business hours. The agenda and agenda packets are also available on the CCSD website at www.cambriacsd.org. Please call 805-927-6223 if you need any assistance. If requested, the agenda and supporting documents shall be made available in alternative formats to persons with a disability. The Committee Chairperson will answer any questions regarding the agenda.

1. OPENING

A. CALL TO ORDER

B. ESTABLISH QUORUM**C. CHAIRMAN'S REPORT****D. AD HOC SUB-COMMITTEE REPORTS****E. COMMITTEE MEMBER COMMUNICATIONS**

Any Committee Member may make an announcement, report briefly on his or her activities, or ask a question for clarification.

F. PUBLIC COMMENTS ON AGENDA ITEMS

Members of the public may now address the Board on any item on its agenda today.

2. REGULAR BUSINESS

- A. Discussion and Consideration of Agreement for Consultant Services with Kevin Merk Associates, LLC for Environmental Consultation for the Water Reclamation Facility (WRF) Project

3. FUTURE AGENDA ITEMS**4. ADJOURN**

CAMBRIA COMMUNITY SERVICES DISTRICT

TO: Resources & Infrastructure Committee

AGENDA NO. **2.A.**FROM: John F. Weigold IV, General Manager
Ray Dienzo, Utilities Department Manager/District Engineer

Meeting Date: April 20, 2022

Subject: Discussion and Consideration of Agreement for Consultant Services with Kevin Merk Associates, LLC for Environmental Consultation for the Water Reclamation Facility (WRF) Project

RECOMMENDATION:

Staff recommends the Resources & Infrastructure (R&I) Committee discuss and consider the Agreement for Consultant Services with Kevin Merk Associates, LLC for Environmental Consultation for the Water Reclamation Facility (WRF) Project and approve staff's recommendation to refer the project and necessary budget adjustment to the Board of Directors.

DISCUSSION:

At the April 14th Board Meeting, the Board referred the Kevin Merk and Associates agreement for consultant services to be reviewed by the Resources and Infrastructure Committee. Due to the time-sensitive nature of this project, this special meeting was scheduled. The tasks included in Mr. Merk's scope of work are required for the District to complete the WRF permitting process.

Background

On May 24, 2018, the CCSD Board of Directors approved an agreement for consultant services with Cindy Cleveland of Cleveland Biological, LLC to perform work related to completing an Endangered Species Act (ESA) Section 7 consultation process, associated permits, consultations, updating the Adaptive Management Plan (AMP), and preparation of the Annual AMP Monitoring Report. Although the Subsequent Environmental Impact Report (SEIR) process for the WRF addressed issues raised over the potential biological impacts of the project, questions and concerns continued to be expressed by resource agencies and private citizens regarding endangered or threatened special status species and critical habitats. The AMP, developed as a biological mitigation for the WRF, provides a mechanism to monitor and protect such species and habitats; however, the AMP does not provide the same level of protection to the CCSD as completing an ESA Section 7 consultation process, which would also address, and is anticipated to resolve, the remaining resource agency concerns.

To date, Ms. Cleveland's work has included informal consultation with resource agencies, preparation of the 2019 Feasibility Study and Assessment of Environmentally Sensitive Habitat Area (ESHA), permitting assistance for the Coastal Development Permit including project description input, preparation of a draft biological assessment, as well as biological monitoring required by the AMP and completion of the 2020 and 2021 AMP Annual Reports. Ms. Cleveland is completing a doctoral degree and does not wish to extend her agreement with the CCSD, which expires June 30, 2022, but has agreed to assist in transitioning her scope of work to Kevin

Merk of Kevin Merk Associates, LLC. Her agreement will be amended to reflect this limited scope of services.

Staff recommends that the remaining ESA Section 7 consultation and related permitting efforts transition to Kevin Merk Associates, LLC. This will include discussions and coordination with several State and Federal agencies, including the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration, the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife. Due to the amount of time elapsed between the date of previous studies and today, additional scope has been added to update the wetland delineation of waters of the United States and California (Task 1 of the attached proposal).

Kevin Merk has extensive experience in environmental regulatory compliance and permitting, including wetland delineations, habitat conservation plans, protocol-level special status species surveys, open space management plans, and California Environmental Quality Act and National Environmental Policy Act compliance. His resume is attached.

Mr. Merk estimates that the work will take approximately 632 hours to complete. Given the amount of work involved and Mr. Merk's experience with Cambria and the regulatory agencies involved with the WRF permit, staff believes his cost proposal of \$85,860 is reasonable and is necessary for staff to move the permitting process forward.

Staff will discuss and present each task outlined in the Merk scope of work in detail.

- Task 1 – Update Delineation of Waters of the U.S. and State of California
- Task 2 - Clean Water Act Section 404 Nationwide Permit Application – the current project description for the WRF shows the lagoon discharge located closer to the confluence of San Simeon Creek and Van Gordon Creek.
 - Task 2.1 – Compensatory Habitat Mitigation and Monitoring Plan
 - Task 2.2 – Biological Assessments
- Task 3 – Clean Water Act Section 401 Water Quality Certification Application.
- Task 4 – California Department of Fish and Wildlife Streambed Alteration Agreement
- Task 5 – Technical Support to Project Team

Attachments: Kevin Merk Associates Proposal
Kevin Merk Resume



Kevin Merk Associates, LLC | P.O. Box 318, San Luis Obispo, CA 93406 | 805-748-5837

March 30, 2022

Mr. Ray Dienzo
District Engineer
Cambria Community Services District
5500 Heath Lane
Cambria, CA 93428

Subject: Environmental Services Proposal for the Sustainable Water Facility Project, Cambria, San Luis Obispo County, California

Dear Mr. Dienzo:

Kevin Merk Associates, LLC (KMA) is pleased to submit this scope of work and cost estimate to provide environmental services in support of the Cambria Community Services District's Sustainable Water Facility project. Our assistance will include preparation of permit application packages for Clean Water Act Sections 404 and 401, and California Fish and Game Code Section 1602. We would also support the CCSD team for the subject project with project description refinement and the regulatory agency consultation process.

Prior to initiating the permitting process, we would conduct an update to the Delineation of Waters of the United States and State of California to identify any changes to the previously mapped wetlands and drainage features within the project area. We would also work with the engineering and design team to make sure construction within San Simeon Creek avoids and minimizes impacts to jurisdictional areas and the project description has sufficient detail to support the permitting process. As part of the permitting effort, we would prepare the required technical documents such as the Habitat Mitigation and Monitoring Plan (HMMP) and Biological Assessments (BA's) required to gain regulatory agency approvals of the project, as well as provide additional support to expedite their review and ultimate issuance of permits. A more detailed description of our work program is outlined below.

SCOPE OF WORK

Task 1 – Update Delineation of Waters of the U.S. and state of California. KMA will conduct field work to update the wetland delineation on the study area (Michael Baker International, 2016) to confirm the identified locations of potential jurisdictional areas subject to the regulatory authority of the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act are consistent with their findings. Mapped waters of the State subject to Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), and California Coastal Commission requirements will also be evaluated in the field and updated as needed.

Waters of the U.S. and State of California will be identified in accordance with the methods described in the Corps' *Wetland Delineation Manual* (Environmental Laboratory, 1987) and *Arid West Regional Supplement* (2008). We will produce an updated delineation map and report that tiers off the 2016 document and provides the methods and results of the supplemental investigation. Data

sheets and site photographs will be included as appropriate. The findings will be used as the basis for the impact analysis that will be provided to each agency as part of the permit application packages.

Task 2 - Clean Water Act Section 404 Nationwide Permit Application. This task involves the preparation of a Corps Section 404 Nationwide Permit (NWP) application for impacts to onsite waters of the U.S. This scope assumes the project will qualify for an NWP since impacts to waters of the U.S. are expected to be less than 0.5 acre and no more than 300 linear feet of stream channel would be affected, which is the threshold of the Corps' Nationwide Permitting process. KMA will prepare the application and necessary supporting documents and graphics, and will utilize construction plans to be prepared by the CCSD team for the final impact assessment. Additional time is included under separate tasks below to work with the project team to provide technical design assistance to finalize the project description as well as prepare other necessary documents to meet regulatory agency requirements. We will provide you a completed application package for review prior to submittal to the Corps. Once the application package has been reviewed, you will then need to sign the application form and provide the necessary application fee.

As detailed below, a Habitat Mitigation and Monitoring Plan and two separate Biological Assessments will also be required as part of the permitting process. We will also help facilitate permit issuance by working with the Corps to answer questions and provide supplemental project information during their review of project materials and consultation with other federal agencies. Upon receipt of the Corps 404 permit, we will review the document on your behalf to identify any problematic or unexpected mitigation requirements about which we may wish to negotiate prior to acceptance. In addition, the project will need to comply with Section 106 of the National Historic Preservation Act of 1966, and assume a project-specific cultural resources report will be provided by the CCSD that will be adequate for the Corps' Section 106 consultation requirements with the State Historic Preservation Office.

Task 2.1 – Compensatory Habitat Mitigation and Monitoring Plan - As a component of the regulatory agencies permitting requirements, impacts to jurisdictional areas must be mitigated to ensure a no net loss of waters of the U.S. and state of California, and CDFW jurisdictional areas. The California Coastal Commission will also likely review this document as part of their Coastal Development Permit issuance. The regulatory agencies require an HMMP as a component of the permit applications that follows all current regulatory guidance to support permit application submittals. We will work with the project team to design the mitigation area(s) onsite, but additional area may be required at an offsite location depending on the final impact calculations. We will also make sure this document is consistent with any California Environmental Quality Act (CEQA) requirements associated with the project.

Task 2.2 – Biological Assessments – Projects acquiring federal permits such as a Clean Water Act Section 404 permit from the Corps are required to analyze actions that “may affect” a federally listed species or protected resources such as critical habitat before a federal agency (in this case the Corps) can issue a permit. This analysis is documented in a Biological Assessment that is provided to the Corps for them to initiate consultation with the appropriate federal agencies pursuant to Section 7 of the Endangered Species Act. Two Biological Assessments will be required for this project since the Corps is anticipated to consult with two federal agencies including the U.S. Fish and Wildlife Service (USFWS) for the California red-legged frog and tidewater goby, and National Marine Fisheries Service for steelhead trout. The BA's will be prepared consistent with guidelines contained in 50 CFR Section 402.12(f), and will include the detailed project description provided by the CCSD, and an assessment of the project to affect federally protected resources. Results of past

investigations on the site and in the region will aid in a cumulative effects analysis to support permit issuance. The expected outcome of the Section 7 consultation process will be the issuance of a Biological Opinion from USFWS and a Biological Opinion from NMFS allowing the project to proceed with specific avoidance and minimization measures, and incidental take limits of the protected resources during construction.

An early consultation phase with the regulatory agencies will be important to help streamline their review process, and we assume email correspondence, phone calls and onsite meetings may be needed. In addition, a pre-application meeting is now required by the RWQCB, and several rounds of review and potentially additional analysis may be required depending on regulatory agency guidance through the Corps' Section 7 consultation process.

Task 3 – Clean Water Act Section 401 Water Quality Certification Application. This task involves preparation of a Clean Water Act Section 401 Permit (Water Quality Certification) application. Any project that may result in fill or physical changes to Waters of the U.S. and State of California is required to be reviewed and approved by the RWQCB. As stated above, the RWQCB requires a pre-application meeting, and we will schedule and attend the meeting assuming it will be held in their San Luis Obispo office. For drafting the application package, we will utilize final construction documents and prepare any additional supporting graphics. Once the application package is complete, we will provide it to the team for review and comment. Once we have finalized the application for submittal to the RWQCB, you will need to sign it and provide the appropriate fee. We will calculate the anticipated RWQCB fee, and assume that you will pay the application fee directly to the RWQCB upon application submittal.

We will coordinate with the RWQCB to track progress of the permit approval. Similar to the Corps permitting process detailed above, supplemental information may be requested during their review of the project materials. The 401 Water Quality Certification cannot be finalized until the Corps issues the 404 permit. Please note that the RWQCB is a state agency and will need proof that the CEQA process has been completed with an approved and adopted Final Environmental Impact Report and all necessary CEQA requirements such as a Notice of Determination completed prior to permit issuance. Upon receipt of the 401 permit, we will review the document on your behalf to identify any problematic or unexpected mitigation requirements about which you may wish to negotiate with the agency.

Task 4 – California Department of Fish and Wildlife Streambed Alteration Agreement. Impacts to San Simeon Creek and its associated riparian corridor to construct the project will require the issuance of a Streambed Alteration Agreement (SAA) pursuant to California Fish and Game Code section 1600 et seq. Alterations to a creek's bed, banks or associated vegetation fall under the jurisdiction of the CDFW. Therefore, an agreement is needed for any riparian habitat alteration or modification to the creek's channel. The CDFW has moved to an online portal for their SAA review. We will complete the online application and upload all supporting documentation, and you will have time to review the submitted information prior to finalizing and submitting payment. Once you have reviewed the application materials, you will then need to pay the application fee directly to CDFW upon final submittal.

We will track the progress of application approval, and answer questions and provide supplemental information to CDFW as needed. We will utilize the HMMP and other technical documents prepared for the project and submit them as attachments to the SAA application. The CDFW, since they are a state agency, will also require proof that the CEQA process has been completed and the

environmental filing fee has been paid prior to permit issuance. Upon receipt of the draft SAA, we will review the document on your behalf to identify any problematic or unexpected mitigation requirements about which you may wish to negotiate with the CDFW prior to acceptance.

Task 5 – Technical Support to Project Team. We will provide as-needed technical support to the project team to finalize construction plans and the project description as they pertain to the work that may impact jurisdictional areas. Our involvement would be on a time and materials basis to ensure construction documents are consistent with the biological analysis to support the permitting efforts. For developing this cost estimate, we have assumed upwards of five meetings would be held in Cambria and additional remote meetings (i.e., Zoom, email and phone calls) would occur during the course of the work program.

COST ESTIMATE

We propose to complete the above scope of work on a time and materials reimbursement basis against an estimated budget of \$85,860. Please refer to the attached cost estimate for further detail. Expenses for vehicle reimbursement, field equipment and report/application package production costs are also included. Additional tasks not included above would be completed following written authorization on a time and materials basis consistent with our standard fee schedule and contract terms.

Thank you for the opportunity to provide environmental consulting services for this project. If you have any questions regarding this proposal, please call me directly.

Sincerely,

KEVIN MERK ASSOCIATES, LLC



Kevin B. Merk
Principal Biologist

*Attachments Cost Estimate Spreadsheet
 Standard Fee Schedule*

**Cambria Community Services District's Sustainable Water Facility
Budgetary Cost Estimate for Environmental Services:**

Task	Cost	Hours	Principal Biologist	Senior Biologist	GIS Specialist	Admin
			\$150/hr	\$125/hr	\$105/hr	\$65/hr
Task 1 - Update Wetland Delineation	\$11,745	89	40	32	16	1
Task 2 - Clean Water Act Section 404 Nationwide Permit	\$11,545	89	32	40	16	1
2.1 - Compensatory Habitat Mitigation and Monitoring Plan	\$12,335	95	32	48	14	1
2.2 - Biological Assessments - 1 for USFWS and 1 for NMFS	\$19,845	153	44	92	16	1
Task 3 - Clean Water Act Section 401 Water Quality Certification	\$10,035	75	32	38	4	1
Task 4 - CDFW Streambed Alteration Agreement	\$9,185	69	28	36	4	1
Task 5 - Technical Support to Project Team	\$8,670	62	48	8	2	4
Expenses (Vehicle, Field Equipment, Report/Permit App Production)	\$2,500					
Total Budget Estimate	\$85,860	632	256	294	72	10



Kevin Merk Associates, LLC

CCSD SWF Project Environmental Permitting Schedule Estimate

Task	April	May	June	July	August	September	October	November	December	January	February	March
1 - Update Wetland Delineation												
2 - Clean Water Act Section 404 Nationwide Permit												
2.1 - Compensatory Habitat Mitigation and Monitoring Plan												
2.2 - Biological Assessments - 1 for USFWS and 1 for NMFS												
3 - Clean Water Act Section 401 Water Quality Cert.												
4 - CDFW Streambed Alteration Agreement												
5 - Technical Support to Project Team												





KEVIN MERK ASSOCIATES, LLC

Standard Fee Schedule for Environmental Services

The following sets forth the billing rates for our personnel.

<u>Professional and Technical Personnel</u>	<u>Rate</u>
Principal	\$ 150/hour
Senior Associate	\$ 125/hour
Biologist	\$ 115/hour
Graphics, GIS Technician	\$ 105/hour
Word Processor/Administrative Assistant	\$ 65/hour

Expert witness services consisting of depositions and in-court testimony will be charged at a rate of \$300/hour.

<u>Representative Equipment</u>	<u>Unit Rate</u>
Sound Level Meter	\$100/day
Hypsometer	\$ 50/day
Wind Meter	\$ 25/day
Temperature-pH-Conductivity Meter	\$ 25/day
GPS (sub-meter precision)	\$150/day
Infrared/Wildlife Camera	\$ 50/day

Photocopying and Printing

Photocopies will be charged at a rate of \$0.15/copy for single-sided copies and \$0.25 for double-sided copies. Colored copies will be charged at a rate of \$1.50/copy for single-sided and \$2.50/copy for double-sided or 11x17" copies.

Reimbursable Expenses

Expenses associated with completing a project are termed Reimbursable Expenses. These expenses do not include the hourly billing rates described above. Reimbursable expenses include, but are not limited to the following.

1. Direct costs associated with the execution of a project are billed at cost plus 15% to cover General and Administrative services. Direct costs include, but are not limited to, subcontractor services, authorized travel expenses, permit charges and filing fees, printing and graphic charges, performance bonds, sample handling and shipment, equipment rental other than covered by the above charges, etc.
2. Vehicle use in company-owned two wheel drive vehicles will be billed at a day rate of \$85/day and \$125/day for 4x4 vehicles plus \$0.85/mile over 50 miles per day. Rental vehicles will be billed at cost plus 15%. For transportation in employee owned automobiles, a rate of \$0.85/mile will be charged.



Kevin Merk Associates, LLC

KEVIN B. MERK

Principal Biologist

Kevin Merk is the founding principal of Kevin Merk Associates, LLC. With nearly 20 years of environmental consulting experience, Kevin has directed, managed, and conducted hundreds of natural resource and environmental studies throughout California. Mr. Merk has a diverse background in the biological sciences with expertise in plant taxonomy, quantitative vegetation analysis, habitat classification/evaluation procedures, surveys for special status species, habitat restoration and biotechnical erosion control. His work experience includes general biological and species-specific surveys, U.S. Army Corps of Engineers and California Coastal Commission wetland delineations, as well as permit acquisition and regulatory compliance. He has prepared, implemented and monitored habitat mitigation/restoration projects throughout California. Mr. Merk is a well-versed regulatory specialist that provides a balance between rigorous scientific documentation, environmental regulatory requirements and project development goals and objectives. Prior to founding Kevin Merk Associates, Mr. Merk was a program manager for an environmental consulting firm in the Central Coast region.

TECHNICAL CAPABILITIES

- Mr. Merk has an in-depth knowledge of the California flora and protocols for surveying rare, threatened and endangered plant species.
- He has conducted floristic surveys and mapped vegetation communities for private, state and local government clients including California State Parks, California State University System, Fort Ord Reuse Authority, Cities and Counties of Monterey, San Luis Obispo, and Santa Barbara, and Cities of Arroyo Grande, Lompoc, Sand City, Santa Maria and Scotts Valley.
- Mr. Merk has also conducted rare wildlife surveys throughout California for species such as the California tiger salamander, California red-legged frog, western spadefoot toad, legless lizard, horned lizard, burrowing owl and other raptors and nesting birds.
- Mr. Merk has conducted multi-parameter wetland delineations throughout the state including within the Coastal Zone, and is an expert in environmental regulation compliance (e.g., Endangered Species Act, Clean Water Act, Coastal Development Act, California Department of Fish and Game Code, Porter-Cologne Act).

EDUCATION, CERTIFICATIONS, REGISTRATIONS

B.A. Biology (Plant Sciences), University of California, Santa Cruz

40 Hour OSHA HAZWOPER Training and 8 eight-hour annual refresher courses

Hydrogeomorphic Approach to Functional Assessment of Riverine Waters/Wetlands in the South Coast Region of Santa Barbara County

Biology and Handling Trainings for California red-legged frog, California tiger salamander, and Santa Cruz long-toed salamander

U.S. Army Corps of Engineers Wetland Delineation Training

California Native Plant Society

California Botanical Society

California Invasive Plant Council

Society for Ecological Restoration

American Public Works Association

International Erosion Control Association

Wildlife Society, Western Chapter

EMPLOYMENT HISTORY

Kevin Merk Associates, LLC, Founding Principal Biologist (2011 through present)
 Rincon Consultants, Inc., Biological Program Manager (2000-2011)
 Zander Associates, Senior Botanist/Restoration Ecologist (1995 through 2000)
 University of California, Santa Cruz Natural Resource Assessment Group, Botanist (1993-1995)
 Greening Associates, Restoration Ecologist (1991-1992)

REPRESENTATIVE PROJECT EXPERIENCE

Biological Resources

- Coastal Christian School Biological Resources Assessment, mapped/classified vegetation, conducted rare plant and California red-legged frog surveys, delineated USACE wetlands, and supported architect/design team during planning and CEQA review process, San Luis Obispo County.
- More Mesa Biological Resources Inventory, conducted rare plant surveys, mapped vegetation communities and delineated USACE and Coastal Commission wetlands, Santa Barbara County
- May Family Trust Biological Resources Assessment, mapped/classified vegetation, conducted rare plant surveys, delineated USACE wetlands, and assisted design team during planning and CEQA review process, San Luis Obispo County.
- Harmony Ranch Biological Resources Assessment, mapped/classified vegetation, conducted rare plant and California red-legged frog surveys, delineated USACE and Coastal Commission wetlands, and assisted design team during development planning process, San Luis Obispo County
- Mormann Property Biological Resources Assessment, mapped/classified vegetation and conducted rare plant surveys, San Luis Obispo County
- Laetitia Winery Biological Resources Assessment, Rare Plant Surveys, USFWS California red-legged frog surveys and wetland delineation, San Luis Obispo County
- Mahoney Ranch Biological Resources Assessment and Constraints Analysis, Santa Maria
- Birch Street Development project rare plant surveys and California red legged frog surveys in support of Coastal Development Permitting process, Cayucos, San Luis Obispo County
- Santa Rosa Creek Trail project rare plant surveys and habitat assessments for California red-legged frog, pond turtle, steelhead and tidewater goby, Cambria
- Pecho Valley Road Property vegetation classification, rare plant surveys and USFWS protocol Morro shoulderband snail surveys, Los Osos, San Luis Obispo County
- Grover Beach-Five Cities Trail Constraints Analysis, City of Grover Beach

Focused Botanical Surveys

- More Mesa Botanical Inventory and Wetland Delineation, Santa Barbara County
- Bradley Ranch Botanical Inventory and Wetland Delineation, Santa Maria
- Mahoney Ranch Botanical Inventory and Wetland Delineation, Santa Maria
- Pismo Lake Ecological Reserve Botanical Inventory, San Luis Coastal RCD
- Harmony Headlands Botanical Inventory, California State Parks
- Sheridan Lane Botanical Inventory, San Luis Obispo County
- Chevron Estero Marine Terminal Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Biddle Ranch Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Tract 1998 Rare Plant Surveys for Pismo Clarkia, City of Arroyo Grande
- James Way Fuel Modification Project Rare Plant Surveys, City of Arroyo Grande

- Jones' Harmony Ranch Project Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Highland Ranch Rare Plant Surveys, San Luis Obispo County
- San Miguel Ranch Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Continental Vineyards Rare Plant Surveys and Wetland Delineation, San Luis Obispo County
- Chandler Ranch Rare Plant Surveys, City of Paso Robles
- Various focused surveys for the rare Morro Manzanita in Los Osos

Focused Animal Surveys

- Salinas Road Interchange Project, Caltrans Designated Biologist conducted California red-legged frog and California tiger salamander aquatic surveys. Captured and relocated over 10,000 life stages of California red-legged frog during construction, Monterey County
- Santa Maria Integrated Waste Management Facility, USFWS protocol Vernal Pool Branchiopod and California Tiger Salamander Surveys (upland and aquatic) on 1,770-acre site in northern Santa Barbara County.
- Mahoney Ranch USFWS protocol California red-legged frog and California tiger salamander surveys, Santa Maria, Santa Barbara County
- Biddle Ranch USFWS California red-legged frog surveys and California tiger salamander habitat assessment, San Luis Obispo County
- Union Valley Parkway USFWS California red-legged frog and California tiger salamander surveys (upland and aquatic), Santa Maria, Santa Barbara County
- Monarch butterfly annual population censusing surveys for populations in Santa Cruz County from Natural Bridges to Capitola, University of California Santa Cruz
- Birch Street Project USFWS California red-legged frog surveys and Monarch butterfly habitat assessment, Coastal Development Permitting, Cayucos, San Luis Obispo County
- San Joaquin Kit Fox Habitat Evaluations for numerous projects ranging from winery expansion to telecommunication projects, northern San Luis Obispo County and southern Monterey County

CEQA and NEPA Compliance Documents (primary author of Biological Resources Sections)

- Ahmanson Ranch General Plan Amendment and Specific Plan EIR, Ventura County
- Keysite 3 EIR Biological Resources Section, Santa Barbara County
- Rancho Maria Estates EIR Biological Resources Section, Santa Barbara County
- Union Valley Parkway EIR/EA, City of Santa Maria
- Santa Maria Integrated Waste Management Facility EIR, City of Santa Maria
- Santa Maria Airport Specific Plan EIR, City of Santa Maria
- Mahoney Ranch Environmental Assessment (EA), City of Santa Maria
- Tract 1998 Rancho Grande EIR and supplements, City of Arroyo Grande
- COG Residential Development Project EIR, San Luis Obispo County
- Biddle Ranch Agricultural Cluster Subdivision EIR, San Luis Obispo County
- Chevron Estero Marine Terminal Source Removal Project EIR, San Luis Obispo County
- Downtown Specific Plan EIR, City of Scotts Valley, Santa Cruz County

Regulatory Compliance and Construction Monitoring

- Salinas Road Interchange, Senior Biologist overseeing environmental permit compliance during construction, Caltrans District 5 through DeSilva Gates Construction
- Cross Creek Bridge Replacement, prepared and implemented riparian habitat restoration plan, monitored construction and restoration activities to comply with Coastal Development Permit, Malibu, Los Angeles County

- Surfer's Point Shoreline Retreat Project, prepared Coastal Dune Habitat Restoration Plan in support of Coastal Development Permit acquisition, City of Ventura
- North of Playa Habitat Conservation Plan, Sand City, Monterey County. Prepared HCP, implemented coastal dune restoration program and Conservation Strategy for Smith's blue butterfly, and oversaw construction activities including environmental awareness training. Implemented HCP monitoring program for five years and prepared annual reports.
- Cherry Creek Residential Development, conducted USACE wetland delineation, prepared USACE, CDFG, and RWQCB permit applications, monitored construction, Arroyo Grande
- Bach Hotel, conducted USACE wetland delineation, prepared USACE, CDFG, and RWQCB permit applications and habitat mitigation program, City of Buellton
- Highway 46 East Improvement Project, Senior Biologist overseeing environmental permit compliance during construction, Caltrans District 5 through Papich Construction
- Union Valley Parkway, prepared EIR/EA, BA, ESA Section 7 Consultation, Designated Biologist overseeing environmental permit compliance during construction, Caltrans/City of Santa Maria Local Assistance Project
- Biddle Ranch Agricultural Cluster Subdivision Project, County of San Luis Obispo designated environmental monitor overseeing construction of roads and infrastructure improvements
- California State University, Channel Islands, biological studies and wetland delineation, prepared habitat mitigation program and USACE, CDFG and RWQCB permit applications, monitored construction, implemented habitat mitigation program and monitored for five years, Ventura County
- Damon Garcia Sports Complex Project, conducted focused studies including California red-legged frog surveys and wetland delineation, prepared habitat mitigation program and USACE, CDFG and RWQCB permit applications, monitored construction and implemented habitat mitigation program, City of San Luis Obispo
- Santa Maria River Mining, CDFG and Department of Conservation permit acquisition, monitoring and annual permit compliance reporting, City of Santa Maria
- Bret Harte Unified High School District Sports Fields Complex, conducted wetland delineation, prepared habitat mitigation program and USACE, CDFG and RWQCB permit applications, Calaveras County

Open Space Management Plans

- Bailey Wetland Area Management Plan, City of Lompoc, Santa Barbara County
- Leffingwell Ranch Open Space Resource Management Plan, Cambria, San Luis Obispo County
- East West Ranch Public Access and Resource Management Plan, Cambria, San Luis Obispo County

Teaching

- Workshop Instructor - California Native Plant Society Rare Plants and Habitats of San Luis Obispo County (separated into coastal and inland sections)
- Workshop Instructor/Field Coordinator - Elkhorn Slough Coastal Training Program's Management and Conservation of Coastal Grasslands
- Guest lecturer - CalPoly Natural Resource Management and Landscape Architecture Departments
- Teaching Assistant - Ecology of California Flora, Plant Anatomy, Plant Taxonomy, Plant Physiology, Mycology, and Plants and Human Affairs, University of California, Santa Cruz
- Presenter - Association of Environmental Professionals state and national conferences; Society of Ecological Restoration annual conferences, and International Erosion Control Association conferences