

PROPOSAL TO PREPARE

Environmental Impact Report for the Nevada County Cannabis Ordinance

Submitted to Nevada County Planning Department

May 24, 2018





266 Grand Avenue, Suite 210, Oakland, CA 94610
P.O. Box 2727, Oakland, CA 94602
510-986-1850 | www.horizonh2o.com

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Brian Foss, Planning Director
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959

Subject: Work Program and Bid Proposal for Preparation of an Environmental Impact Report for the Nevada County Cannabis Ordinance

Dear Mr. Foss:

Horizon Water and Environment, LLC (Horizon) is pleased to present our work program and bid proposal to assist Nevada County (County) in completing a program environmental impact report (PEIR) for the County's Cannabis Cultivation Ordinance. The objective for the consultant services requested in this RFP is to prepare a PEIR that comprehensively evaluates existing (baseline) cannabis cultivation activities in the county, reasonably foreseeable activities under Nevada County's draft cannabis cultivation ordinance, their potentially significant environmental impacts, and mitigation measures or alternatives to reduce or avoid those impacts. In addition, the PEIR must be completed in a clear and transparent manner that allows for meaningful involvement by interested parties and members of the public. Because the County is considering the adoption of a discretionary process for the licensing of cannabis cultivators, the document must be prepared in a manner that allows individual use permit applicants to tier from the PEIR.

In order to accomplish the County's objectives, the selected consultant must be strongly qualified to perform the requested work and have a deep understanding of the California Environmental Quality Act (CEQA) and commercial cannabis propagation, cultivation, production, and processing. The Horizon team was formed to meet these needs and is exceptionally well qualified to accomplish all objectives outlined in the County's Request for Proposal (RFP).

Horizon's overall approach to serving Nevada County will be to prepare a superior environmental analysis that evaluates the impacts of implementing the County's ordinance by meticulously following the procedural and substantive requirements of CEQA, meeting schedule imperatives, and applying exceptional technical quality coupled with effective project management oversight.

The Horizon team's expert, strategic approach to CEQA compliance for regulations provides the County with several advantages:

- **Experience with Commercial Cannabis Cultivation and Regulation Projects.** Horizon offers a unique benefit to the County through our work preparing the PEIR for the California Department of Food and Agriculture's (CDFA's) CalCannabis Cultivation Licensing Program. As part of the CDFA project, Horizon visited multiple cannabis cultivation operations, provided advice on the development of regulation and mitigation measures, and completed extensive research on environmental issues related to cannabis cultivation. We led eight public scoping meetings and four workshops throughout California and prepared responses to 80 comments. As a result, Horizon has a *deep understanding of cannabis cultivation*

activities and their potential environmental impacts, as well as a comprehensive understanding of the statewide regulatory framework pertaining to cannabis cultivation. We can provide important efficiencies at a lower budget to Nevada County by preparing an EIR that tiers off the work already completed by the State.

- **Experience with CEQA and Program EIRs, in Particular.** The Horizon team has extensive experience in preparing the full range of environmental compliance documents under CEQA, and we are experts at **leveraging PEIRs to reduce the need for lower-tier site-specific analysis** where appropriate. For the County's cannabis program, as described in our work program, we will use geographic information systems (GIS) analysis to help narrow down the locations and conditions that merit environmental focus. Where specifics regarding mitigation cannot be identified in the PEIR due to lack of project-specific details, clear and enforceable performance standards are included to avoid improper mitigation deferral. In this way, the PEIR can accommodate a range of outcomes, from "no impact" to a reasonable assessment of potentially significant impacts. These mitigation pathways frequently alleviate the need for tiered environmental documents; instead, project-level analysis can often be limited to mitigation implementation.
- **Experience in Nevada County.** ECORP, a key member of the Horizon team, is currently identified on the County's list of biological resources consultants and has provided CEQA, biological, cultural, and permitting services for several agencies in the County. This **local familiarity** will enable the Horizon team to quickly identify appropriate stakeholder groups and geographic areas of focus for the public involvement program and PEIR.
- **Excellence in Project Management.** Horizon firmly believes that **responsiveness, budget, schedule, and quality** are measures of effective project management. Our benchmark is excellence. We achieve this through principal-level commitment to all our projects, which assures the highest level of client service and QA/QC.

In closing, Horizon was founded with the goal of providing exceptional technical quality and service-oriented consulting to every client and every project, large or small. We encourage you to talk with our references, who can attest to the high quality of our work and our responsive client service. We look forward to providing the County with this same high level of service and quality. We look forward to meeting with you to discuss our proposal further.

Sincerely,



Michael Stevenson
Principal, Horizon Water and Environment
Office: (510) 986-1852 | Mobile: (510) 421-7666
Email: michael@horizonh2o.com

Enclosure: Horizon Work Program and Bid Proposal

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A. QUALIFICATIONS AND EXPERIENCE

At Horizon, we focus on managing important and often controversial CEQA projects and programs that deal with challenging public policy issues of local, regional or statewide significance. We believe that the regulation of cannabis cultivation in Nevada County represents one of these very important public policies. As such, we are excited to support the County in its CEQA compliance efforts as it develops its cannabis ordinance.

The Horizon team’s project manager Michael Stevenson has a long resume of experience with program EIRs and a deep understanding of issues related to cultivation of cannabis. The references provided in Section D will attest to our responsiveness to our clients, and our ability to deliver challenging projects on time and within budget.

To provide the County with a robust group of consultants with experience in cannabis regulation, expertise in CEQA compliance, and planning in Nevada County, our team includes the following firms.

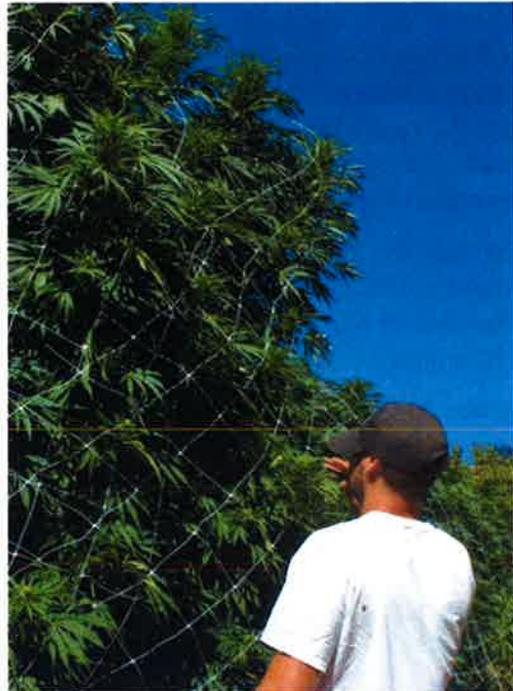
	<p>Horizon Water and Environment, LLC. <i>Prime Consultant.</i> Project Management. CEQA Lead and Analysis. Quality Control. Public Outreach.</p> <p>Horizon, established in 2008, is a multidisciplinary environmental consulting firm that specializes in CEQA, policy formulation and regulation development, resource planning and management, and environmental permitting for public agency clients. We understand the importance of producing clearly written and legally defensible environmental compliance documents.</p>
	<p>ECORP Consulting, Inc. <i>Subconsultant.</i> Land Use and Planning. Biological Resources and Studies. Cultural Resources, Tribal Cultural Resources, and AB 52 Consultation.</p> <p>ECORP’s environmental services include technical studies for biological, cultural, and water resources; land use planning; and regulatory compliance with CEQA and other California and federal laws and regulations. ECORP’s experience in Nevada County includes projects with the Nevada Irrigation District and the City of Grass Valley. ECORP staff have also been involved in review of land ordinances for cannabis cultivation for several local government clients.</p>
	<p>ENERCON Consulting, Inc. <i>Subconsultant.</i> CEQA Strategy. Air Quality, GHG Emissions, Energy, Geology/Soils, Water Quality, and Recreation.</p> <p>ENERCON was selected to be part of the Horizon team for their strong regulatory/policy strategy and agency consultation experience, greenhouse gas and air quality expertise, and past successful teaming partnerships with Horizon on cannabis projects with the California Department of Food and Agriculture and the Bureau of Cannabis Control.</p>

The following discussion demonstrates (1) our understanding of and experience in cannabis cultivation and regulation projects, (2) our significant experience in CEQA, (3) our team’s experience in Nevada County, and (4) our outstanding record of project management.

A.1 Experience with Commercial Cannabis Cultivation and Regulation Projects

Our team has extensive experience with cannabis cultivation and regulation. We assisted the California Department of Food and Agriculture (CDFA) in developing regulations and preparing the statewide PEIR for its CalCannabis Cultivation Licensing Program pursuant to the State's Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). We also prepared an Initial Study/Negative Declaration (IS/ND) for the State Bureau of Cannabis Control to support its adoption of regulations pursuant to MAUCRSA for distribution, retail sale, laboratory testing, and cannabis microbusinesses.

As part of the CDFA project, Horizon visited multiple cannabis cultivation operations, provided advice on the development of regulation and mitigation measures, and completed extensive research on environmental issues related to cannabis cultivation. We led eight public scoping meetings and four workshops throughout California and prepared responses to 80 comments. As a result, Horizon has a deep understanding of cannabis cultivation activities and their potential environmental impacts, as well as a comprehensive understanding of the statewide regulatory framework pertaining to cannabis cultivation.



Having developed the State's Program EIR for cultivation licensing, we have a significant understanding of mitigation measures intended to address potentially significant environmental impacts of the cannabis industry.

We are the only team of environmental consultants supporting the State with CEQA and regulation development related to the MAUCRSA. This experience offers the County substantial advantages, including our direct access and interactions with the State's decision-makers, an in-depth and on-the-ground understanding of the State's regulations, and the ability to leverage the considerable environmental work that our team has undertaken for the State. Our familiarity with the State's CEQA approach has allowed us to assist the City of Colusa with its cannabis CEQA compliance by tiering from the CDFA PEIR. Our work for the State continues, and we believe that these benefits will be of great value to the County as it moves forward with its project.

California Department of Food and Agriculture CalCannabis Cultivation Licensing Program EIR

CDFA is tasked with licensing commercial cannabis cultivation, as well as establishing a track-and-trace system. To accomplish this, CDFA is currently implementing the CalCannabis Cultivation Licensing Program (Program) and has adopted emergency regulations under the Administrative Procedures Act (APA) for medicinal and adult-use cannabis cultivation pursuant to MAUCRSA. CDFA is currently in the process of developing and adopting permanent (non-emergency) regulations, which will largely mirror the emergency regulations. Horizon is also assisting CDFA with review of applications for CEQA compliance.

Horizon is assisting CDFA with the implementation of the Program and analyzed the potential environmental effects of this program in a Program Environmental Impact Report (PEIR). The scope of work included performing human and ecological risk assessments related to pesticide use, consultations with multiple state agencies (i.e., DPR, SWRCB, RWQCB, CDFW, and California Air Resources Board), and collecting and assessing scientific data relating to cannabis and its cultivation. The Horizon team conducted public outreach in locations throughout the state and coordinated with stakeholders.

Horizon's work has provided a foundation for CDFA's promulgation of regulatory measures related to medical and non-medical cannabis and its cultivation, and the licensing of indoor, mixed-light, and outdoor cultivation sites.

Team firm Enercon supported the project team with regulatory agency consultations and meetings, notably with the California Air Resources Board; drafted the Greenhouse Gas Emissions and Energy Use section of the EIR; supported the development of the Literature Review; and assisted with overall CEQA strategy.

Budget and Schedule: Horizon worked efficiently and ended the PEIR process over half a million dollars under budget. As a result, CDFA has engaged Horizon to assist the agency with processing of license applications.

Bureau of Cannabis Control

Cannabis Business Licensing Program Initial Study/Negative Declaration

The Bureau of Cannabis Control is responsible for issuing licenses for testing laboratories, distributors, retailers, and vertically integrated microbusinesses. The Bureau drafted emergency regulations to implement the requirements of MAUCRSA and began issuing licenses on January 1, 2018.

Horizon analyzed the potential environmental effects of the Bureau's program in an Initial Study/Negative Declaration (IS/ND). We collected and assessed scientific data relating to the various commercial cannabis businesses. This involved visits to commercial cannabis businesses and extensive research to determine whether the Bureau's regulations would result in any potentially significant impacts to the environment. In support of the IS/ND, the Horizon team conducted public outreach in multiple locations throughout the state and coordinated with stakeholders and partner agencies.

Team firm Enercon wrote the aesthetics, public services, and air quality/ GHG sections and assisted with overall CEQA strategy.

Budget and Schedule: As with the CalCannabis project, Horizon worked efficiently, and ended the CEQA process several hundred thousand dollars under budget. As a result, the Bureau has engaged the Horizon team to assist the agency with ongoing public outreach related to the State's regulatory programs for cannabis.

City of Colusa

Colusa Triple Crown Cannabis Research and Development Business Park Project IS/MND

The City of Colusa is considering approval of the construction and operation of a Cannabis Research and Development Business Park. The project would encompass approximately 1,420,000 square feet on 84 acres and would include energy-efficient greenhouses for cannabis cultivation, plant processing spaces, facilities for creating infused products, a testing laboratory, research and development and training centers, distribution center, and corporate offices.

Horizon is currently preparing an IS/MND for the project tiered from the CDFA CalCannabis PEIR and referencing the Bureau of Cannabis Control's IS/ND. The City requested Horizon's assistance in crafting a CEQA strategy for the Triple Crown project that will be consistent with citywide implementation of its recently adopted cannabis ordinance and will simplify the process of complying with state licensing requirements.

Budget and Schedule: This project began in 2018 and will be completed by early 2019.

City of Desert Hot Springs

Environmental Documentation for Various Cannabis Cultivation Facilities

ECORP has provided environmental support for over 12 medical marijuana cultivation projects in the City of Desert Hot Springs. The projects were primarily indoor grow operations proposed in industrial parks located throughout the City. Typically, the projects involved processing of a Conditional Use Permit and a development agreement. For the majority of the projects ECORP prepared technical studies addressing biological resources, cultural resources, and air quality/greenhouse gas in support of IS/MNDs. The projects were completed between 2016 and 2018.

Various Municipalities in Northern California

On-Call Contract Staffing Services – Medical Marijuana Ordinance Preparation

ECORP is contracted with various public agencies to provide on-call, professional contract planning and environmental services whereby ECORP staff serves as agency staff. Working in that capacity, ECORP staff has undertaken the following efforts related to cannabis use, cultivation, dispensing, transport and/or sale:

- **City of Biggs, CA:** (Contract Planning Department Staff). ECORP staff served the City in the capacity of contract Planning (Planning Director) and Code Enforcement staff. Working in this capacity, ECORP's assigned staff member (Mr. Scott Friend) assisted in the drafting of the City's Medical Marijuana Ordinance in response to Proposition 215 and SB420 and assisted the City in the redrafting of the City's regulations in response to the Adult Use of Marijuana Act (Prop. 64). Additionally, ECORP staff members served as the Code Enforcement staff of the agency in the enforcement of agency Codes and Regulations. Acting in this capacity, ECORP worked with local law enforcement, public works and building staff to enforce City and State codes. Completion Date: 1995-2017; Ordinances Approved in 2011, 2012, 2016.
- **City of Yreka, CA:** (Contract Planning Department Staff). ECORP staff currently serves the City as an on-call contract Planning and Environmental consultant. Working in this capacity, ECORP staff members have assisted the City with its drafting and re-drafting of the City's Medical and Adult Use of Marijuana Ordinances in response to Propositions 64 and 215 and SB420. This involved both engagement



- with City staff and presentation with both the Planning Commission and City Council. Completion Date: In process; Ordinances Approved in 2012, 2013, amendment in process)
- **City of Red Bluff, CA:** (Contract Planning Department Staff). ECORP staff currently serves the City in the capacity of the City's on-call contract Planning and Environmental consultant including acting as the City's Community Development Department (staff and Director). Working in this capacity, ECORP staff members have assisted the City with its drafting and re-drafting of the City's Marijuana Ordinances in response to Proposition 215 and SB420. This involved both engagement with City staff and presentation with both the Planning Commission and City Council. Completion Date: In process; Ordinance Approved in 2012, amendment in process)
 - **City of Orland, CA:** (Contract Planning Department Staff). ECORP staff currently serves the City in the capacity of the City's on-call contract Planning and Environmental consultant including acting as the City's Community Development Department (staff and Director). Working in this capacity, ECORP staff members have assisted the City with its drafting and re-drafting of the City's Marijuana Ordinances in response to Proposition 215 and SB420. This involved both engagement with City staff and presentation with both the Planning Commission and City Council. Completion Date: In process; Ordinances Approved in 2010, 2012, amendment in process)

A.2 Experience with CEQA and Program EIRs, in Particular

Horizon's experience developing and leading CEQA compliance strategies for state and local clients spans many project types, with project manager Michael Stevenson's experience in PEIRs constituting a major theme over the majority of his 20-year career. Mr. Stevenson regularly works on projects involving the evaluation of regulatory policies and/or controversial projects similar to the County's project, including most notably the CalCannabis Cultivation Licensing Program PEIR and the Bureau of Cannabis Control's IS/ND. Mr. Stevenson also managed the Statewide Pest Prevention and Management Program EIR for CDFA, which won environmental excellence awards from both the California and National Associations of Environmental Professionals. He regularly works with counties and cities on program EIRs, including clients such as Lake County, the City of Modesto, the Town of Windsor, the Sonoma County Water Agency, the Santa Clara Valley Water District.

Our approach to preparing PEIRs involves identification of the full range of conditions and outcomes that may result from implementation of the program, considering variations in geography, the local environment, and the likely characteristics of the individual projects that will be implemented under the program. From that point, we identify the spectrum of possible impacts, and identify mitigation pathways, often which involve "if-then" approaches that consider the site-specific impacts to identify which mitigation measures are required. A menu of mitigation measures is often developed which are scalable to accommodate the varying nature and intensity of specific impacts. Where specifics regarding mitigation cannot be identified in the Program EIR due to lack of project-specific details, clear and enforceable performance standards are included to avoid improper mitigation deferral. In this way, the Program EIR can accommodate a range of outcomes, from "no impact" to a reasonable worst-case scenario. These mitigation pathways frequently alleviate the need for tiered environmental documents; instead, project-level analysis can consist of mitigation implementation.

Below is a list of Horizon's recent and relevant experience involving PEIRs and other types of CEQA documents. Two examples of Horizon's work with PEIRs are described further.

Examples of Horizon’s CEQA Experience, Highlighting Program EIRs

Project and Client	Document Type
CalCannabis Cultivation Licensing PEIR, CDFA	Program EIR
Statewide Cannabis Business Licensing Program IS/ND, California Bureau of Cannabis Control	Program EIR
Statewide Plant Pest Prevention PEIR, CDFA	Program EIR
Stream Maintenance PEIR and Environmental Permitting, Santa Clara Valley Water District	Program EIR
Stream Maintenance PEIR and Environmental Permitting, Sonoma County Water Agency	Program EIR
Suction Dredge Permitting Program Subsequent EIR, California Department of Fish and Wildlife	Subsequent PEIR
Clear Lake Integrated Aquatic Plant Management Plan PEIR, Lake County	Program EIR
PEIR for California Building Code Revisions, Office of Statewide Health Planning and Development	Program EIR
Water Master Plan Update PEIR, Town of Windsor	Program EIR
Modesto Water Master Plan EIR, City of Modesto	Program EIR
Modesto Wastewater Master Plan EIR, City of Modesto	Program EIR
CHP Environmental Compliance, California Department of General Services	EIRs and MNDs
Round Robin Environmental Consulting (On-Call), California Public Utilities Commission	EIR, IS/EAs, MND
Surface Water Supply, Stanislaus Regional Water Authority	MND, EIR
Kern River Program, City of Bakersfield	Recirculated EIR
State Printing Plant Relocation and Demolition, California Department of General Services	MND
Pope Creek Invasive Plant Management, Tuleyome	IS/EA
Terminal Reservoir Lining, Modesto Irrigation District	NOE
Austrian Dam Erosion Repair, San Jose Water Company	NOE
Austin Creek, Vallejo Flood and Wastewater District	Addendum to MND

EA = environmental assessment
 EIR = environmental impact report
 IS = initial study
 MND = mitigated negative declaration

ND = negative declaration
 NOE = notice of exemption
 PEIR = program environmental impact report

City of Modesto Public Works Department Water and Wastewater Master Plan EIRs

A Program EIR for water-related infrastructure typically addresses all resources areas and has the complexity of basing the analyses on both current and projected conditions. Horizon crafts mitigation at the program level of analysis that can allow many anticipated projects to move forward without the need for extensive additional environmental review. At the same time, completing a program-level EIR provides the flexibility of evaluating the available information while allowing future projects to be more fully developed, rather than applying mitigation that may not be necessary.

Horizon prepared the City of Modesto Wastewater Master Plan EIR, a combined project- and program-level EIR, that evaluates the City’s proposed upgrades to its wastewater treatment and collection system facilities planned for implementation over a 25-year period. The EIR evaluates one near-term project at a project level of detail, and over 70 capital improvement projects at a program level. Under a separate contract, Horizon also prepared the EIR for the City’s Water Master Plan that

analyzes, at a program level, water infrastructure components proposed to be installed or upgraded to alleviate existing deficiencies and accommodate water service demands associated with future development. Horizon worked closely with the City's Public Works Department and its selected engineers to ensure the EIRs are complete and legally defensible.

Budget and Schedule: Horizon has assisted the City with concurrent preparation of its Water and Wastewater Master Plan EIRs, as well as ensuring consistency with the City's Urban Area Master Plan Update Master EIR, which is being prepared on a parallel track. For the Wastewater Master Plan EIR, the schedule was accelerated mid-stream to allow the inclusion of a project-level analysis of the City's proposed River Trunk Project. Budgets for the two projects are \$324,998 for WWMP EIR, \$284,626 for WMP EIR.

Sonoma County Water Agency

Stream Maintenance Program, CEQA and Permitting

Sonoma County Water Agency (SCWA) is responsible for performing sediment removal, vegetation removal and thinning, and bank stabilization activities annually to maintain flow conveyance capacity in county flood control channels.

Horizon assisted SCWA in developing its Stream Maintenance Program (SMP), including technical studies, CEQA compliance, and permitting. Prior to the SMP, maintenance projects were permitted individually. This resulted in project uncertainty, delays, and high permitting costs. Horizon developed a comprehensive approach to achieve long-term 10-year and 15-year permits with multiple regulatory agencies.

Horizon conducted a thorough CEQA analysis and wrote a PEIR document that was awarded the 2011 Outstanding Environmental Resource Document from the California Association of Environmental Professionals. Horizon was successful in obtaining long-term programmatic permits and developing a flexible mitigation program that uses on-site restoration and off-site watershed projects with partner agencies, landowners, and non-profit organizations to provide required mitigation.

Technical studies included cultural resources assessment, riparian vegetation mapping, wetlands inventory, and sensitive species and habitat mapping to support permitting processes.

Budget and Schedule: The project has been managed adeptly by Horizon, keeping to schedule and the original project budget. SCWA continues to be a valued Horizon client, having been retained by SCWA for additional services including developing the Agency's Flood Control Design Criteria Manual, Water Smart Development and Low Impact Development Guidebook, and leading the U.S. Army Corps of Engineers' operations and maintenance program for channel facilities along the Russian River and Dry Creek.



Horizon developed a PEIR that streamlines permitting for routine flood control activities and reduces costs for the Sonoma County Water District. Horizon's scope also included technical studies, permitting and developing treatment design templates for sediment removal, bank stabilization, and vegetation management activities.

Photo: Restoration after sediment removal on East Washington Creek, Petaluma, California

A.3 Experience in Nevada County

ECORP has extensive experience working on projects located in Nevada County. Horizon staff have worked together for many years and are accustomed to quickly gathering information to familiarize themselves with the stakeholders, issues, services, and natural resources of communities.

Nevada Irrigation District

EIR and Regulatory Permitting for the Centennial Reservoir Project, Nevada and Placer Counties

NID has proposed the Centennial Reservoir Project to provide drought mitigation and improve water supply reliability for NID's customers. The proposed project involves the construction of a new 110,000-acre-foot reservoir on the Bear River between the existing Rollins and Combie Reservoirs. The project would construct a new dam and associated facilities. The project would also implement low-impact public recreational opportunities within the proposed project area.

ECORP is supporting NID, under subcontract to HDR, with biological and cultural resources and permitting expertise. ECORP will be preparing the Biological and Cultural Resources Assessment in the EIR. ECORP biologists, archaeologists, and an architectural historian have been conducting surveys of the inundation zone (approximately 1,300 acres) and additional areas to accommodate construction staging areas, relocated infrastructure, borrow sites, and new recreation facilities.

ECORP has prepared a Cultural Resources Inventory of the inundation zone and additional areas relating to both cultural resources and the built environment and is evaluating over 130 identified resources for significance. ECORP is coordinating Tribal Consultation under the provisions of AB 52, the CEQA tribal consultation requirement, and will prepare a Paleontological Resource Assessment for the project. ECORP biologists have conducted surveys for vegetation, forest canopy, sensitive species occurrences and habitat, and federal and state jurisdictional waters and wetlands. ECORP will also provide peer review support for the Water Resources section of the EIR.

ECORP has also been retained to prepare applications for federal and state regulatory permits in support of the project, including CWA Section 404 Individual Permit Application and Section 401 Request for Water Quality Certification, California Fish and Game Code Section 1602 Streambed Alteration Agreement, ESA Section 7 Biological Assessment, CESA Section 2081 Incidental Take Permit (if necessary), and NHPA Section 106 Compliance.

City of Grass Valley

Loma Rica Specific Plan EIR, Nevada County

The Loma Rica Specific Plan EIR project is a proposed 452-acre in-fill residential and commercial development located adjacent to the City of Grass Valley in the upper foothills of the Sierra Nevada Foothills, Nevada County.

ECORP was retained by RBF Consulting to conduct biological and cultural resources constraints studies and to aid in preparation of the biological and cultural resources sections of the EIR. ECORP worked closely with RBF's project manager and the City of Grass Valley Planning Department to assess biological and cultural resources impacts and develop mitigation measures in support of the EIR. Project-specific tasks included a detailed assessment of the existing literature and development plans, biological and cultural resources field surveys, development and submittal of biological and cultural resources constraints reports, and biological and cultural resources EIR support.

A.4 Excellence in Project Management

Responsiveness, budget, schedule, quality; these are measures of effective project management. Our benchmark is excellence. We achieve this through principal-level commitment to all our projects, which assures the highest level of client service and QA/QC.

Horizon focuses on producing clearly written and legally defensible environmental compliance documents. We strive to provide high-quality initial drafts, to allow final versions to be produced quickly with minimal changes.

We believe our performance on the large-scale on-call contract described below is a good indicator of our excellence in project management because it required quick response, staffing diverse project types, flexibility in schedules, managing subconsultants, keeping clients informed, and delivering high-quality results on-time and within budget. Task orders were managed by senior staff, demonstrating that excellence in project management is the standard throughout the company.

California Department of General Services

Environmental Services Retainer – Northern California

California Department of General Services (DGS) Real Estate Services Division (RESD) is responsible for planning and development of many state buildings and properties.

Horizon has staffed 30 separate task orders in Northern California to date under the 2016—2020 retainer contract. Quick-response performance and preparation of environmental documents for CEQA compliance are critical aspects of this work. Environmental analysis and CEQA compliance required for these projects include a full range of environmental, biological, and cultural resources investigations. In past 3 years, our team has prepared two EIRs and eight IS/MNDs for DGS.

One representative project under this retainer contract is the California Conservation Corps Placer Center Kitchen and Dorm Replacement Project, located in Placer County. Horizon completed an IS/MND for replacement of facilities at this campus-style center. The main environmental resource topics included biology, cultural and historic resources (including Assembly Bill 52 tribal consultations), noise, and hazardous materials. The Horizon team completed supplemental technical reports and activities including but not limited to a wetland delineation, tree count survey, biological resources survey and report, a Public Resources Code Section 5024 evaluation of the historic buildings, and archaeological excavations. Horizon

is currently providing regulatory permitting and mitigation measure implementation support for this project.

Budget and Schedule: Of the 30 task orders issued to Horizon since 2016, 17 are complete, and all were completed on time and within budget. The 13 open task orders are also on schedule and within budget. DGS selected Horizon for the next retainer contract (2020—2025), which helps demonstrate their satisfaction with our responsiveness the quality of our work.

Client Testimonials

I want to thank you and the entire Horizon team for working so hard to meet the extremely aggressive schedule that was set in the beginning of [these two projects]. You have produced quality documents with great speed and without complaint. I truly appreciate your patience.

– Jennifer Parson, Senior Environmental Planner, DGS

The suction dredge project was an example of exactly how a CEQA contract should be run.

– Stafford Lehr, Branch Chief, CDFW

Thank you for everything that you are doing on San Joaquin River Restoration. I really appreciate your careful thought, your patience, your messaging, and all of your team.

– Wendy Bogdan, Assistant General Counsel, CDFW

Just wanted to add my own thank you for all the good work your firm did on this complex and detailed project. Appreciated the close coordination, timeliness, and high-quality work. Very much appreciated with working with you all personally, and as we continue with permits.

Mike Coleman, Environmental Planner, Santa Clara Valley Water District

I have reviewed the material and have no further comments. The report is very complete. Your firm does excellent work.

Mike Brinton, Stanislaus Regional Water Agency

B. WORK PROGRAM

B.1 Background

Since late 2015, several state laws have been enacted related to medical and recreational commercial cannabis activity, culminating in the passage of the Medicinal and Adult Use Cannabis Regulation and Safety Act (MAUCRSA) in mid-2017. MAUCRSA creates a single statewide regulatory system to govern the cannabis industry in California and provides a structure for state licensing of the cultivation, processing, manufacturing, tracking, quality control, testing, inspection, distribution, and retail sale of commercial cannabis.

While MAUCRSA imposes a requirement that cannabis businesses obtain state licenses for commercial cannabis activities, it explicitly gives powers to local entities (i.e., counties and cities) to further regulate, enforce, and/or restrict such activities. Such regulations or restrictions may include limitations on the size, location, and specific practices of cannabis businesses, or may even ban some or all types of commercial cannabis activities.

From April 2017 through December 2017, Nevada County worked with a consultant to facilitate an independent and impartial process of gathering community input regarding the development of long-term cannabis regulations. A stakeholder group, known as the Community Advisory Group (CAG), was formed, and held a series of ten public meetings and received input for the County's long-term cannabis regulations. The CAG determined that cannabis cultivation was an important economic interest in Nevada County, and that there was support for bringing existing cannabis activity into compliance; however, the group also developed a series of recommendations to ensure the protection of neighborhood activities, youth, and the environment. Following a review of the CAG's findings by the Nevada County Board of Supervisors, the County developed a draft cannabis cultivation ordinance.

On May 22, 2018, the Nevada County Board of Supervisors approved an urgency ordinance allowing the County to issue temporary commercial medical cannabis cultivation permits to a limited number of applicants. The temporary permits would be subject to state law and would require compliance with state and local laws, ordinances, and regulations but would not create any right in the permit holder to a permanent or long-term license.

B.2. Understanding of Project Requirements and County Expectations

The objective for the consultant services requested in this RFP is to prepare a program environmental impact report (PEIR) that comprehensively evaluates existing (baseline) cannabis cultivation activities in the county, reasonably foreseeable activities under Nevada County's draft cannabis cultivation ordinance, their potentially significant environmental impacts, and mitigation measures or alternatives to reduce or avoid those impacts. In addition, the PEIR must be completed in a clear and transparent manner that allows for meaningful involvement by interested parties and members of the public. Because the County is considering the adoption of a discretionary process for the licensing of cannabis cultivators, the document must be prepared in a manner that allows individual use permit applicants to tier from the PEIR.

In order to accomplish the County's objectives, the selected consultant must be strongly qualified to perform the requested work and have a deep understanding of both CEQA and commercial cannabis propagation, cultivation, production, and processing. The Horizon team was formed to meet these needs and is exceptionally well qualified to accomplish all objectives outlined in the County's RFP.

Program Environmental Impact Report (PEIR): A type of CEQA document that can be used to evaluate a series of actions, such as individual activities carried out under the same authorizing regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

Individual cannabis cultivation sites authorized under Nevada County's future ordinance fit these criteria, providing substantial advantages to the County, including:

- (1) A robust public process as the County completes CEQA compliance for its ordinance.
- (2) The ability to streamline CEQA compliance for individual sites, allowing for tiered evaluations that focus on site-specific environmental impacts that were not able to be addressed in the broader PEIR.

B.3. Horizon's Approach to the Work

Horizon's overall approach to serving Nevada County will be to prepare a superior environmental analysis that evaluates the impacts of implementing the County's ordinance by meticulously following the procedural and substantive requirements of CEQA, meeting schedule imperatives, and applying exceptional technical quality coupled with effective project management oversight.

Horizon offers a unique benefit to the County through our work preparing PEIR for the California Department of Food and Agriculture's (CDFA's) CalCannabis Cultivation Licensing Program. We can provide important efficiencies at a lower budget to Nevada County by preparing an EIR that tiers off the work already completed by the State. The details of this approach are included below in Section B.4.

In this section, we set out our proposed work program, highlighting several issues that warrant particular attention in preparing the PEIR for the County's cannabis cultivation ordinance.

A proposed schedule and budget are included in Sections B.5 and B.6.

Project Scoping

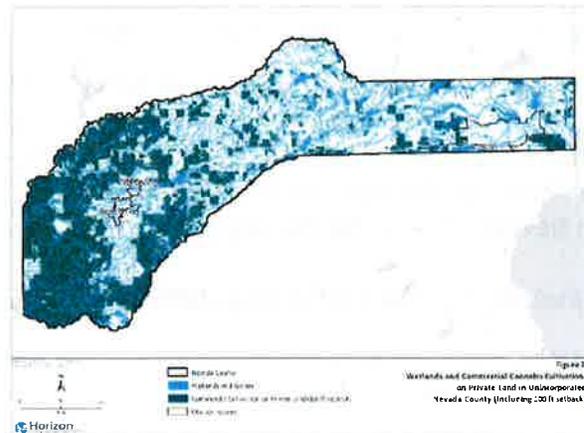
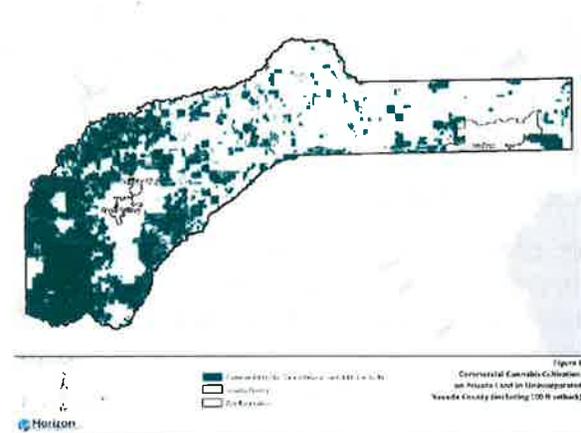
During the project scoping period, we will work with Nevada County to understand the specific needs and issues of Nevada County as they relate to its draft cannabis ordinance. We will develop a public outreach process that begins with project scoping and continues throughout the project, delivering clear, easy-to-understand information to the public and interested stakeholders.

Understanding of Local Conditions and Nevada County's Needs

We understand that Nevada County has specific needs related to its regulation of commercial cannabis cultivation that do not necessarily mirror those of other local jurisdictions or the State. At the outset of the project, we will work closely with your staff to deepen our understanding of the County's needs and key environmental, planning, and economic concerns related to cannabis cultivation and the County's draft cannabis ordinance. Our team will familiarize itself with the key local factors and conditions that

influenced the development of the draft ordinance. Following these reviews, we will work with County staff to consider and troubleshoot any potential issues with the project.

In order to fully understand potential impacts, Horizon also proposes to conduct a comprehensive evaluation of the existing cultivation operations in the county, including site visits to cultivation sites, as well as data collection and desktop research regarding the baseline environmental conditions in the County that will serve as a framework for the impact analysis. Horizon will determine and advise the County on any technical studies the County may want to prepare in order to address potential issues. We will work closely with County staff to determine what resources are already available to the County that could be utilized, including maps, aerial photographs, and environmental assessments. We will focus primarily on the AG, AE, and FR zone districts, where commercial medical cannabis cultivation would be allowed. Using geographic information systems (GIS) analysis will help our team narrow down the locations and conditions that merit environmental focus, as depicted in Figures 1 and 2 showing, respectively, private lands in permitted zoning districts and those same lands with an overlay of wetlands and waters.



As mentioned above, we recognize that the County has needs and requirements that are not necessarily addressed by the State regulatory framework. We will work with the County to ensure its ordinance adequately addresses nuisance issues such as neighborhood compatibility, visual screening, traffic, odors, noise, and security/public safety. An ultimate goal of the land use cannabis ordinance will be to protect the health, safety, and welfare of County residents and visitors, as well as commercial cannabis workers and employers. Our work will be conducted with these topics in mind, and we have included experienced planners on our team to accomplish this.

Developing and Implementing a Public Outreach Strategy

As has already been seen during the ordinance development process, this project will garner substantial public interest within, and potentially outside of, the County. We understand also that one of the key goals of the CAG was to “bring the community together around a set of regulations and document the process to protect the public health, safety, and welfare.” As such, particular attention must be paid to both the process by which the public is engaged, and the messages provided throughout the public engagement process. A key to success will be for the CEQA process to occur in a manner that is transparent and easy for the public to understand.

Stakeholder and public outreach for this project will occur primarily through the CEQA process, and Horizon’s public outreach services will be led by Michael Stevenson. Michael brings a long history of leading public meetings and managing public participation and outreach. For the CDFA CalCannabis PEIR,

Michael led eight scoping workshops throughout California, followed by an additional four public meetings during the Draft PEIR comment period. As another example of the Horizon team's ability to effectively manage the public outreach process, this project management team successfully completed the public outreach and response to comments efforts for the CDFA Statewide Plant Pest Prevention and Management Program EIR, which involved the facilitation of five statewide public meetings and the processing of approximately 15,700 comment letters.

We effectively manage contentious stakeholders and controversial issues, addressing concerns early in the project to ensure work is not delayed when the stakes are high. As part of navigating projects through state and federal protocols, our team can also provide solutions and outreach support strategies with the following, often challenging tasks: strategic communications planning, public awareness materials, cross cultural communications, stakeholder engagement, community advisory forums, conflict resolution, public workshop facilitation, presentations, displays, and website development and maintenance.

Preparing a Complete, Legally Defensible Tiered EIR

Relying on our extensive experience with CEQA broadly, as well as specifically with the CDFA Cannabis Cultivation EIR and the specific environmental issues related to cannabis cultivation, we will prepare a complete, legally defensible tiered EIR for Nevada County's cannabis cultivation ordinance. The EIR will leverage the work we have completed for the State, as well as considering the existing conditions in Nevada County and the regulatory framework already in place at the state level.

Leveraging the CDFA Regulations and PEIR

As discussed elsewhere in this proposal, Horizon recently completed the PEIR for CDFA's CalCannabis Cultivation Licensing Program. As part of this work, we conducted numerous site tours of nurseries and indoor, outdoor, and mixed-light cultivation operations. We also completed a thorough literature review of cannabis cultivation and its potential impacts. This resulted in the development of a set of regulations for the CalCannabis Program that avoids the potential for significant environmental impacts. We then developed a PEIR for CDFA that contains an exhaustive evaluation of the potential impacts of commercial cannabis cultivation, addressing the full range of CEQA topics.

The importance of this work rests in the fact that the document was not legally challenged, and the statute of limitations has expired, and it therefore provides a solid, legally defensible CEQA platform.

The document contains a tiering strategy (Appendix J of the PEIR), whereby local jurisdictions such as Nevada County can act as a responsible agency on CDFA's PEIR, adopting it as their own. In this scenario, Nevada County can then prepare a PEIR that tiers from CDFA's PEIR and draws on the conclusions made therein. As examples, the CDFA PEIR determined that there would be no significant impacts, even at the local level, in the resource areas of Greenhouse Gas Emissions, Mineral Resources, Public Services, and Hazards. Under this approach, the County would also be able to leverage the findings of the Human Health and Ecological Screening Risk Evaluation technical study conducted for the CDFA PEIR. Many other impacts within resource topics could be dismissed based on the statutory requirement of compliance with the CDFA licensing framework. The County's tiered PEIR would be streamlined and focused on local issues and the conditions that exist within the County, to the extent they were not addressed in CDFA's PEIR.

Horizon can then facilitate a double-tiering process for the County, preparing a "tiering strategy checklist" that identifies the environmental topics specific to Nevada County that were not sufficiently addressed in the CDFA PEIR. This would allow the County to identify and address any potential impacts associated with permitting individual projects in a focused and efficient manner.

Note that, should the County desire a stand-alone PEIR that does not tier from CDFA's PEIR, Horizon's intimate knowledge of cannabis cultivation and its potential impacts, garnered through the development of CDFA's document, can be fully leveraged to create efficiency as we prepare the County PEIR. Horizon can work with the County to prepare a budget and work plan based on this alternate approach.

Leveraging the Work Completed by Other Counties

Horizon is currently in the process of comprehensively evaluating the CEQA documents prepared by other counties, to support the CalCannabis Licensing Program's CEQA compliance related to licensing of individual cultivation sites. As such, we possess a thorough understanding of how these other counties have approached their environmental analysis and mitigation measures, including the best practices that have been incorporated into other local ordinances to avoid or minimize potential impacts and make the ordinance effective and easy to implement. We will bring this information and understanding to bear for Nevada County.

Consideration of Existing Laws and Regulations

A complex network of existing laws and regulations governs commercial cannabis cultivation, including those implemented by CDFA, the State Water Resources Control Board, the California Department of Fish and Wildlife, the California Department of Pesticide Regulation, Cal/OSHA, and many others. These requirements address topics such as background checks, wattage limits on mixed-light cultivation, water supply and water quality, biological resources, worker safety, security lighting, and other topics. Horizon suggests that the County can simplify CEQA compliance by acknowledging that compliance with these other laws and regulations will address many of the County's key concerns and the environmental impacts of cultivation. The County can then focus its efforts on topics where it wishes to be more environmentally protective, as well as those issues that are not addressed by the existing regulatory framework.

Consideration of Baseline Conditions

We understand that a number of legal and illegal cannabis cultivation sites already exist in Nevada County. To the extent that these cultivation sites would continue to operate under the County's new ordinance, they represent the baseline condition and will not generate new impacts. To the extent that their operations would change as a result of the County's new ordinance or state law, the PEIR will need to address the incremental impacts of such a change, many of which are likely to be beneficial in nature.

A Tiering Strategy for the County

A key to success for the County's PEIR will be the ability for individual operations to easily tier from the document as the County considers and processes individual use permit applications. To accomplish this, Horizon proposes to prepare a tiering strategy for the County—similar to the one we developed for CDFA (Appendix J of the CDFA PEIR), but tailored to the County's needs—to focus and streamline individual approvals of cultivation sites and associated CEQA compliance documentation. This approach can, if desired, include templates for tiered CEQA documents, such as Addenda, Negative Declarations, and Mitigated Negative Declarations.

Legally Defensible CEQA Processes and Analysis

Horizon will ensure that the PEIR anticipates and addresses the typical legal complaints filed against other lead agency EIRs and the courts' disposition relative to those issues, in particular suits that have been filed

against other local agencies' cannabis ordinances. These issues include the need for a stable and complete project description, a meaningful and contextual analysis of the benefits and impacts on the environment of the County's proposed approach to regulating cannabis cultivation, consideration of a reasonable range of alternatives, and a robust cumulative impact analysis. We will pay particular attention to these issues to ensure the highest level of CEQA compliance.

Strong, Effective Project Management and Clear Communication

Project Management Team

Preparation of the PEIR for the County's ordinance will involve complex processes and rigorous procedural requirements. Project management must focus resources on the critical path, organize tasks efficiently, identify where tasks can be completed in parallel (absent complete information), integrate the County's direction, avoid redundancies, anticipate challenges, and assure quality. The project manager must possess a high level of organizational and leadership ability, and be able to communicate effectively with a wide range of audiences in both verbal and written formats.

Horizon's project management team, including principal-in-charge Ken Schwarz, Ph.D., and project manager Michael Stevenson, M.S., has extensive experience managing CEQA processes for similarly large, complex, multi-agency, and/or multi-objective projects (including projects that require balancing competing objectives), coordinating interdisciplinary teams, and preparing high-quality reports within time and budget constraints. Project manager Michael Stevenson is known for his effective project-related communications and his excellent interpersonal, written, and verbal communication abilities. Michael is effective with a wide range of stakeholders. He is skilled at maintaining a complete and well-organized administrative record.

Strategy Team

Our project management and technical staff will be supported by a strategy team that has been assembled specifically to meet the challenges associated with this unique project:

- Enercon, which helped guide the CEQA team through the CalCannabis PEIR process; and
- ECORP, which has recent local experience working in Nevada County and is familiar with stakeholder and community issues.

This group will interface with our team and County staff to ensure that all of our work is carefully targeted to meet the County's objectives and is practical, efficient, and legally defensible.

Adherence to Schedule and Budget Imperatives

Horizon understands that the County desires the PEIR to be prepared on a strict timeline to allow for timely adoption of its ordinance. We have prepared a preliminary schedule that shows the key phases of work on the PEIR and associated timeframes; this is presented in Section B.5. The schedule allows time for thorough County review of deliverables, and we plan to develop a detailed schedule and work plan during the contracting phase of the project. We also understand the need to work within budget constraints and, based on the budget provided in Section B.6, will develop a detailed budget that meets the County's needs and accomplishes the necessary result—a legally defensible and usable PEIR.

Regular, Clear Communication

At the start of the project, Horizon’s project manager Michael Stevenson will meet with the County to develop an effective communication protocol. Michael and his team will ensure that clear channels of communication and responsibility exist between Horizon and the County. Michael will ensure that all members of the project team are fully aware of, and comply with, the communication protocols established between Horizon and the County.

Horizon will hold an internal kickoff meeting to ensure that everyone working on the project has the standardized data collection procedures, data storage and analysis guidelines, report templates, style sheets, and other standardized tools to improve quality and attain consistency.

QA/QC and Peer Review

Horizon implements rigorous quality assurance/quality control (QA/QC) procedures, which rely heavily on the thorough review of all project-related documents during each development stage. This requires a closely coordinated project schedule that allows sufficient time for internal review and revision. We use Microsoft Project software to develop project schedules for task tracking and internal team tracking. Our senior staff will support the project management team and lead the Horizon team’s QA/QC program.

As part of the startup phases of the project, we will develop a delivery schedule for all team members that incorporates internal review and editing of all documents prior to submittal to the County. Each document produced by Horizon for the County will go through a thorough editing process prior to submittal. For key deliverables and as necessary, legal QA review will also be provided. Horizon conducts and documents QA and QC reviews for all main documents that will be publicly circulated or may become a substantive portion of the administrative record, including key correspondence, reports, studies, presentation materials, and calculations.

Administrative Record

If desired, Horizon can develop and maintain the administrative record for the project. We will identify the organization and structure of the administrative record at the outset of the project. We will then develop the administrative record in “real time” such that it is available to the County at any point throughout the project. At the end of the project, we will deliver a clear, complete, and organized Administrative Record.

The administrative record is a critical aspect of project management. Environmental documents have failed in the courts solely because of a poorly organized administrative record. The Horizon team will be proactive in its approach to maintaining the administrative record throughout the duration of the project.

B.4. Work Plan

The Horizon team’s work plan is organized into the following tasks:

1. Review Draft Ordinance
2. Develop Schedule
3. Public Outreach Program
4. NOP and Scoping
5. Technical Studies
6. Prepare EIR

7. Mitigation Monitoring and Reporting
8. Public Meetings/Hearings
9. Project Management and Administrative Record Support

Detailed descriptions of each task are provided below, including all major meetings and deliverables. A proposed schedule and budget are included in Sections B.5 and B.6.

Task 1. Review Draft Ordinance

Horizon's initial task will be to review Nevada County's draft cannabis cultivation ordinance to understand the project description and identify the supporting technical studies needed to complete an EIR and to ensure a sound approach to environmental review.

Task 1.1. Ordinance Review and Project Kick-off

Horizon will review Nevada County's draft commercial cannabis ordinance, to become familiar with the County's approach to commercial cannabis regulations and identify potential issues and information needs. Following this review, Horizon will hold a half-day kick-off meeting to discuss the County's draft ordinance, priorities for analyzing potential impacts, communication protocols, scheduling, public outreach strategy, and CEQA documentation. The meeting will focus on:

- Review of the scope of work and project schedule;
- Discussion of the characteristics of the draft ordinance as well as other state requirements;
- Review of the overall CEQA process;
- Review and discussion of the general approach to CEQA analysis and key technical issues;
- Discussion of appropriate public engagement through the CEQA process;
- Review of the approach to organize and maintain the administrative record;
- Discussion and confirmation of communication protocols for the project team; and
- Discussion and scheduling of upcoming activities and deliverables.

Following the kick-off meeting, Horizon will conduct a comprehensive evaluation of the existing cultivation operations in the county, including data collection and desktop research regarding the baseline environmental conditions in the County, which will serve as a framework for the impact analysis. As part of this work, Horizon will work with the County to determine what types of data the County may already have in terms of maps, aerial photographs, and information regarding existing cultivation activities. Following this review, Horizon will advise the County on what, if any, technical studies may need to be completed to ensure an adequate assessment of environmental impacts of the project.

Task 1.2. Development of Alternatives

Alternatives will be developed to support the alternatives analysis in the EIR. The alternatives developed under this task will represent a reasonable range of potentially feasible alternatives that would achieve most project objectives, but avoid or substantially lessen anticipated project-related significant impacts. Potential alternatives to be considered may include, but are not necessarily limited to, the following:

- No Action – continuation of status quo
- Impose different limitations on the types of operations (e.g., indoor, outdoor, size)
- Impose limitations on number of operations to be licensed

- Restrict locations where cannabis cultivation is permitted (e.g., sensitive habitats)
- Ban commercial cannabis cultivation completely

The alternatives developed will be outlined in a memorandum. This memorandum will describe CEQA and California Administrative Procedures Act (APA) (Government Code Section 11340 et seq.) requirements for alternatives, describe the alternatives development process, recommend the alternatives to be considered in the EIR and Initial Statement of Reasons, describe those alternatives that were dismissed from further consideration, and provide a rationale for those alternatives that were selected and those that were dismissed.

Task 1.3. Project Description

Horizon will use the review and information gathering process from Task 1.1 to develop a comprehensive project description for use in the EIR. The outcome of this task will be a project description which adequately describes, for CEQA purposes, the various aspects of Nevada County's cannabis cultivation ordinance and will serve as the basis for the CEQA scoping process and the environmental analysis in the EIR. The project description is anticipated to be primarily organized around types of operations (i.e., size and indoor/outdoor/hybrid), although it is possible that other formats may be used instead.

The approach to developing the project description will consider past litigation related to alleged deficiencies in the project descriptions in EIRs (e.g., a stable and finite project description), to avoid similar criticisms of this document. The project description will include all CEQA-mandated sections, including project objectives, project location (relying on GIS analysis of eligible parcels), a description of cultivation activities and methods, and a description of how the EIR will be used for related environmental review and consultation requirements (e.g., by County planners for local implementation of regulations). The project description will also include a clear description of the discretionary action that is being taken by the County in certifying the EIR and considering approval of the project.

Deliverables:	Alternatives Memorandum (draft and final, electronic)
	Project Description (draft and final, electronic)
Meetings:	Project Kick-off Meeting (4 hours)

Task 2. Develop Schedule

For this task, Horizon will work with the County to prepare a schedule with key milestones for the EIR process. As described in Task 1, Horizon will work with the County during project kick-off to refine and adjust the schedule according to the County's needs.

Task 3. Public Outreach Planning

Horizon will identify key items in the proposed public outreach program, including generally where and when outreach meetings will be held; what materials, if any, Horizon will be responsible for preparing; and to what purpose.

At the kick-off meeting and during the initial stages of the project, Horizon will work with the County to determine an appropriate and robust public outreach strategy. As part of this work plan, Horizon plans to hold two scoping meetings (see Task 4) and attend up to three meetings/hearings with public agencies, the County Planning Commission, and/or the Board of Supervisors (Task 8). The materials Horizon will prepare, as well as the meeting structure and objectives, are described in Tasks 4 and 8.

Because of the anticipated high level of public interest in the County's ordinance and its potential impacts, Horizon proposes that, in addition to the meetings described in Tasks 4 and 8, we would conduct a public meeting following the publication of the Draft EIR. The meeting may be held in the same locale as the scoping meetings or in another location at the discretion of the County. The hearing will focus on providing a brief overview of the Draft EIR and providing a forum for receiving meaningful public comments.

Horizon will provide a structured process for the hearing utilizing a general format as follows:

1. Brief overview of the hearing's purpose, ground rules, and agenda. *(Ground rules and purpose will include an explanation that the hearings are not designed to review the need for the program or to question various stakeholder groups' interests or motives but instead an opportunity to learn more about the Draft EIR so the participants can be as successful as possible in the comment period.)*
2. Brief presentation by Horizon and/or County staff regarding the content of the Draft EIR, the range of impacts analyzed, and the process being undertaken to produce the Final EIR.
3. Following the presentation, one of the following two options will be used to receive public comments at the hearings. Horizon has utilized both of the following methods and can assist the County in determining which approach will be most useful:
 - Option I – Allow each public speaker a very limited time (e.g., 3 minutes) to present oral comments that are recorded. No response to the comments is given, but rather they are recorded for later review (and, if desired, transcription) and possible response in the Final EIR.
 - Option II – Provide comment cards to meeting attendees as they enter the hearing and ask them to write their questions and concerns on the cards, which the facilitator will then read aloud and, when relevant, the County and/or Horizon staff may respond to. This option minimizes unfocused input and allows the public to submit written comments during the review period.
4. All comments will be recorded for later assessment.
5. Maintain a highly structured approach to ensure speaker time limits are enforced.
6. Work stations may also be used, and are recommended, to allow the public to have informal discussions with the County and technical staff around topics of interest.

As part of this task, Horizon will be responsible for:

1. Meeting logistics, including setting up the meeting rooms (assuming a public location arranged by the County at no cost).
2. Preparing meeting support materials.
3. Facilitating one public meeting.
4. Recording speakers' comments, including hiring of a court reporter if desired.
5. Providing writing supplies, flip charts, and other audio-visual aids.

In addition, Horizon will provide a draft notice for the public hearing. This includes publishing newspaper notices in up to two newspapers.

Support materials to be prepared by Horizon will include a PowerPoint presentation, meeting agenda, sign-in sheets, comment cards, a brief (e.g., 1-2 pages) project fact sheet/frequently asked questions, and up to four additional poster boards. Many of the poster boards prepared for scoping can also be reused for the Draft EIR hearing. Draft copies of all materials will be provided to the County for review prior to finalizing. Horizon will conduct one planning meeting with the County in advance of the hearing to finalize logistics and run through the presentation.

Following the meetings, Horizon will match the sign-in sheets at each public meeting to the master mailing list and update the mailing list accordingly.

Deliverables:	Draft meeting materials (electronic)
	Final meeting materials (hard copy)
Meetings:	Public Hearing

Task 4. NOP and Scoping

For this task, Horizon will prepare a Notice of Preparation of the EIR and attend two scoping meetings: one public agency scoping meeting and one scoping meeting before the Planning Commission to gather public and Planning Commission comments.

Task 4.1. Notice of Preparation

Horizon will prepare a Notice of Preparation (NOP) that complies with the requirements of State CEQA Guidelines Section 15082.

The NOP will:

- Contain the project description developed under Task 1, above;
- Describe Nevada County's framework for developing the regulations (i.e., based on MAUCRSA, recommendations from the CAG, and in response to identified impacts);
- Identify the date, time and place of public scoping meetings;
- Direct the reader to the location where documents or files relating to the project are available for review;
- Provide an address where written comments on the scope of the EIR may be sent; and
- Identify a deadline for submittal of scoping comments.

In addition, Horizon will assist Nevada County in developing a public distribution mailing list, to ensure the document is appropriately distributed in accordance with CEQA. The NOP will be circulated for 30 days for public and agency review. To support this review process, Horizon will provide materials to the State Clearinghouse at the Governor's Office of Planning and Research (State Clearinghouse) and the Nevada County Clerk. Newspaper notices will be completed as described below in Task 4.2. Horizon assumes that the County will be responsible for mailing and website postings, and Horizon will provide the files in both print-ready and web-ready format for this purpose. If the County prefers to have Horizon prepare and complete mailing of the NOP, Horizon could provide this service on a time and materials basis.

Horizon will also be responsible for performing the notifications required under Assembly Bill 52 (AB 52) to any Native American tribal organizations that have requested notification by the County. Horizon will develop a letter template and, upon approval by the County, will mail the letter and a copy of the NOP to tribal organizations that have requested AB 52 consultation. Details are provided below in Task 6.1.

Deliverables: Notice of Preparation (NOP) (hard copy and electronic)

Task 4.2. Public Scoping

During the scoping period, Horizon will utilize the public notices described above and hold two public scoping meetings: one public agency scoping meeting and one scoping meeting before the Planning Commission to gather public and Planning Commission comments. The scoping meetings will be focused on informing the public about Nevada County's cannabis ordinance, and will be structured to obtain meaningful input about the scale, scope, and issues that should be considered in the environmental compliance document. Horizon's project management and public outreach staff will provide a structured environment utilizing the following format:

1. Brief overview of the meeting's purpose, ground rules, and agenda. During the introduction of the session the facilitator will clarify to the audience that the purpose of the meeting is not to answer technical questions regarding potential environmental impacts during this meeting, but rather to receive comments/questions that should be taken into consideration during the environmental analysis.
2. Brief presentation (by Horizon and/or County staff) providing an overview of the program, the impetus for the current CEQA analysis, the objectives of the analysis, the range of issues that are anticipated for inclusion in the EIR, and the steps and schedule for the CEQA process moving forward.
3. Interactive session, in which participants will be invited to present their input and ask questions regarding the CEQA process and the program. Worksheets and facilitation methods will focus comments on the range of issues to be analyzed in the EIR and additional alternatives to be considered.
4. Comments will be recorded for later assessment. Following the public comment portion of the meeting, the audience will be invited to present additional input and/or ask questions at a series of work stations set up in the room. The work station themes will be developed in consultation with the County and Horizon staff.

As part of this task, Horizon will be responsible for:

- Meeting logistics, including setting up the meeting rooms (assuming a public location arranged by the County at no cost).
- Preparing meeting support materials.
- Facilitating two meetings.
- Recording speakers' comments, including hiring of a court reporter if necessary.
- Providing writing supplies, flip charts, and other audio-visual aids.

In addition, Horizon will provide notice for the public meetings. This will consist of publishing newspaper notices in two newspapers.

Scoping meeting support materials to be prepared by Horizon are anticipated to include a PowerPoint presentation, meeting agenda, sign-in sheets, comment cards, a brief (e.g., 1-2 page) project fact sheet/frequently asked questions, and up to eight poster boards. Draft copies of all materials will be provided to the County for review prior to finalizing.

Horizon will conduct one planning meeting with the County in advance of the scoping meetings to finalize logistics and run through the presentation.

Deliverables:	Draft meeting materials
	Final meeting materials
	Notices to two newspapers
Meetings:	One scoping planning meeting (or conference call)
	Two scoping meetings

Task 5. Technical Studies

For this task, Horizon will generate any new information as necessary to complete the review of this project. The County has not prepared any environmental studies for the draft ordinance.

It is not certain whether technical studies will need to be completed for the preparation of the County PEIR. Horizon will consider the available data in concert with the expected range of activities and impacts related to cannabis cultivation and will advise the County regarding the need for additional study. Upon review of the draft ordinance and the anticipated issues within Nevada County, we expect to examine the need for the following technical studies:

- Biological resources
- Cultural resources (sensitivity)

Based on our current scope of work for preparing the Administrative Draft EIR (ADEIR) (see Task 6.1 below), we are incorporating preparation of these technical studies as part of the ADEIR effort. At this preliminary stage, we anticipate that all other technical disciplines will be covered as part of the analysis within the EIR without the need for separate technical studies; however, if the need for additional studies is identified during conversations with the County, an amendment to the scope of work and budget would be required.

Task 6. Prepare EIR

Horizon will prepare a legally adequate EIR based on the parameters presented in the County's RFP, the approved work program, and as mandated by CEQA. This will include the following: Identification and analysis of specific environmental impacts and degree of impacts; Inclusion of appropriate, practicable, and specific mitigation measures for all significant impacts; Inclusion of an executive summary, provided in front of the document, which explains the pertinent issues identified, a list of all significant environmental impacts, and a summary containing all conclusions and mitigation measures in list or matrix form; identification of all impacts that cannot be mitigated to a level below significant, and a demonstration of the degree of mitigation possible through project alternatives or re-design; consideration, development and comparative review of appropriate CEQA alternatives; and preparation of all EIR content, conforming to Sections 15120-15151 of the State CEQA Guidelines.

Task 6.1. Administrative Draft EIR

Horizon will prepare an Administrative Draft EIR (ADEIR) for review by the County. The ADEIR will contain all of the necessary elements of a Draft EIR, as outlined by CEQA and the State CEQA Guidelines. In the ADEIR, technical analyses and impact assessments will be conducted for each environmental resource topic, and appropriate mitigation measures for any significant impacts will be identified. The document will also describe the CDFA EIR and its findings and explain how Nevada County's analyses will tier off of the findings already made by CDFA.

Each topical chapter will include both a physical and regulatory setting as applicable, clear identification of significance thresholds, detailed description of program impacts, identification of feasible mitigation measures, and statements of the level of significance both prior to and following implementation of mitigation. The thresholds of significance will be based on County guidance and Appendix G of the State CEQA Guidelines. Where appropriate to support the impact analysis and its conclusions, significance thresholds will be customized to be more specific to the program. Any custom significance thresholds would be reviewed with the County prior to use in the ADEIR.

The ADEIR will contain the following sections:

Executive Summary. A summary of the DEIR will be provided for ease of review. CEQA requires an executive summary be included in a draft EIR. Often, this summary repeats the project description, with the addition of a table of impacts and mitigation measures. While satisfying the requirements of CEQA, this type of executive summary is not very helpful to readers. We propose to prepare an Executive Summary that meets the requirements of CEQA but actually summarizes draft EIR findings. The body of the chapter will contain a concise, clearly written summary of the proposed program's elements, the alternatives analyzed, and the findings of the draft EIR. The Executive Summary will also explain the tiering process and how Nevada County's CEQA findings will tier from the CDFA EIR. Details of the impacts and mitigation measures presented in the draft EIR will be provided in a table at the end of the Executive Summary.

Introduction. The Introduction will describe the purpose of the program, provide background information, and explain the regulatory purpose of the document, the public's role, and steps in the process. The Introduction will also clearly instruct readers on the document's organization; a reader's guide will be included.

Project Description. This will consist of the Project Description developed under Task 1 above.

Environmental Analysis. The DEIR will contain environmental analysis for all relevant environmental resource topics, to the extent they have not been covered in the CDFA EIR. Certain topics may have no potential for significant impacts and will be briefly discussed and dismissed without the need for detailed analysis. This is anticipated to include Geology and Soils and Mineral Resources due to the absence of potentially significant impacts related to these resource topics. It would also include topics that were analyzed in the CDFA EIR and found to have no significant impacts at either the state or local level, such as GHG emissions and Hazards, as discussed in more detail below.

Baseline conditions for the analysis will include ongoing cannabis cultivation activities. To the extent that the Program would result in a continuation of these baseline conditions (e.g., air pollutant emissions in a given air basin), the Program would have no impact. Other impacts may be significant despite this baseline (e.g., impacts on resources located at new cultivation sites, where such resources have not been previously impacted by past or present medical cannabis cultivation activities).

Aesthetics. The CDFA EIR found that there would be no significant impacts to aesthetics as a result of either security lighting at cannabis operations, or as a result of indoor or mixed light cultivation

activities. This was because CDFA regulations require artificial lighting for cultivation to be shielded from sunset to sunrise, and outdoor security lighting to be downward facing and shielded. ***Aesthetic impacts due to lighting will not need to be analyzed further in the tiered EIR.***

The CDFA EIR found that any aesthetic impacts to scenic vistas, scenic resources, scenic highways, or the visual character or quality of a site would need to be examined at the local or site specific level, and must meet local requirements to related to zoning and land use compatibility. This impact would need to be analyzed in the tiered EIR.

Typical aesthetic qualities of indoor and outdoor cultivation operations will be described. The DEIR will establish the baseline conditions of existing scenic resources and vistas, as well as provide a description of the visual character and quality of a typical or range of typical sites commonly used for indoor and outdoor cultivation sites which would be viewable by sensitive receptors and from scenic roads and highways. The aesthetic analysis will consider the possible locations of cultivation sites and their proximity to sensitive receptors and public viewpoints under the County's ordinance. The timing, duration, and extent of cultivation activities will be summarized and evaluated for their potential effects on recreationalists, permanent nearby residents, and any other sensitive receptors. This discussion will carefully distinguish between potential impacts which are aesthetics-related and recreation-related.

Air Quality and Global Climate Change and Greenhouse Gas Emissions. The CDFA EIR found that the licensing of cannabis cultivation would have a beneficial impact on greenhouse gas (GHG) emissions due to CDFA's environmental protection measures related to generator use. The use of fuel powered equipment for cultivation activities would have no impact on GHG emissions. By tiering off the CDFA EIR, ***no further analysis is required with regard to GHG emissions.***

The CDFA EIR found that issues related to air quality, air pollutants, and odors would not result in significant impacts on a statewide basis, but may need to be examined on a local or site specific basis. The analysis would look at the baseline of legal and illegal cultivation in the County and would determine whether activities under the ordinance would change.

Agricultural and Forestry Resources. The CDFA EIR found that there would be no significant impacts related to the conversion of farmland since cannabis is an agricultural commodity, and therefore ***no additional analysis to impacts on agriculture is required in the tiered EIR.***

With respect to conversion of forest land or timberland, it found that while cannabis cultivation would have significant impacts at a state level, local jurisdictions would need to consider impacts of site development on timberland and forest land conversion. This evaluation will consider how/if the cultivation operations would directly or indirectly convert timber or forest lands to other uses.

Biological Resources. As part of its PEIR, CDFA conducted a Human Health and Ecological Screening Risk Evaluation, which examined the effects of pesticides on biological resources. It also examined how the framework of other laws and regulations would protect sensitive species. The CDFA EIR found that existing restrictions imposed by agencies such as the State Water Resources Control Board (SWRCB) and the California Department of Fish and Wildlife (CDFW) would substantially reduce the possibility of significant impacts to biological resources as a result of cannabis cultivation. California Department of Pesticide Regulations' (CDPR's) limits on the types of pesticides that may be used by cultivators further reduce these risks to sensitive species.

Additionally, CDFA regulations contain a series of pesticide protocols that are protective of biological resources. However, CDFA found that a local or site-specific analysis would be needed to determine whether impacts may occur at a local level.

As described in Task 5 above, we anticipate that a biological resources technical study may be necessary for the project; the technical study will form the basis for preparation of the PEIR analysis. We will review the draft Cannabis Ordinance to understand fully and sufficiently the mechanisms of potential effects to biological resources in the study area. To the extent feasible and beneficial, we will describe categories of actions and effects to simplify the organization of the impact assessment in the EIR. We will review existing literature and environmental documents and will describe land cover types and habitats generally occurring within those land zoning designations affected by the ordinance. We will also query relevant resource databases (i.e., CNDDDB, USFWS IPaC, NWI) to develop lists of sensitive and managed resources that associate with the described habitats. No site visits or technical studies are proposed to accomplish this task. Resource maps will be developed to show locations of known sensitive resources in the study area. Regulations typically associated with permitting or authorizing impacts to biological resources will be described.

Potential direct and indirect impacts on biological resources within the study area will be described. Thresholds of impact significance will be defined, and potential impacts on biological resources will be evaluated against these thresholds and summarized. The potential cumulative impacts of implementing the proposed ordinance on biological resources will be analyzed. Measures will be developed to avoid and minimize impacts on biological resources from implementing the proposed cannabis ordinance. The residual impacts of program activities on biological resources will be summarized. The typical processes for compensating for unavoidable impacts to sensitive biological resources will be summarized.

Cultural Resources. As described in Task 5 above, we anticipate that a cultural resources technical study may be necessary for the project; the technical study will form the basis for preparation of the PEIR analysis. To support the County with identifying cultural resources issue areas, ECORP will prepare a cultural resources sensitivity model for use in the EIR analysis. Cultural resources come in a variety of forms and types, including archaeological, prehistoric, and architectural. The ability to predict the presence of cultural resources is not always possible; however, the use of predictive modeling to produce sensitivity can be very helpful in long-term planning efforts such as a program EIR. A sensitivity model for use in the EIR analysis includes a broad overview of the anticipated types of cultural resources that may be expected in different zones of Nevada County, as well as research themes and questions, historical context, and a general compliance framework that may be used to plan individual projects that tier from the PEIR. The sensitivity model may also identify areas that may require consultation with specific interest groups such as Native American tribes.

We will conduct a broad and high-level records search and literature review at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) for the relevant zones of Nevada County. The purpose of the records search will be to broadly identify previously recorded and documented cultural resources sites and property types. The records search will not include specific-site location mapping or other information gathering that may be necessary for specific projects, but will instead be a high-level assessment of general site types

and locations to inform the sensitivity model. The literature review will also include a review of geological maps and soil data, aerial photographs, and historical maps to help assess sensitivity.

We will prepare a brief sensitivity model letter to be prepared by, or under the direct supervision of, a Registered Professional Archaeologist that meets the Secretary of the Interior's Standards for Archaeology. The sensitivity model will include an overview of relevant historical context for Nevada County and anticipated property types expected to occur within ordinance planning zones based on the records search data, which will help inform the analysis of projects that are expected to tier from the PEIR. It will also include a broad overview of research themes and topics that may be used for the anticipated property types, and a general compliance framework. The compliance framework will include a broad summary of state laws and how they apply to cultural resources, including CEQA and AB 52. Generally, the sensitivity model will be a letter prepared using professional expertise and information gathered from the above sources and will be developed for use with the PEIR only.

Hazards and Hazardous Materials. CDFA's EIR found that existing laws and regulations governing the handling and storage of hazardous waste would reduce impacts related to hazardous materials to a less-than-significant level. Similarly, CDFA and CDPR regulations restricting the use of pesticides for cannabis cultivation would reduce risks from those chemicals to a less-than-significant level. CDFA regulations require applicants for cultivation licensed to conduct an Envirostor database search to ensure that, if a cultivation site is located on a hazardous materials site, the applicant demonstrates protocols to protect employee health and safety. The EIR also determined that the risk of fires, or of injuries due to fires, was less than significant, as CDFA requires licensed cultivators to comply with building codes, fire codes, electrical codes, and standards for emergency access. Because of these protections, ***there would be no significant impacts related to hazards and hazardous materials and no additional analysis will be required in the tiered EIR.***

Hydrology and Water Quality. The CDFA EIR contained a detailed analysis of potential hydrologic impacts and water quality impairments resulting from or associated with indoor, outdoor, and mixed-light cannabis cultivation operations, including erosion/soil deposition; stream diversions and flow reductions; discharge of sediments, pollutants, and human waste/trash; grading or construction activities; and water contamination from pesticides, rodenticides, fertilizers, and fuels, utilizing information from the ecological risk assessment prepared for CDFA. The EIR found that there would be no significant impacts on surface water or surface water quality, due to the framework of state regulations applicable to cannabis cultivators, including the SWRCB General Order and the NPDES permit requirements. ***No further analysis regarding impacts on surface water will be required.***

The CDFA EIR found that, while there would be no impact on groundwater at the statewide level, the potential for impacts on a local level should be considered. Consequently, in the County's PEIR, we will evaluate the potential impacts on groundwater supplies as a result of cannabis crop irrigation.

Land Use and Planning. The foreseeable potential impacts of the program on land use and planning will be evaluated at a programmatic level, including neighborhood land use compatibility; conflicts with adopted regulatory land use programs or policies; and consistency

with adopted regulatory land use programs and policies. We will rely on the Appendix G checklist of the State CEQA Guidelines and tier from the CDFA PEIR for this analysis.

Noise and Vibration. The CDFA EIR found that noise impacts would largely need to be addressed on a local or site-specific basis. Thus, the County's PEIR will analyze noise impacts in Nevada County. Noise and vibration impacts associated with cultivation operations will be evaluated with consideration of the typical proximity of cultivation sites to noise-sensitive receptors, taking into account the mandatory setbacks identified in the County's ordinance. The evaluation will consider all potential noise sources associated with the cultivation or transport of medical cannabis, including equipment type and duration/timing of use to develop and operate cultivation sites, and applicable noise standards. If necessary, best management practices (BMPs) and mitigation measures will be identified to reduce potential impacts to less-than-significant levels.

Public Services. In general, the potential for cultivation activities regulated under the ordinance to affect public services is limited. The CDFA EIR found that the licensing process for cultivation facilities would require cultivators to implement security measures and comply with building and fire codes, thereby potentially reducing the need for additional public services related to law enforcement and fire protection. In addition, the data show that cultivation is unlikely to create such substantial population growth that additional services would be required. For these reasons, the CDFA EIR determined that there was no significant impact on public services. ***By using the tiered EIR approach, no additional analysis will be required for public services.***

Recreation. The recreation section will describe the proximity of cultivation operations to recreational activities, lands, or facilities using a GIS-based analysis, as well as the direct or indirect potential of medical cannabis cultivation operations to affect recreational lands, and, as necessary, any BMPs or mitigation measures to reduce potential recreation-related effects. This description will include the timing, frequency, and duration of the various recreational activities that may be conducted near indoor and outdoor cultivation operations. An initial list of recreational activities conducted near cultivation operations includes fishing by bank and boat, rafting and tubing, swimming, camping, hiking, horseback riding, and mountain biking.

Traffic and Transportation. The CDFA EIR concluded that impacts on traffic and transportation would need to be analyzed at a local or site-specific level. Data related to trip generation and frequency, and vehicle miles traveled (VMT) for typical cannabis cultivation operations will be collected or estimated from surrogate agricultural operations. Data sources may include input from cannabis cultivation experts and/or available traffic demand models. Based on the collected data and/or estimates, traffic impacts will be evaluated using the existing CEQA guidance and the developing guidance related to Senate Bill (SB) 743. If necessary, BMPs or other measures to reduce potential traffic impacts will be recommended.

Tribal Cultural Resources and AB 52 Compliance. On July 1, 2015, new CEQA requirements, chaptered under California Public Resources Code 21080.3 (also referred to as AB 52), went into effect for early coordination with tribes that are traditionally and culturally affiliated with the geographic area of a proposed project. AB 52 requires lead agencies to provide interested tribes with an opportunity to consult with the lead agency regarding their issues and concerns as soon as a project is defined. For those Native Americans requesting consultation, the consultation process involves meetings to exchange information about the project and any cultural resources, including a newly defined category of resources under CEQA called "tribal cultural resources,"

that may be affected, and to guide the environmental impact evaluation and development of appropriate mitigation measures.

The Horizon team will assist the County in consulting with California Native American tribes under AB 52. Horizon will, at the discretion of the County, assist in drafting consultation letters, coordinate tribal meetings, maintain the AB 52 administrative record, and/or provide technical support to the agency in determining how to manage Tribal Cultural Resources in the PEIR. We will document the consultation process and comments discussed, and advise the County on how to come to a conclusion to the consultation, as specified by AB 52.

This section will discuss the County's consultation efforts with tribes that have a cultural and ancestral affiliation with the area. It will also present any information provided by tribes about tribal cultural resources that could be affected by projects approved under the ordinance and the mitigation measures proposed for minimizing those impacts.

The cost estimate for AB 52 consultation is provided on a time-and-materials basis. If the consultation requests from the tribes will require a level of effort that will exceed the budget provided herein, then a contract change order would be required to complete the scope and AB 52 consultation.

Utilities and Service Systems. The CDFA EIR found that while significant impacts to utilities and service systems are unlikely, an assessment may need to be done at a local or site-specific level. Potential impacts on utilities and service systems will be analyzed for indoor and outdoor cultivation operations during both construction and operation phases. The evaluation assumes a qualitative discussion of the typical use of utilities and service systems by cultivation operations, and potential effects of the cultivation operations on utilities, including water, wastewater, stormwater, and solid waste utilities. If necessary, BMPs or mitigation measures will be identified to reduce potentially significant impacts.

Cumulative Impacts. Horizon expects to use the "projection" approach to cumulative impact analysis. The analysis will first identify the resource topics to which the Program could make a considerable contribution. For those topics, the analysis will identify whether a cumulatively significant impact exists, considering past, present and probably future projects, including cannabis cultivation under the Program. Baseline conditions will be used as a proxy for past and present projects, as their impacts would be reflected in baseline conditions. For the topics determined to have significant cumulative impacts, the Program's contribution to those impacts will be evaluated to determine whether it is "considerable," and mitigation measures will be identified as feasible.

Alternatives. The alternatives identified in Task 1.2 will serve as the basis for the alternatives evaluation in the EIR. Up to 3 alternatives, in addition to the No Project Alternative, will be considered. Alternatives will be crafted such that they (generally speaking) achieve project objectives, while reducing one or more of the significant impacts of the Program; however, the alternatives may have increased impacts overall compared to the Program as proposed. Alternatives that were considered but dismissed from detailed analysis will also be listed, and the reasons for their dismissal discussed. The environmentally superior alternative will be identified.

Note that EIRs are frequently challenged on the basis of the alternatives analysis. Our team has experience with crafting legally defensible alternatives to a statewide program of this nature, with a focus on achieving program objectives while reducing potentially significant impacts. Horizon will carefully develop

alternatives and enlist support from our CEQA legal advisors to ensure the alternatives analysis is fully compliant with CEQA.

Other Sections. The DEIR will also contain the following sections:

- Report Preparation,
- References, and
- Appendices (including the technical studies).

Deliverables: Administrative Draft EIR – electronic and 7 hard copies

Task 6.2. Screen Check Draft EIR

Horizon will revise the ADEIR based on one round of County review and comment. Horizon will coordinate with the County to discuss comments and agree on the appropriate revisions. Once again, it is assumed that comments will contain clear direction and be coordinated for consistency such that Horizon does not receive conflicting guidance from different County reviewers.

Horizon will prepare a Screen Check Draft EIR that incorporates comments received on the ADEIR and provide an opportunity for the County to review and confirm the contents and format of the document prior to public circulation.

Deliverables: Screen Check Draft EIR – electronic and 7 hard copies

Task 6.3. Public Draft EIR

Horizon will incorporate any final comments from the County to prepare the Public Draft EIR. County comments at this point are anticipated to be primarily related to document layout, format, and editing.

In addition, as part of this task, Horizon will work with the County to update the scoping mailing list for use in distributing the Draft EIR and Notice of Availability. Horizon will prepare and arrange publication of public notices to initiate public review of the Draft EIR as required by CEQA. This will include working with the County to prepare a draft and final NOA and NOC. In addition, Horizon will print 25 copies of the Draft EIR. Horizon will also prepare CD-ready and web-ready PDF versions of the document, as well as 25 CDs. Horizon will be responsible for mailing the NOA and/or Draft EIR to recipients on the mailing list (assumes up to 100 recipients), including the State Clearinghouse, County Clerk, libraries, responsible and trustee agencies, agencies with jurisdiction by law, and parties requesting notice. The submittal to the State Clearinghouse will also include the NOC.

Note that a public hearing during the DEIR review period is included in Task 3.

Deliverables: Mailing list (electronic)
 Draft NOA and NOC (electronic)
 Final NOA – 100 hard copies and included on CD
 Final NOC – 1 hard copy
 Public Review Draft EIR – 25 hard copies and 25 CDs

Task 6.4. Comment Cataloging and Database

The County will provide Horizon with a complete copy of all comments for which the County expects responses to be prepared. Horizon assumes a high level of public interest and receipt of a large number of comments on the Draft EIR, and the approach outlined below reflects these assumptions.

Horizon will review all comment letters and perform an initial sorting to group the comment letters into four categories: letters requiring an individual response, letters addressed entirely by master responses, letters for which comments may be addressed by a combination of master and individual responses, and form letters. Each comment letter will be given a unique identifier, tracked in a database, and have associated data (i.e., commenter's name, agency, topics raised in the letter, comments that are substantive, comment date). As each letter is reviewed, key comment topics will be identified to form the basis for determining potential master responses. Each master response will generally address one particular comment or topic. Letters that are classified as substantive and requiring a substantive response in the Final EIR (i.e., requiring individual responses or a combination of master responses and individual responses) will be reviewed in detail to identify specific comments within each comment letter, and provide each comment with a unique identifier. Horizon's budget assumes that up to 20 letters requiring individual responses or a combination of individual and master responses will need to be prepared, up to 5 master responses will be needed, and that no more than 50 individual comment letters and 200 form letters requiring processing will be received, based on past experience with projects of this scope.

Deliverables: Public comment database (electronic)

Task 6.5. Draft Responses to Comments

Horizon will prepare responses to all substantive comments received on the Draft EIR. Horizon recommends early coordination between Horizon and the County on the appropriate level of response to the comments. Horizon will coordinate with the County regarding the approach to preparing individual or master responses, resulting in agreement on the approach for each major type of comment. As outlined in Task 4.1, some letters may not require any response, others may be entirely addressed by master responses, while still others will require some degree of individual response.

Deliverables: Administrative Draft Responses to Comments (electronic and 5 hard copies)
Screen Check Draft Responses to Comments (electronic and 10 hard copies)

Task 6.6. Administrative Final EIR

Based on the County's comments on the Draft Responses to Comments, Horizon will prepare an Administrative Final EIR that will consist of an addendum document to the Draft EIR, including a Response to Comments section containing all the comments received, as well as responses. The changed portions of the Draft EIR will be indicated as underline/~~striketrough~~, as necessary based on responses to comments on the Draft EIR. The Administrative Final EIR will be legally adequate and consistent with the requirements of CEQA.

Deliverables: Administrative Final EIR – electronic

Task 6.7. Revised (Screen Check) Final EIR

Horizon will discuss the County's comments on the Administrative Final EIR and agree on the appropriate revisions in response to those comments. Horizon will prepare a Revised Administrative Final EIR (Screencheck Final EIR) which incorporates comments received on the Administrative Final EIR.

Deliverables: Revised (Screen Check) Final EIR – electronic

Task 6.8. Final EIR

Horizon will prepare a Final EIR which incorporates comments received on the Revised Administrative Final EIR, which will serve as an opportunity for County review and confirmation of the contents and format of the document prior to public circulation.

Under this task, Horizon will also work with the County to ensure that the Final EIR is distributed to the proper entities. Under CEQA Section 21092.5(a), the Final EIR must be sent to all public agencies commenting on the Draft EIR at least 10 days prior to certifying the Final EIR. In addition, the County may wish to distribute the Final EIR to other parties.

Distribution and Noticing of Final EIR

Horizon will print 15 copies of the Final EIR. Horizon will also prepare CD-ready and web-ready PDF versions of the document. Horizon will circulate the Final EIR to the state CEQA Clearinghouse, and the entities identified on the mailing list above. Horizon will ensure that the Final EIR is distributed to the public agencies commenting on the Draft EIR at least 10 days before EIR certification.

Findings, Notice of Determination, and Statement of Overriding Considerations (if necessary)

Horizon will prepare draft findings for each significant impact and statement of overriding consideration for significant impacts found to be unavoidable (if applicable) for the County's use in certifying the Final EIR and approving the program. The statement of overriding considerations, if required, will express the County's reasons for approving a program that would have significant, unavoidable impacts on the environment. The statement would be based on supporting evidence in the administrative record. Horizon will prepare the findings in compliance with Sections 21081 and 21081.5 of the California Public Resources Code.

Horizon will also prepare a draft NOD in an appropriate format for the County.

Prior to preparing the Findings and NOD, Horizon's project manager will coordinate with the County to identify the approach to the findings, obtain example County documents, resolve other aspects of the document format and approach, and agree on the rationale for the statement of overriding considerations (if applicable). In this way, Horizon will ensure that the findings represent the judgment and format of the County.

The CEQA findings (and Statement of Overriding Considerations, if necessary), once adopted, will be submitted to the administrative record for the EIR. Within 5 days of EIR certification and project approval, Horizon will print the NOD, and file it with the Governor's Office of Planning and Research. Note that the County will be responsible for providing Horizon with checks to cover the CDFW filing fee for the environmental document and County Clerk filing fee.

- Deliverables:**
- Draft Findings and NOD (electronic)
 - Final Findings and NOD – 1 hard copy and electronic
 - Mitigation Monitoring and Reporting Plan (an appendix to the Final EIR, and 15 separate bound copies)
 - Final EIR – 15 hard copies

Task 7. Mitigation Monitoring and Reporting

Prepare a comprehensive mitigation monitoring and reporting program, in compliance with Section 21081.6 of the Public Resources Code, for all significant impacts required for project implementation. Any recommended monitoring program should, at a minimum, include the following: (a) Specific criteria for use in measuring mitigation success; (b) Recommendations regarding the frequency of monitoring and preparation/submission of written reports to the County; (c) Recommendations for the appropriate reviewing agencies and specific qualifications for monitoring and reporting personnel.

Horizon will prepare a draft Mitigation Monitoring and Reporting Program (MMRP) in compliance with State CEQA Guidelines Section 15097. The MMRP will ensure that mitigation measures are implemented as required under Section 21081.6 of the California Public Resources Code. The MMRP will:

- Identify each impact of the program that will be mitigated,
- Contain a brief explanation of each relevant mitigation measure,
- Specify the agency/entity responsible for implementing and monitoring each mitigation measure,
- State when and how frequently each mitigation measure should be implemented,
- Provide general details of the monitoring program, and
- Present the criteria for judging successful implementation of mitigation.

Horizon will coordinate with the County regarding the format of the MMRP, as the Program is anticipated to be primarily self-mitigating due to the inclusion of environmental measures in the regulations. Horizon will submit the draft MMRP to the County for review and comment alongside the Final EIR.

- Deliverables:** Mitigation Monitoring and Reporting Program (15 separate bound copies)

Task 8. Public Meetings and Hearings

Horizon will attend all public meetings/hearings requiring the following tasks: (1) Presentation of the NOP to public agencies and to the County Planning Commission, and Board of Supervisors; (2) Presentation of the proposed Final EIR to the County Planning Commission and Board of Supervisors for certification and adoption, and participation in all such public hearings held by such bodies on the adequacy of the Draft EIR.

Horizon will attend all public meetings or hearings that require presentation of the NOP to the County Planning Commission, the Board of Supervisors, and public agencies, or hearings held by the County Planning Commission and the Board of Supervisors on the adequacy of the Draft EIR. Horizon’s proposed budget assumes there will be three such meetings or hearings for this task.

For meetings or hearings presenting the NOP, Horizon will be prepared to give a brief presentation regarding the project, including the anticipated content of the Draft EIR, the range of impacts analyzed, and the process undertaken to produce the EIR. Horizon will be prepared to answer questions from County or public agency representatives as well as members of the public regarding the NOP and/or the CEQA process.

Additionally, Horizon will attend the presentation of the proposed Final EIR to the County Planning Commission and Board of Supervisors for certification and adoption. Horizon will be prepared to give a presentation regarding the findings of the EIR, including a discussion of mitigation measures, if applicable. Horizon will be prepared to answer questions from County or public agency representatives or the public pertaining to the EIR findings and/or process.

Supporting materials to be prepared by Horizon may include a PowerPoint presentation, a brief (e.g., 1-2 page) project fact sheet/frequently asked questions, and up to four additional poster boards. Many of the poster boards prepared for scoping should also be able to be reused for these meetings. Draft copies of all materials will be provided to County for review prior to finalizing. Horizon will conduct one planning meeting with the County in advance of the meetings to finalize logistics and run through the presentation.

If the County requests Horizon’s participation in additional public meetings and/or hearings beyond the three assumed in our budget, we can accommodate this request on a time-and-materials basis.

- Deliverables:**
 - Draft meeting materials (electronic)
 - Final meeting materials (hard copy)
- Meetings:**
 - Planning meeting and/or rehearsal immediately prior to the first meeting
 - Up to 3 public meetings

Task 9. Project Management and Administrative Record Support

To ensure the effective delivery of consultant services, we have included a separate project management task in our work plan. Project management duties under this task include scheduling and managing project activities, budget tracking, project staffing and oversight, overall contract performance, and communications with the County. In addition, this task provides for periodic project updates by email when important updates and summaries are necessary to keep communications with the County clear and keep the project advancing on track.

Horizon will provide a monthly progress report, invoice, and budget tracking spreadsheet to the County. The progress report will briefly describe activities conducted since the previous progress report, the status of tasks in progress, a description of any constraints or problems, and a summary of upcoming tasks and deliverables.

The administrative record serves as the base of evidence for the procedural steps and substantive analysis conducted for the EIR and is used as the sole basis for determining the adequacy of an EIR, should it be legally challenged.

Horizon will provide supporting materials for the County's compilation of the administrative record as it relates to the development of the EIR. Entries to the administrative record will be collected from technical staff and subconsultants and submitted to the County. Horizon's portion of the administrative record will be delivered to the County within one month following the filing of the NOD.

B.5. Preliminary Schedule

Based on the work program described above, Horizon has provided a preliminary schedule for completion of a PEIR in approximately 8 months, as shown in the MS Project spreadsheet on the following page.

Note that this preliminary schedule will be reviewed during the kick-off meeting in Task 1.1 and adjusted as needed to meet the County's needs.

B.6. Cost Estimate

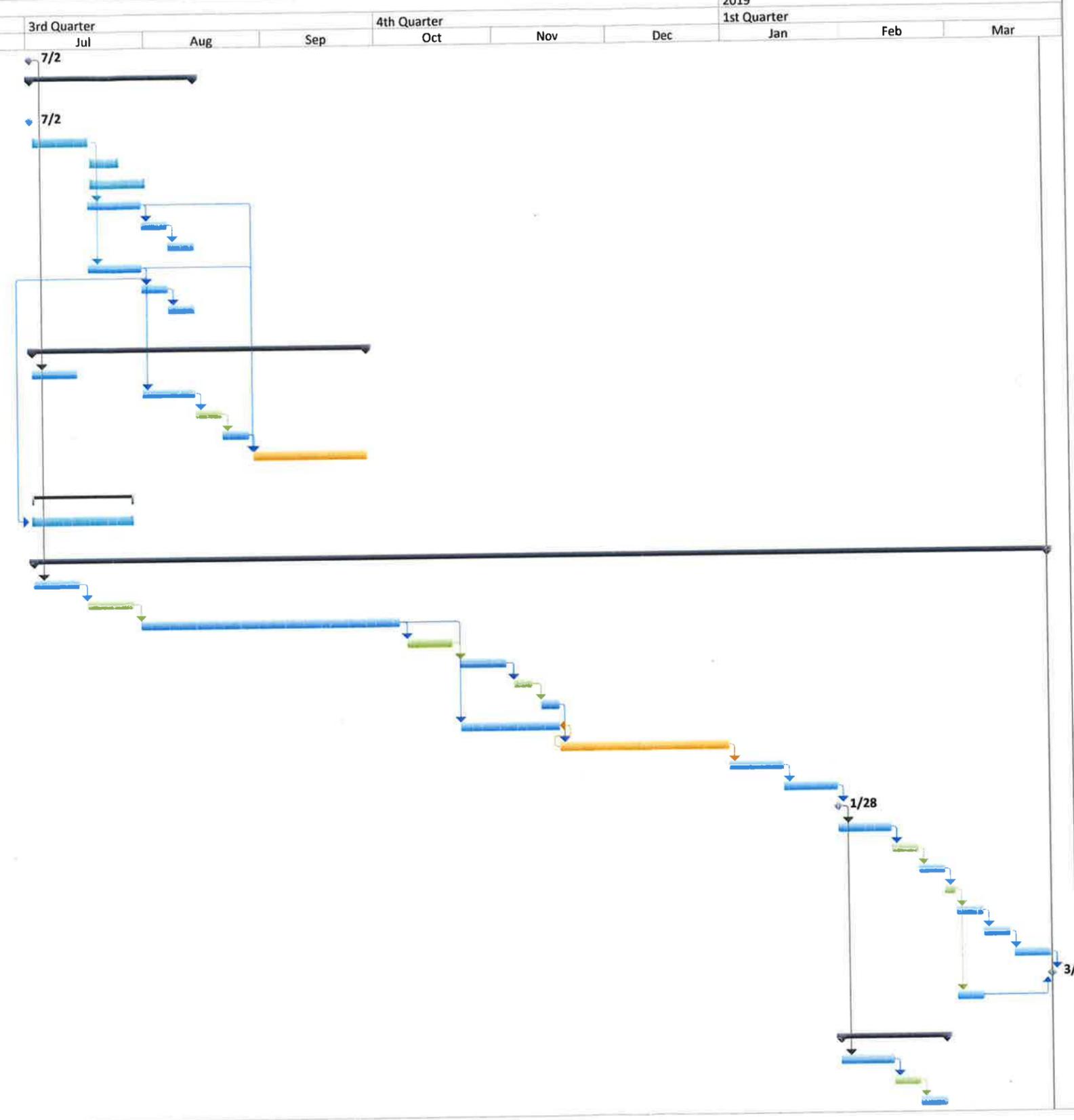
Based on the work program described above, Horizon has provided a cost estimate to prepare the PEIR for a total amount not to exceed \$169,975, as shown in detail in the following Excel spreadsheet.

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SCHEDULE

Nevada County Cannabis Ordinance Environmental Impact Report

ID	Task Number	Task Name	Duration	Start	Finish	2019																
						3rd Quarter			4th Quarter			1st Quarter										
						Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar							
1		Notice to Proceed	0 days	Mon 7/2/18	Mon 7/2/18																	
2	1, 2, 3	Initial Regulatory/CEQA Strategy, Scheduling and Public Outreach Planning	31 days	Mon 7/2/18	Mon 8/13/18																	
3	1.1	Kickoff Meeting	0 days	Mon 7/2/18	Mon 7/2/18																	
4		Review County's Ordinance	2 wks	Tue 7/3/18	Mon 7/16/18																	
5	2	Develop Detailed Project Schedule	5 days	Wed 7/18/18	Tue 7/24/18																	
6	3	Determine Public Outreach Plan for Scoping and EIR tasks	2 wks	Wed 7/18/18	Tue 7/31/18																	
7	1.2	Develop Alternatives	2 wks	Tue 7/17/18	Mon 7/30/18																	
8		County Review of Draft Alternatives	1 wk	Tue 7/31/18	Mon 8/6/18																	
9		Develop Final Alternatives	1 wk	Tue 8/7/18	Mon 8/13/18																	
10	1.3	Develop Project Description	2 wks	Tue 7/17/18	Mon 7/30/18																	
11		County Review of Project Description	1 wk	Tue 7/31/18	Mon 8/6/18																	
12		Develop Final Project Description	1 wk	Tue 8/7/18	Mon 8/13/18																	
13																						
14	4	NOP and Scoping	64 days	Mon 7/2/18	Thu 9/27/18																	
15	4.1	Notice of Preparation (NOP)	2 wks	Mon 7/2/18	Fri 7/13/18																	
16	4.2	Public Scoping	2 wks	Tue 7/31/18	Mon 8/13/18																	
17		County Review of NOP	5 days	Tue 8/14/18	Mon 8/20/18																	
18		Finalize and Distribute NOP	1 wk	Tue 8/21/18	Mon 8/27/18																	
19		Scoping Period (30 calendar days)	30 edays	Tue 8/28/18	Thu 9/27/18																	
20																						
21	5	- Technical Studies	20 days	Mon 7/2/18	Fri 7/27/18																	
22		Evaluate and Determine if Needed	4 wks	Mon 7/2/18	Fri 7/27/18																	
23																						
24	6	Prepare EIR	191 days	Mon 7/2/18	Mon 3/25/19																	
25		Draft EIR outline and templates	2 wks	Mon 7/2/18	Fri 7/13/18																	
26		County Review of EIR Templates	2 wks	Mon 7/16/18	Fri 7/27/18																	
27	6.1	Administrative Draft EIR	10 wks	Mon 7/30/18	Fri 10/5/18																	
28		County review	2 wks	Mon 10/8/18	Fri 10/19/18																	
29	6.2	Screencheck Draft EIR	2 wks	Mon 10/22/18	Fri 11/2/18																	
30		County review	5 days	Mon 11/5/18	Fri 11/9/18																	
31	6.3	Public Draft EIR	1 wk	Mon 11/12/18	Fri 11/16/18																	
32		Public Noticing and Draft EIR Public Meetings Preparation	4 wks	Mon 10/22/18	Fri 11/16/18																	
33		Public Review of Draft EIR	45 edays	Fri 11/16/18	Mon 12/31/18																	
34	6.4	Comment Cataloging and Database	2 wks	Tue 1/1/19	Mon 1/14/19																	
35	6.5	Draft Responses to Comments	2 wks	Tue 1/15/19	Mon 1/28/19																	
36		Meeting with County	0 days	Mon 1/28/19	Mon 1/28/19																	
37	6.6	Admin Final EIR	2 wks	Tue 1/29/19	Mon 2/11/19																	
38		County review	1 wk	Tue 2/12/19	Mon 2/18/19																	
39	6.7	Revised (Screencheck) Final EIR	1 wk	Tue 2/19/19	Mon 2/25/19																	
40		County review	3 days	Tue 2/26/19	Thu 2/28/19																	
41	6.8	Final EIR	1 wk	Fri 3/1/19	Thu 3/7/19																	
42		Final EIR Distribution	1 wk	Fri 3/8/19	Thu 3/14/19																	
43		10-day waiting period	10 edays	Fri 3/15/19	Mon 3/25/19																	
44		File Notice of Determination	0 days	Mon 3/25/19	Mon 3/25/19																	
45		Findings	1 wk	Fri 3/1/19	Thu 3/7/19																	
46																						
47	7	Prepare MMRP	20 days	Tue 1/29/19	Mon 2/25/19																	
48		Administrative MMRP	2 wks	Tue 1/29/19	Mon 2/11/19																	
49		County review	1 wk	Tue 2/12/19	Mon 2/18/19																	
50		Final MMRP	1 wk	Tue 2/19/19	Mon 2/25/19																	



COST ESTIMATE
 Nevada County
 Commercial Cannabis Ordinance Environmental Impact Report
 Horizon Water and Environment - May 24, 2018

Task	NAME / DESCRIPTION	Labor							Sub-Total Labor Hours per Task	Sub-Total Labor Fee per Task	Enercon	ECORP	Sub-Total Subcontractor	Markup on Subcontractors	Sub-Total Subcontractor Fee per Task	Reimbursable Expenses			Markup on Direct Expenses	Sub-Total Direct Expense Fee per Task	Total per Task
		Principal, PM, QA	Deputy Project Manager	Senior Associate II	Associate II	Analyst	Publication Specialist	Administrative Assistant								Reproductions	Postage/Delivery	Travel Expenses and Per Diem			
	Hourly Rate	\$220	\$175	\$185	\$158	\$143	\$92	\$87					5.0%					5.0%			
Task 1: Review Draft Ordinance																					
1.1	Ordinance Review and Project Kick-Off	12	18						30	\$5,790			\$0	\$0	\$0		\$100	\$500	\$30	\$630	\$6,420
1.2	Development of Alternatives	2	6						8	\$1,490	\$ 750		\$750	\$38	\$788				\$0	\$0	\$2,278
1.3	Project Description	6	16		10		2		34	\$5,884	\$ 750		\$750	\$38	\$788				\$0	\$0	\$6,672
Task 2: Develop Schedule																					
	Develop Schedule	1	2						3	\$570			\$0	\$0	\$0				\$0	\$0	\$570
Task 3: Public Outreach Planning																					
	Public Outreach Plan and DEIR meeting	8	16				4		28	\$4,928			\$0	\$0	\$0			\$1,000	\$50	\$1,050	\$5,978
Task 4: NOP and Scoping																					
4.1	Notice of Preparation	4	4		8				16	\$2,844			\$0	\$0	\$0	\$2,700		\$135	\$2,835	\$5,679	
4.2	Public Scoping	14	24		8				46	\$8,544			\$0	\$0	\$0	\$500		\$1,000	\$75	\$1,575	\$10,119
Task 5: Technical Studies																					
	Technical Studies	4	4						8	\$1,580			\$0	\$0	\$0				\$0	\$0	\$1,580
Task 6: Prepare EIR																					
6.1	Administrative Draft EIR	26	40	24	32	16	12		150	\$25,608	\$6,000	\$17,000	\$23,000	\$1,150	\$24,150	\$800		\$250	\$53	\$1,103	\$50,861
6.2	Screencheck Draft EIR	8	32	4	10	4	4		62	\$10,620	\$1,000	\$1,500	\$2,500	\$125	\$2,625	\$500		\$25	\$525	\$13,770	
6.3	Public Draft EIR	4	8		8		8		28	\$4,280			\$0	\$0	\$0	\$5,500	\$250	\$250	\$300	\$6,300	\$10,580
6.4	Comment Cataloging and Database	1	2			16			19	\$2,858			\$0	\$0	\$0				\$0	\$0	\$2,858
6.5	Administrative Final EIR	6	24	12	16		4		62	\$10,636	\$700	\$2,500	\$3,200	\$160	\$3,360	\$200		\$10	\$210	\$14,206	
6.6	Screen Check Final EIR	4	8	4	12				28	\$4,916			\$0	\$0	\$0				\$0	\$0	\$4,916
6.7	Final EIR	4	4		10		4		22	\$3,528			\$0	\$0	\$0	\$1,100	\$100	\$250	\$73	\$1,523	\$5,051
Task 7: Mitigation Monitoring and Reporting																					
	Mitigation Monitoring and Reporting	2	2			8	2		14	\$2,118			\$0	\$0	\$0	\$300	\$100		\$20	\$420	\$2,538
Task 8: Public Meetings and Hearings																					
	Public Meetings and Hearings	16	16				2		34	\$6,504			\$0	\$0	\$0	\$250	\$20	\$2,000	\$114	\$2,384	\$8,888
Task 9: Project Management & Administrative Record Support																					
	Project Management & Admin. Record Support	24	48			16	12		100	\$17,012			\$0	\$0	\$0				\$0	\$0	\$17,012
Subtotal Labor Hours		146	274	44	114	60	42	12	692												
Subtotals		\$32,120	\$47,950	\$8,140	\$18,012	\$8,580	\$3,864	\$1,044		\$119,710	\$9,200	\$21,000	\$30,200	\$1,510	\$31,710	\$11,950	\$470	\$5,250	\$885	\$18,555	
Total																				\$169,975	

C. KEY PERSONNEL

Our team (**Figure 3**) consists of staff who have worked on previous CEQA projects related to cannabis cultivation. Many have toured cannabis operations and participated in public scoping meetings, as well. This familiarity with the industry and issues brings expertise and efficiency to the EIR for Nevada County’s cannabis cultivation ordinance project. Biographies of key personnel are provided in this section (in the order they appear on the organization chart); resumes for all staff are provided as an attachment (organized by firm).

County of Nevada Community Development Agency, Planning Department	
Project Management	Strategy & QC
Michael Stevenson, MS (Project Manager)	Tom Engels, PhD
Megan Giglini, MS (Deputy Project Manager)	Chris Stabenfeldt, AICP
Susan Pearce, JD (Deputy Project Manager)	Tom Trexler, MS
Kenneth Schwarz, PhD (Principal-in-Charge)	
CEQA / NEPA Resource Specialists	
<u>Aesthetics Agriculture Forestry</u>	<u>Land Use Planning</u>
Allison Chan, MS	Scott Friend, AICP
Patrick Donaldson, MS	Laura Prickett, MCP, AICP, CPESC, QSD
<u>Air Quality GHG Emissions Energy Noise</u>	<u>Recreation</u>
Michael Smith, PhD	Tom Trexler, MS
Megan Giglini, MS	
Johnnie Chamberlin, PhD	<u>Traffic Transportation</u>
<u>Biological Resources</u>	Patrick Donaldson, MS
Thomas Scofield	Michael Lee
Clay DeLong	<u>Utilities Public Services</u>
Brian Piontek, MS	Susan Pearce, JD
Robin Hunter, MS	Julie Allison
<u>Cultural Resource Tribal Cultural Resources</u>	<u>Population Housing</u>
Lisa Westwood, MA, RPA	Julie Allison
Jeremy Adams, MA	Debra Lilly
Janis Offermann, MA, RPA	<u>Alternatives</u>
<u>Geology Soils Hazards Wildfire</u>	Julie Allison
Tod Monks, PG, MBA	Debra Lilly
Brian Piontek, MS	<u>Cumulative Impacts</u>
Patrick Donaldson, MS	Tom Engels, PhD
<u>Hydrology Water Quality</u>	Debra Lilly
Tom Trexler, MS	<u>Public Outreach</u>
Kenneth Schwarz, PhD	Michael Stevenson, MS
Patrick Donaldson, MS	Susan Pearce, JD
Johnnie Chamberlin, PhD	Megan Giglini, MS
<u>Mineral Resources</u>	
Brian Piontek, MS	
Tod Monks, PG, MBA	

Figure 3. Horizon Team Organizational Chart

Michael Stevenson, M.S.

Project Manager, Public Meetings and Outreach

Michael has been heavily involved environmental compliance projects for cannabis cultivation, beginning in 2016 when Horizon was selected by the California Department of Food and Agriculture to develop a Program EIR for licensing cannabis cultivation for medical use. Soon after, the State broadened the scope to include non-medical use. Michael has extensive understanding of the State's regulations, its Program EIR, and the process by which local regulations can tier off that Statewide EIR for cannabis cultivation. He has also made presentations to professional associations regarding regulation and licensing of cannabis.



Michael also has a deep understanding of the CEQA process. He has led California statewide legally contentious cases and developed award-winning environmental documents, such as the Statewide Plant Pest Prevention and Management Program, Program EIR that were recognized by both the California Association of Environmental Professionals (CalAEP) and the National Association of Environmental Professionals (NAEP) under their 2016 awards programs.

Michael's long history supporting local and municipal agency clients with environmental compliance and permitting projects helps illustrate his understanding of the many routes to CEQA compliance. He has supported the City of Modesto's Planning and Utilities Departments with CEQA services since 2008. Examples of his work for the City include the 2010 Water System Engineer's Report Update Program EIR and project-level CEQA compliance that tiered from that Program EIR, and more recently Program-level EIRs for wastewater and water supply programs. Prior to founding Horizon in 2008, he supported the City for a number of years, including assisting with updates to the City's Urban Area General Plan Master EIR and leading the Modesto Regional Water Treatment Plant Phase 2 Expansion Project Subsequent EIR. Other local and municipal clients include Town of Windsor, City of Turlock, City of Ceres, and Sonoma County Water Agency.

Michael is an exceptional program and project manager who consistently keeps highly complicated projects on schedule and within budget. Under a multi-year on-call contract with the California Department of General Services (DGS) for complex environmental documentation, Michael's team has completed all (23) task orders on time and within budget. Over the past 3 years, Horizon has prepared two EIRs and eight IS/MNDs for DGS and led the public outreach and/or noticing for all documents.

Michael has effectively led many CEQA scoping sessions, public meetings, and hearings across the state, including those held throughout California related to the statewide cultivation licensing and track-and-trace program.

Role: As Project Manager, Michael will work closely with the County to develop an overall strategy for the EIR. He will be responsible for overseeing all of Horizon's work and keeping the County apprised of progress, budgets, and issues. He will also lead the public meeting and facilitation tasks.

Megan Giglini, M.S.*Deputy Project Manager, Public Outreach, Air Quality and Noise Analysis***Years of Experience:** 14**Education**

M.S., University of Nevada,
Reno, Hydrology, 2003
B.S., University of California
Riverside, Environmental
Sciences, 2001

Megan is deputy project manager for the CalCannabis Cultivation Licensing PEIR so she is intimately familiar with the analysis and the resource topics that local governments must cover when tiering their PEIR. Megan has extensive experience leading CEQA/NEPA compliance, having completed studies and documents for a variety of project types. Megan has a broad depth of experience with multiple CEQA resource areas, particularly hydrology, air quality, greenhouse gases, geology, and hazards and hazardous materials.

She has extensive experience managing CEQA processes for similarly large, complex, multi-agency, and/or multi-objective projects (including projects that require balancing competing objectives), coordinating interdisciplinary teams, and preparing high-quality reports within time and budget constraints.

Megan and Michael have worked on many contracts together, including the DGS Northern California Retainer contract for environmental services. She has extensive experience managing CEQA processes for similarly large, complex, multi-agency, and/or multi-objective projects (including projects that require balancing competing objectives), coordinating interdisciplinary teams, and preparing high-quality reports within time and budget constraints.

Susan Pearce, J.D.*Deputy Project Manager, Public Outreach, Analyst – Utilities and Public Services***Years of Experience:** 11**Education**

J.D., University of California,
Hastings College of the
Law, 1997
B.A., Political Science,
University of California,
San Diego, 1993

Susan is deputy project manager for the Cannabis Business Licensing Program IS/ND; she was a technical analyst on the CalCannabis Cultivation Licensing PEIR; and she is currently assisting with preparation of the IS/MND for the Colusa Triple Crown Cannabis R&D Business Park tiered from the CDFA CalCannabis PEIR.

In addition to her role as deputy project manager for the Nevada County project, Susan will provide public outreach support. Her expertise in this work comes from many years as a leader and board member of public organizations and representing the interests of clients in California.

Kenneth Schwarz, Ph.D.*Principal-in-Charge, Hydrology and Water Quality***Years of Experience:** 24**Education**

Ph.D., Geography
(Geomorphology and
Hydrology) UCLA, 1999
M.A., Geography, UCLA, 1995
B.A., Regional Development,
UC Berkeley, 1988

Ken is a founding principal at Horizon. As principal-in-charge he will ensure resources are available to complete this project to the County's satisfaction.

Ken is a recognized expert in geomorphology, hydrology, and watershed management. He has directed complex projects throughout California involving erosion and sediment management, flood and stormwater management, stream maintenance and capital programs, land use planning, water rights, habitat conservation, and ecosystem restoration. Ken has directed CEQA investigations for water resource projects for 17 years, including developing many IS/MND and EIR documents for river management, flood maintenance, water supply infrastructure, and ecologic restoration projects.

Tom Engels, Ph.D.

Strategy and Quality Control

Years of Experience: 25

Education

Ph.D., Biological Sciences,
University of Texas,
Austin 1995

B.A., Liberal Arts (English),
University of Texas,
Austin, 1987

Tom has over 25 years of experience in environmental consulting, specializing in CEQA, NEPA, Clean Water Act and Endangered Species Act compliance, expert witness testimony and CEQA/NEPA case law, energy and water resources planning, and project management. He manages large-scale projects involving CEQA and/or NEPA environmental impact assessments, environmental permitting, integrated natural resources management plans, and feasibility studies.

Tom served as principal-in-charge on the CalCannabis Cultivation Licensing PEIR. He will use his experience from that project and his extensive experience in CEQA/NEPA case law to provide strategy and quality control guidance, as needed, for the Nevada County project.

Chris Stabenfeldt, AICP

Strategy and Quality Control

Years of Experience: 31

Education

MCRP Coursework, City and
Regional Planning,
California Polytechnic
University, San Luis
Obispo

B.A. Environmental Studies,
University of California
Santa Barbara

Certification

American Institute of
Certified Planners

Chris is a certified planner, team and project manager, and environmental analyst with more than 31 years of professional environmental and planning consulting experience. He has a strong multidisciplinary background and has conducted technical studies in noise, air quality, geology, hydrology/water supply, infrastructure analysis, and land use policy assessment.

He has managed preparation of numerous programmatic environmental documents and has worked on several projects in Nevada County including currently serving as project manager for biological resources, cultural resources and permitting for the Centennial Reservoir EIR being prepared for Nevada Irrigation District.

Tom Trexler, M.S.

Strategy, Quality Control, Analyst – Water Quality and Recreation

Years of Experience: 24

Education

M.S., Environmental Science
Yale University, 1999

B.A., Geography
(Geomorphology),
University of Southern
California, 1997

Tom has 24 years of experience with environmental compliance services. Tom’s responsibilities include project management and integrating the full-service disciplines of environmental compliance on controversial, high-profile California projects. He is a recognized expert in CEQA/NEPA compliance and permitting support.

Tom provided strategy support on the CalCannabis Cultivation Licensing PEIR.

Allison Chan, M.S.*Analyst – Aesthetics, Agriculture, Forestry***Years of Experience:** 11**Education**

M.S., Environmental Management, University of San Francisco, 2014
 B.S., Environmental Biology and Management, University of California, Davis, 2006

Allison has a successful history of coordinating complex environmental evaluations for water resource, energy, and community development projects. She is experienced in preparing CEQA resource evaluations for land use, aesthetics, recreation, traffic, public services, utilities, water quality, and hazards/hazardous materials topics. Allison prepared the land use and agricultural resources sections of the CalCannabis Cultivation Licensing PEIR.

Michael Smith, Ph.D.*Analyst – Air Quality, Energy, Noise***Years of Experience:** 20**Education**

Ph.D., Sociology (Environment and Natural Resources) Utah State University, 1998
 M.A., Geography (Natural Resource Management and Policy emphasis) University of Wyoming, 1994
 B.A., Environmental Studies, University of California, Santa Cruz, 1991

Michael is a nationally-recognized leader in NEPA/CEQA compliance and integrating GHG/climate change analyses into impact assessments. He has over 20 years' experience in environmental impact assessment, project and program management, policy development, and land use planning with the federal government, private sector, academia, and non-governmental organizations. He manages and serves as a strategic advisor and senior reviewer for NEPA and CEQA projects and programs for a wide variety of federal, state, and private-sector clients; provides policy compliance, scientific, technical, and QA/QC review of environmental analyses. He served as project manager for the award-winning EIS for the 2011-2015 rulemaking setting fuel efficiency requirements for passenger cars and light trucks, which was the first EIS prepared under NEPA to model the incremental climate change consequences of the proposed action. Michael contributed his expertise to the CalCannabis Cultivation Licensing PEIR.

Thomas Scofield*Lead Analyst and Technical Studies– Biological Resources***Years of Experience:** 27**Education**

B.S., Biology, Humboldt State University, 1990

Certification

CDFG Scientific Collecting Permit (SC-007091)

Thomas has extensive experience providing biological resources services in Nevada County and Placer County. Representative projects include the Loma Rica Specific Plan EIR for the City of Grass Valley, the Centennial Reservoir Project for Nevada Irrigation District, and Biological Resources Support Services for the Placer Vineyards Specific Plan EIR/EIS for Placer Vineyards Property Owner's Group. He will lead technical studies and analysis.

Lisa Westwood, M.A., RPA*Lead Analyst and Technical Studies – Cultural Resources and Tribal Cultural Resources***Years of Experience:** 23**Education**

M.A., Anthropology, Eastern New Mexico University, Portales
 B.A., Anthropology and Pre-medicine, University of Iowa, Iowa

Certification

Register of Professional Archaeologists/ #11692

Lisa serves as Director of Cultural Resources for ECORP, as principal investigator and task manager for cultural resources services required for compliance with Section 106 of the National Historic Preservation Act and CEQA. She is well versed in impact assessment and development of mitigation measures for CEQA and Section 106 projects. She recently developed, and is now implementing, complex Programmatic Agreements for large, 20-year, multi-applicant specific plan projects in Sacramento and Placer counties, which requires advanced Section 106 expertise and creative solutions. She also serves as principal investigator for all cultural resources studies in Northern California and others throughout California and Nevada.

Janis Offermann, M.A., RPA*Analyst and Technical Studies – Cultural Resources and Tribal Cultural Resources***Years of Experience:** 40**Education**M.A., University of California,
Davis, Anthropology,
1981B.A., Sonoma State College,
Anthropology, 1977**Certification**Register of Professional
Archaeologists/ #989109

Janis meets the U.S. Secretary of the Interior's professional qualifications as an archaeologist and is a Registered Professional Archaeologist. Her career includes 26 years with the State of California. She has extensive experience applying CEQA to cultural resources. Janis also has extensive experience working with Section 106 of the National Historic Preservation Act and coordinating those efforts with federal agencies. On the state level, Janis has worked closely with the State Historic Preservation Office, California Department of Parks and Recreation, and the State Lands Commission. Her expertise includes northern California prehistoric archaeology and Native American consultation.

Tod Monks, P.G., MBA*Analyst – Geology, Soils, and Hazards***Years of Experience:** 30**Education**M.B.A., University of New
Mexico, 2008M.S., Geology/Hydrogeology,
Wright State University,
1988B.S., Geology, Ohio
University, 1983**Registration**Professional Geologist,
California No. 8047 2005Professional Geologist,
Arizona No. 41586 2004

Tod is a registered geologist with 30 years of site characterization, remediation, groundwater resources, and NEPA/CEQA project experience throughout Northern California and Nevada. His experience includes soil and groundwater investigations, remediation, feasibility studies, mine site restoration, water supply development and management, conceptual and numerical groundwater flow and contaminant transport model development, industrial waste discharge permitting, feasibility studies, impact assessments, and numerous compliance projects.

Project experience includes leading environmental assessments in the Western United States for Department of Energy, Department of Defense, and T-Mobile.

Scott Friend, AICP*Lead Analyst – Land Use and Planning***Years of Experience:** 23**Education**Graduate Studies – Masters
of Environmental
Planning Program,
Arizona State UniversityB.A., Political Science,
California State
University, Chico**Certification**American Institute of
Certified Planners

Scott specializes in current and long-range contract planning activities as well as the preparation and review of general plans, municipal codes and CEQA environmental compliance documents. He has provided principal direction and project management on projects ranging from policy documents such as general and specific plans to implementation documents and programs such as zoning ordinance updates, design review programs, and planning program guidelines.

He has prepared hundreds of land use ordinances, resolutions and programs including multiple cannabis and cannabis-related cultivation, use, and code enforcement ordinances.

Laura Prickett, MCP, AICP, CPESC, QSD*Analyst – Land Use and Planning***Years of Experience:** 22**Education**

Master of Community
Planning, University of
Rhode Island
(Environmental
concentration), 1995
B.A., Boston University,
International Relations,
1984

Laura has 20 years of experience as an environmental planner, project manager, with a specialization in stormwater control for development projects. Laura has extensive municipal stormwater permit experience and also manages CEQA environmental review and public outreach for transportation projects. Her stormwater experience includes managing the preparation of technical guidance manuals for implementing stormwater treatment requirements in development project, and supporting the negotiation of municipal stormwater permit requirements.

Julie Allison, B.S.*Analyst – Population, Housing, and Alternatives***Years of Experience:** 10**Education**

B.S., California Polytechnic
State University San Luis
Obispo, Ecology and
Systematic Biology, 2007

Julie's experience preparing environmental documents pursuant to CEQA, includes EIRs, MNDs, and EA). Her project work includes analyses for the CalCannabis Cultivation Licensing PEIR, the Modesto Wastewater Master Plan EIR that included program-level and project-level analyses, and projects for utilities including Pacific Gas and Electric.

Debra Lilly, B.A.*Analyst – Alternatives and Cumulative Impacts***Years of Experience:** 17**Education**

B.A., English, Kenyon College,
1981

Debra is managing preparation of an IS/MND for the Colusa Triple Crown Cannabis Research and Development Business Park, which is being tiered from the CDFA CalCannabis PEIR and referencing the Bureau of Cannabis Control's IS/ND. The City of Colusa is considering approval of the construction and operation of a Cannabis Research and Development Business Park. The project would encompass approximately 1,420,000 square feet on 84 acres and would include energy-efficient greenhouses for cannabis cultivation, plant processing spaces, facilities for creating infused products, a testing laboratory, research/ and development and training centers, distribution center, and corporate offices.

D. REFERENCES

Client: [California Department of Food and Agriculture](#)

Contact: Michele Dias, General Counsel
1220 N Street, Room 221, Sacramento, CA 95814
michele.dias@cdfa.ca.gov | (916) 654-1393

Services: Horizon prepared a program EIR for CDFA's licensing of commercial cannabis cultivation and establishment of a track-and-trace program for commercial cannabis.

Staff: Michael Stevenson (project manager), Megan Giglini (deputy project manager, analyst), Julie Allison (deputy project manager), Tom Engels (principal-in-charge), Tom Trexler (strategy), Michael Smith (analyst), Susan Pearce (analyst), Allison Chan (analyst), Johnnie Chamberlin (analyst), Brian Piontek (analyst), Robin Hunter (analyst), Janis Offermann (analyst), Patrick Donaldson (analyst).

Client: [California Department of General Services](#)

Contact: Jennifer Parson, Senior Environmental Planner
707 3rd St, West Sacramento, CA 95605
jennifer.parson@dgs.ca.gov | (916) 376-1604

Services: Horizon prepares environmental documentation for replacement CHP facilities throughout California. Under a separate on-call contract, Horizon conducts technical studies and prepared CEQA documentation for a wide variety of projects,

Staff: Michael Stevenson (project manager), Megan Giglini (deputy project manager, analyst), Julie Allison (analyst), Tom Engels (principal-in-charge), Sabrina Teller (legal review), Allison Chan (analyst), Johnnie Chamberlin (analyst), Brian Piontek (analyst), Robin Hunter (analyst), Janis Offermann (archaeology, analyst), Patrick Donaldson (analyst).

Client: [Stanislaus Regional Water Authority](#)

Contact: Michael Brinton, Interim General Manager
156 South Broadway, Suite 270, Turlock, CA 95380
Michael.Brinton@ci.ceres.ca.us | (209) 538-5758

Services: Since 2009, Horizon has supported SRWA in planning for CEQA compliance guidance, studies, and documentation related to its regional Surface Water Supply Project, which would diversify water sources for the Cities of Turlock and Ceres (and possibly others) by treating Turlock Irrigation District water for potable uses.

Staff: Michael Stevenson (principal-in-charge), Debra Lilly (project manager), Allison Chan (analyst), Johnnie Chamberlin (analyst), Brian Piontek (analyst), Robin Hunter (analyst), Janis Offermann (analyst), Patrick Donaldson (analyst). Megan Giglini (analyst), Michael Lee (analyst).

Client: [Napa County Conservation Division, Planning, Building, and Environmental Services](#)

Contact: **Brian Bordona, Supervising Planner**
County Administration Building, 1195 Third Street, 2nd Floor, Napa, CA 94559
Brian.Bordona@countyofnapa.org | (707) 253-4417

Services: Horizon worked for the Division for 8 years to support the Napa River Restoration Project, including natural resource investigations, CEQA compliance, and permitting.

Staff: Ken Schwarz (project manager), Michael Stevenson (strategy), Allison Chan (analyst), Brian Piontek (analyst, natural resources specialist), Robin Hunter (analyst, botanist), Janis Offermann (analyst, archaeologist), Patrick Donaldson (analyst).

Client: [Nevada Irrigation District](#)

Contact: **Doug Roderick, P.E., Senior Engineer**
1036 Wet Main Street, Grass Valley, CA 95945
Roderick@nidwater.com | (530) 271-6866

Services: ECORP is providing biological and cultural resources and permitting services for the EIR and Regulatory Permitting for the Centennial Reservoir Project, Nevada and Placer Counties. ECORP is a subconsultant to HDR.

Staff: Chris Stabenfeldt (project manager), Jeremy Adams (cultural resources manager), Tom Scofield (senior biologist), Clay Delong, (associate biologist) Lisa Westwood (director, cultural resources).

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Attachment

Resumes

Michael J. Stevenson, M.S.

Principal

Michael Stevenson is a founding principal of Horizon Water and Environment. He has 20 years of experience in planning, CEQA/NEPA, and permitting for a wide range of project types, centering around topics such as regulation development, cannabis, water resources, infrastructure, water rights, and natural resources management and restoration. He is a recognized expert in CEQA and regulatory permitting and, in particular, in leading California statewide legally contentious cases. He also possesses expertise in the provisions and requirements of the federal Clean Water Act, State of California Porter-Cologne Water Quality Control Act, federal and state Endangered Species Act requirements, and the Fish and Game code.

Michael is an exceptional program and project manager who consistently keeps highly complicated projects on schedule and within budget. Michael has excellent written and verbal communication skills, which support the high quality of his written documents and the meetings he leads. Michael has effectively led many CEQA scoping sessions, public meetings, and hearings across the State of California, often in highly contentious settings.

EDUCATION

M.S., Yale University, School of Forestry and Environmental Studies (emphasis on Watershed Management and Restoration), 2000

B.A., UC Santa Cruz, Environmental Studies, 1993

PROFESSIONAL EXPERIENCE

Horizon Water and Environment

- Founding Principal (2008–present)

Jones & Stokes Associates

- Project Director (2007–2008)
- Project Manager (2003–2006)

Environmental Science Associates

- Senior Associate (2001–2003)

Lawrence Livermore National Laboratories

- Environmental Scientist (2000–2001)
- Environmental Specialist (1998–2000)

Grid Group, Santa Cruz, CA

- Environmental and Permitting Specialist (1997–1998)

Habitat Restoration Group, Santa Cruz, CA

- Ecological Restoration Specialist (1997–1998)

PROJECT EXPERIENCE

Colusa Triple Crown Cannabis Research and Development Business Park Project IS/MND: City of Colusa; Colusa County, CA (2018–present).

The City of Colusa is considering approval of the construction and operation of a Cannabis Research and Development Business Park. The project would encompass approximately 1,420,000 square feet on 84 acres and would include energy-efficient greenhouses for cannabis cultivation, plant processing spaces, facilities for creating infused products, a testing laboratory, research/ and development and training centers, distribution center, and corporate offices. Horizon is preparing an IS/MND for the project tiered from the CDFA CalCannabis PEIR and referencing the Bureau of Cannabis Control's IS/ND.

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present).

Michael was Horizon's Project Manager for this statewide program EIR in support of the California Department of Food and Agriculture's (CDFA's) CalCannabis Cultivation Licensing Program. The key objectives of the EIR were to support the development and adoption of regulations that establish a framework for implementing CDFA's obligations under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (the Act). CDFA's obligations under the Act primarily relate to the licensing of commercial cannabis cultivation sites, and the implementation of a track-and-trace seed-to-sale program. A key challenge for the team was ensuring that the program EIR encompassed a comprehensive statewide evaluation of existing and potential future cannabis cultivation methods and the development of appropriate management measures to ensure that cannabis cultivation does not result in significant adverse environmental impacts. Horizon completed the project substantially under budget and is now assisting CDFA with processing of individual license applications.

PRESENTATIONS

- Stevenson, M.J., 2016. MCRSA: What to Expect January 2018. Presentation, State of Marijuana Annual Conference, Long Beach, CA, September 2016
- Stevenson, M.J., 2016. Implementing State and Local Cannabis Regulations, Northern California Association of Environmental Professionals Conference, Eureka, CA, September 2016.

AWARDS

- 2016 Outstanding Environmental Analysis Document Award, California Association of Environmental Professionals, for California Department of Food and Agriculture Statewide Plant Pest Prevention and Management Program Environmental Impact Report
- 2016 Award for NEPA (National Environmental Protection Agency) Excellence, National Association of Environmental Professionals, for California Department of Food and Agriculture Statewide Plant Pest Prevention and Management Program Environmental Impact Report
- 2016 Award of Merit, Best Practices Category, American Planning Association, California Northern Section, for California Department of Food and Agriculture Statewide Plant Pest Prevention and Management Program Environmental Impact Report
- 2011 Association of Environmental Professionals Award for Outstanding Environmental Resource Document for the Sonoma County Stream Maintenance Program
- 2006 Award for Outstanding Environmental Planning Document, Jurisdiction over 50,000 Population: California Coastal National Monument Resource Management Plan, California Association of Environmental Professionals

Cannabis Business Licensing Program Initial Study/Negative Declaration (IS/ND): Bureau of Cannabis Control; Statewide (2016–present). This statewide project included an extensive initial study to determine potential impacts of the Cannabis Business Licensing Program being developed by the Bureau of Cannabis Control. Michael was the project manager on this project, and led all aspects of the project, including research, document development, and public outreach activities. The primary objectives of the program are to ensure that medicinal and adult-use commercial cannabis activities are performed in a manner that avoids significant adverse impacts on the environment, cannabis industry workers, and the general public from the individual and cumulative effects of these commercial cannabis activities, and fully complies with all applicable laws, including the Act. Horizon completed the project substantially under budget and is now assisting the Bureau with ongoing public outreach related to its licensing program.

Program EIR for Statewide Plant Pest Prevention Program: CDFA; Statewide (2011–2014). Michael was project director for the Program EIR for the Statewide Plant Pest Prevention and Management Program. This award-winning EIR evaluated CDFA's various pest prevention and management activities, including biocontrol agents, sterile insects, and chemical use, and created a framework to streamline CEQA compliance for individual project-level activities.

Stream Maintenance Program EIR and Environmental Permitting: Santa Clara Valley Water District; Santa Clara County, CA (2010–2014). Michael was the project director for CEQA compliance and permitting for the District's updated stream maintenance program. Michael oversaw the Program EIR analysis which evaluated key topics such as biological resources, cultural resources, water quality, herbicide use, and instream restoration and protection of salmonid and riparian habitat. Michael directed permit negotiations with federal and state agencies to renew 10-year programmatic permits for stream maintenance activities.

Water Master Plan Update Program EIR: Town of Windsor; Windsor, CA (2009–2011). Michael was the principal-in-charge for a Program EIR that evaluated implementation of a program of water infrastructure improvement projects. The EIR incorporated project-level and programmatic-scale impact evaluations. Challenging topics included growth inducement and program alternatives. The EIR was successfully certified on schedule and under budget.

Modesto Water Master Plan EIR: City of Modesto; Modesto, CA (2015–present). Michael is principal-in-charge responsible for preparation of a program EIR for the City's Water Master Plan, which will analyze the plan's proposed water supply facilities, including pipelines, water tanks, and groundwater wells.

Modesto Wastewater Master Plan EIR: City of Modesto; Modesto, CA (2015–present). Michael is principal-in-charge responsible for preparation of a program EIR for the City's Wastewater Master Plan, which will analyze the plan's proposed wastewater treatment and collection facilities, including pipelines, at program- and, where appropriate, project-level of detail.

Megan R. Giglini, M.S.

Senior Associate

Megan Giglini, M.S., is a project manager with over 14 years of experience in CEQA/NEPA compliance and environmental permitting. Megan has completed environmental studies and documents for a variety of projects involving water resources, water and wastewater treatment plants, energy and transportation, environmental restoration, dam renovations, housing and commercial developments, port development, and linear (pipeline/transmission) construction. Megan specializes in project management and technical analyses related to hydrology and water quality, and public services and utilities. However, Megan has a broad depth of experience with multiple CEQA resource areas, particularly air quality, greenhouse gases (GHG), geology, and hazards and hazardous materials. Megan has experience working with regulatory agencies throughout the permit process, and preparing supporting materials for the USACE, RWQCBs, and CDFW.

EDUCATION

- M.S., University of Nevada, Reno,
Hydrology, 2003
- B.S., University of California Riverside,
Environmental Sciences, 2001

PROFESSIONAL EXPERIENCE

- Horizon Water and Environment,
Oakland, CA
- Senior Associate (2014–present)
- URS Corporation, Sacramento, CA
- Environmental Scientist/Planner (2011–2014)
- PBS&J (now Atkins), Sacramento, CA
- Environmental Scientist (via Aerotek Staffing Agency) (2010)
- Horizon Water and Environment,
Oakland, CA
- On-Call CEQA Author (2010–2011)
- Robertson-Bryan Inc., Elk Grove, CA
- Environmental Scientist (2007–2010)
- Jones & Stokes (now ICF International), Sacramento, CA
- Environmental Scientist (2003–2007)
- Desert Research Institute, Reno, NV
- Graduate Research Assistant (2001–2003)
- University of California Riverside,
Riverside, CA
- Student Research Assistant (2000–2001)

PROJECT EXPERIENCE

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present). Megan is deputy project manager for this statewide EIR. Horizon is working to prepare a programmatic EIR for the CDFA's CalCannabis Cannabis Cultivation Licensing Program. The key objectives of the program are to support the development and adoption of regulations that establish a framework for implementing CDFA's obligations under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (the Act), and to fulfill several other requirements of the Act, such as convening a multi-agency task force. CDFA's obligations under the Act primarily relate to the licensing of medical cannabis cultivation sites, and the implementation of a "track and trace" seed-to-sale program. A key challenge for the team is ensuring the programmatic EIR encompasses a comprehensive statewide evaluation of existing and potential future medical cannabis cultivation methods and the development of appropriate management measures to ensure that medical cannabis cultivation does not result in significant adverse environmental impacts, allowing for issuance of state licenses as a ministerial action.

Cannabis Business Licensing Program Initial Study/Negative Declaration (IS/ND): Bureau of Cannabis Control; Statewide (2016–present). This statewide project included an extensive initial study to determine potential impacts of the Cannabis Business Licensing Program being developed by the California Department of Consumer Affairs. Megan served as a technical analyst on this project, and participated in research, drafting, and public outreach activities for the IS/ND. The primary objectives of the program are to ensure that medicinal and adult-use commercial cannabis activities are performed in a manner that avoids significant adverse impacts on the environment, cannabis industry workers, and the general public from the individual and cumulative effects of these commercial cannabis activities, and fully complies with all applicable laws, including the Medicinal and Adult-Use Cannabis Regulation and Safety Act.

Modesto Water Master Plan EIR: City of Modesto; Modesto, CA (2015–present). Megan is overseeing preparation of a program EIR for the City's Water Master Plan, which will analyze the plan's proposed water supply facilities, including pipelines, water tanks, and groundwater wells, at program- and, where appropriate, project-level of detail. Megan is also leading the preparation of the air quality and greenhouse gases sections.

PROFESSIONAL MEMBERSHIPS

Association of Environmental Professionals (2012–present)

Society of American Military Engineers (2014)

AWARDS

2007 American Society of Civil Engineers' (ASCE) Award for Outstanding Environmental Project for the Stockton Channel Water Quality Restoration Project

2007 Water Leader, Water Education Foundation

2003 Outstanding Student Award, Graduate Program of Hydrologic Sciences, University of Nevada, Reno

Modesto Wastewater Master Plan EIR: City of Modesto; Modesto, CA (2015–present). Megan is leading the preparation of the air quality and greenhouse gases sections of a program EIR for the City's Wastewater Master Plan, which will analyze the plan's proposed wastewater treatment and collection facilities, including pipelines, at program- and, where appropriate, project-level of detail.

California Conservation Corps (CCC) Placer Center Multipurpose Room, Kitchen and Dorm Buildings Replacement Project Mitigated Negative Declaration (MND): California Department of General Services; Placer County, CA (2015–2016). Megan served as project manager and technical author for the air quality, greenhouse gas, and noise resource sections of the MND. The proposed project would replace existing outdated CCC facilities that no longer meet the CCC's operational needs. The MND evaluated all project construction activities, including blasting, and proposed operational activities in comparison to the existing uses. Mitigation measures were developed to address blasting-related noise and particulate matter emissions.

Northern California Environmental Services Retainer Contracts: California Department of General Services (DGS); Sacramento, CA (2016–present). The Department of General Services, Real Estate Services Division (RESD) is responsible for planning and development of many state buildings and properties. Ms. Giglini is providing ongoing deputy project management support for multiple retainer contracts in support of northern California projects. Environmental analysis and CEQA compliance are required for these projects, including a full range of environmental, biological, and cultural resources investigations. Services have been provided for approximately 20 projects throughout California for RESD's client agencies, including the California Conservation Corps, the State Water Resources Control Board, the Department of Food and Agriculture, the Department of Water Resources, the California Highway Patrol, and the Department of Developmental Services, among others.

Statewide Pest Prevention Program EIR: CDFA; Statewide (2011–2014). A Program EIR (PEIR) for CDFA's Statewide Program has been prepared to provide integrated CEQA compliance for the Program's range of prevention, management and regulatory activities. Megan provided project coordination overseeing preparation of air quality, noise, socioeconomic, greenhouse gas, and biological resources sections of the EIR. Megan supported the Draft PEIR's public meetings and the Final PEIR preparation.

Suction Dredge Permitting Program SEIR: California Department of Fish and Wildlife; Statewide, CA. (2010). Megan co-authored recreation, aesthetics, hazards, cumulative, and mineral resources EIR chapters for a statewide EIR that evaluated current suction dredge mining regulations, and identified regulatory updates needed to protect natural resources.

Rodeo Flat Road Pipeline and Pump Station Mitigated Negative Declaration: Nevada Irrigation District (2008–2009). Megan served as project coordinator and lead author for a water distribution expansion project to serve up to 36 residential parcels in Nevada County.

Susan M. Pearce, J.D.

Senior Associate

Susan Pearce, J.D., has been managing environmental projects in California for more than a decade. This includes studies and complex projects involving communication and cooperation with a diverse array of agencies, stakeholders, and landowners. She has successfully led the planning and implementation of resource conservation and environmental restoration projects throughout Santa Cruz County. She has worked closely with private landowners, agricultural operations, County planners, watershed stewards, and environmental advocates to achieve land use and conservation solutions that balance resource needs and economic interests. Susan also has keen understanding of legal issues affecting environmental projects, having practiced environmental law for more than a decade. Susan has a broad background in environmental laws and regulations, including CEQA and NEPA. She is an experienced public speaker, and has given presentations at seminars, workshops, and conferences.

EDUCATION

Juris Doctor, University of California,
Hastings College of the Law, 1997

Bachelor of Arts, Political Science,
University of California, San Diego,
1993 (Graduated with High Honors;
Undergraduate Research Scholar;
Chancellor's Scholar; Dean's List)

CERTIFICATIONS

California Bar Admission, 1997

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Senior Associate (2016–present)

Resource Conservation District of
Santa Cruz County, Capitola, CA

- Program Director/Interim
Executive Director (2011–2015)

McKenna Long & Aldridge LLP, San
Francisco, CA

- Of Counsel (2006–2008)

Hewlett-Packard Company,
Palo Alto, CA

- Senior Corporate Counsel (2000–
2006)

McKenna & Cuneo, L.L.P., San
Francisco, CA

- Associate (1999–2000)

Hatch & Parent, P.C., Santa
Barbara, CA

- Associate (1997–1998)

PROJECT EXPERIENCE

Colusa Triple Crown Cannabis Research and Development Business Park Project IS/MND: City of Colusa; Colusa County, CA (2018–present).

The City of Colusa is considering approval of the construction and operation of a Cannabis Research and Development Business Park. The project would encompass approximately 1,420,000 square feet on 84 acres and would include energy-efficient greenhouses for cannabis cultivation, plant processing spaces, facilities for creating infused products, a testing laboratory, research/ and development and training centers, distribution center, and corporate offices. Susan is assisting in preparation of an IS/MND for the project tiered from the CDFA CalCannabis PEIR and referencing the Bureau of Cannabis Control's IS/ND.

Cannabis Business Licensing Program Initial Study/Negative Declaration (IS/ND): Bureau of Cannabis Control; Statewide (2016–present).

This statewide project included an extensive initial study to determine potential impacts of the Cannabis Business Licensing Program being developed by the California Department of Consumer Affairs. Susan is a deputy project manager on this project, and participated in research, drafting, and public outreach activities, as well as overall project management for the IS/ND. The primary objectives of the program are to ensure that medicinal and adult-use commercial cannabis activities are performed in a manner that avoids significant adverse impacts on the environment, cannabis industry workers, and the general public from the individual and cumulative effects of these commercial cannabis activities, and fully complies with all applicable laws, including the Medicinal and Adult-Use Cannabis Regulation and Safety Act.

PROFESSIONAL EXPERIENCE (CONT.)

Hastings West-Northwest Journal of Environmental Law and Policy, San Francisco, CA

- Editor in Chief (1996–1997)

Professor Brian Gray, Hastings College of the Law, San Francisco, CA

- Research Assistant (1996)

Professor Steven Duke, Yale University Law School

- Research Assistant (1996)

Rodney Richard Jones, Attorney, Mendocino, CA

- Law Clerk (1995)

PROFESSIONAL MEMBERSHIPS

Board Member, Santa Cruz Museum of Natural History, Santa Cruz, CA (2016–Present)

Leadership Santa Cruz, Class 29

Santa Cruz IRWM Steering Committee, Santa Cruz, CA (2014-2015)

Regional Water Management Foundation Board, Santa Cruz, CA (2014-2015)

Board Member, Presidio Restoration Advisory Board, San Francisco, CA, (1995–1997)

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present).

Susan served as a technical analyst for this statewide EIR. Horizon prepared a programmatic EIR for the CDFA's CalCannabis Cultivation Licensing Program. The key objectives of the Program are to support the development and adoption of regulations that establish a framework for implementing CDFA's obligations under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (the Act), and to fulfill several other requirements of the Act. CDFA's obligations under the Act primarily relate to the licensing of cannabis cultivation sites, and the implementation of a product "track and trace" system. A key challenge for the team was ensuring the program EIR encompass a comprehensive statewide evaluation of existing and potential future cannabis cultivation methods and the development of appropriate management measures to ensure that cannabis cultivation does not result in significant adverse environmental impacts. Horizon continues to assist CDFA on processing cultivation licensing applications for this project.

College Lake Multi Objective Management Project: Resource Conservation District of Santa Cruz County; Santa Cruz County, CA (2012–2014).

This project evaluated a series of management alternatives for College Lake in an effort to balance the needs of agricultural users, urban users, nearby landowners, and federal, state, and local natural resource agencies with regard to operation of the lake. Susan served on the Steering Committee for the project, along with the County of Santa Cruz, Pajaro Valley Water Management Agency, and an outside consultant. She worked closely with a Technical Advisory Committee to integrate the goals of the Pajaro Integrated Regional Watershed Management Plan ("IRWMP") as well as many important factors and stakeholders of particular concern in and around College Lake. She drafted several sections of the final project report and coordinated the final presentation of the findings in a public meeting.

Scott Creek Bridge Replacement Project: Resource Conservation District of Santa Cruz County; Santa Cruz County, CA (2013–2015).

Susan served as co-Chair of a Technical Advisory Committee ("TAC") formed to develop a replacement bridge over Scott Creek in Northern Santa Cruz County, including a complicated environmental restoration of the Scott Creek Lagoon. Susan drafted, negotiated, and coordinated the execution of a Memorandum of Understanding between multiple stakeholders, including Cal Trans, Regional Transportation Commission, County of Santa Cruz, and Cal Poly San Luis Obispo regarding development of design criteria for replacement of Scott Creek Bridge and restoration of the Scott Creek Lagoon. She led the TAC in an extended process, including a series of workshops with federal and state natural resource agencies, to create guidelines for designing a new bridge that could meet the mandates of all of the interested agencies. As a result of these workshops, the TAC reached agreement on design principles and is working with Caltrans on moving the project forward. Susan has prepared and delivered public presentations regarding the bridge design criteria development process.

Kenneth M. Schwarz, Ph.D.

Principal

Ken Schwarz, Ph.D., is a founding principal at Horizon Water and Environment. He is a recognized expert in the fields of geomorphology, hydrology, and watershed management. For 24 years, he has directed complex projects throughout California involving erosion and sediment management, flood and stormwater management, stream maintenance and capital programs, land use planning, water rights, habitat conservation, and ecosystem restoration. Ken conducts hydrologic and geomorphic analyses and produces watershed and stream management plans, hydrologic reports, stream assessments, sediment and erosion control evaluations, water rights petitions, restoration designs, and conservation plans. Ken has directed CEQA investigations for water resource projects for 17 years, including developing many IS/MND and EIR documents for river management, flood maintenance, water supply infrastructure, and ecologic restoration projects. Ken is an expert in environmental regulations and specializes in using his technical background to develop successful permitting for the USACE, SWRCB, RWQCBs, CDFW, USFWS, and NMFS, as well as local county and municipal approvals. Ken has provided expert witness testimony to the State Water Resources Control Board, the California Energy Commission, and other civil trial proceedings on hydrology, river management, CEQA, and environmental impact issues. Ken's watershed and stream projects balance the needs of local government planners with regulatory requirements and the interests of watershed stakeholders. Throughout every project, Ken maintains a strong focus on project cost and schedule. Ken is also a highly regarded instructor. He has lectured and taught courses in hydrology, geomorphology, watershed planning, riparian processes, physical geography, and ecosystem restoration for UC Berkeley, UCLA, UC Davis Extension, University of San Francisco, the U.S. Army Corps of Engineers, and Lorman Educational Services. He has authored research articles and presented at several conferences.

EDUCATION

- Ph.D., Geography (Geomorphology and Hydrology) UCLA, 1999
- M.A., Geography (Geomorphology and Hydrology) UCLA, 1995
- B.A., Regional Development (Major Honors and University Distinction), UC Berkeley, 1988

PROFESSIONAL EXPERIENCE

- Horizon Water and Environment
 - Founding Principal (2008–present)
- Adjunct Professor: University of San Francisco, Department of Environmental Management, Instructor for Graduate Course: *Hydrology, Geomorphology, and Watersheds*, (2008 – Present)
- Jones & Stokes, Oakland, CA
 - Principal (2007–2008)
 - Associate Principal (2003–2006)
- Philip Williams & Associates (PWA), San Francisco, CA
 - Director (2002–03)
 - Senior Associate (2001–2002)
 - Associate (1999–2000)

PROJECT EXPERIENCE

Napa County General Plan Update and EIR: Napa County Department of Conservation Development & Planning; Napa, CA (2006). Ken assisted the Napa County Planning Department in developing the 2006 general plan update (GPU). Ken reviewed the hydrology, groundwater, and sediment transport analyses and guided development of the water element of the GPU and the hydrology and water resources sections of the EIR. Ken crafted a ministerial approval process for the County's review of vineyard development projects.

Stream Maintenance Program (SMP), CEQA, and Environmental Permitting: Napa County Flood Control and Water Conservation District; Napa, CA (2010–2012). Ken assisted the District in developing their SMP program including writing a manual and leading CEQA and permitting tasks to authorize maintenance activities. The SMP approach uses geomorphic and ecologic principles to avoid and minimize environmental impacts from maintenance activities. Permits were obtained from the RWQCB and CDFW.

Napa River Oxbow Habitat Restoration and Preservation Project CEQA and Permitting: City of Napa; Napa, CA (2005–2006). While at Jones & Stokes, Ken led the CEQA compliance and permitting process for the restoration project. Several mitigation measures were developed to avoid impacts and protect the sites riparian and aquatic habitats. Additionally, a small wetland feature was designed and created to mitigate for potential wetland impacts during project implementation. Ken led the successful permitting process for the USACE, USFWS, RWQCB, and CDFW. A wetland delineation analysis and report was conducted in support of the Clean Water Act Section 404 permit for USACE.

AWARDS

- 2011 Association of Environmental Professionals (AEP) Award for Outstanding Environmental Resource Document for the Sonoma County Stream Maintenance Program
- 2009 Floodplain Management Association (FMA) Award for Excellence for the Sonoma County Stream Maintenance Program
- 2007 Association of Bay Area Governments (ABAG) Award for Protecting and Preserving the Environment: Napa County Baseline Data Report
- 2006 National Environmental Excellence Award for Planning Integration: Napa County Baseline Data Report, National Assoc. of Environmental Professionals
- 2006 California State Award for Best Use of Technology, California Chapter of the American Planning Association (CCAPA)
- 2006 Certificate of Merit for Outstanding Environmental Resource Document: Napa County Baseline Data Report, California Chapter of the Association of Environmental Professionals (CAEP)
- 2006 Award for Innovative Use of Technology, Napa County Baseline Data Report, Northern Section California Chapter American Planning Association (NSCCAPA)
- 2002 Honorable Mention Award for Environmental Design: Poggi Canyon Olympic Parkway Channel Design and Restoration, Association of Environmental Professionals (CAEP)
- 1999 Distinguished Teaching Award, UCLA Department of Geography
- 1997 Graduate Student Conference Award, American Geophysical Union

Water Master Plan Update Program Environmental Impact Report (EIR): Town of Windsor; Windsor, CA (2009–2011). Ken directed the EIR that incorporated project-level and programmatic-scale impact evaluations. Challenging topics included evaluating growth inducement issues, alternatives, and groundwater recharge and recovery actions. The EIR was successfully certified in July 2011, on schedule and under budget.

Napa County Baseline Data Report and Programmatic EIR: Napa County Department of Conservation Development & Planning; Napa, CA (2003–2005). While at Jones & Stokes, Ken was the project manager leading the comprehensive inventory and GIS analysis of Napa County. Technical highlights of the project included developing a physically based integrated surface hydrology, groundwater, and water quality model (MIKE-SHE) capable of assessing hydrologic conditions at individual project scales, watershed scales, and at the cumulative County scale. The project has won multiple local, state, and national awards.

Stream Maintenance Program CEQA and Environmental Permitting: Santa Clara Valley Water District; Santa Clara County, CA (EIR 2010–2012, Permitting 2012–2014). Ken led writing the project description for the EIR and the permit renewal process for the District, obtaining multi-year permits and developing an approved mitigation program with the USACE, USEPA, USFWS, NMFS, RWQCBs, and CDFG. Key program activities include instream sediment removal, vegetation management, and bank repair and stabilization.

Integrated Regional Water Management Grants Applications and Management: Association of Bay Area Governments (2012–2017). Ken and his Horizon team successfully developed grant applications for DWR Proposition 84 (IRWM) Rounds 2, 3, and 4, resulting in over \$80 million dollars of grant funding for over 40 Bay Area projects. The dedicated and quick work by Ken and his team has been greatly valued by ABAG and Bay Area project partners. Horizon is currently assisting ABAG with grant management and reporting support.

Stream Maintenance Program and Permitting: Contra Costa County Public Works Agency; Contra Costa County, CA (2015–present). Ken and his Horizon team are assisting the County develop programmatic long-term permits for their flood control maintenance activities. Horizon is evaluating channel conditions and developing a custom maintenance manual to guide future work, including impact avoidance and minimization standards.

Thomas M. Engels, Ph.D.

Principal

Tom Engels, Ph.D. is a Principal at Horizon Water and Environment. He has over 25 years of experience in environmental consulting, specializing in CEQA, NEPA, Clean Water Act and Endangered Species Act compliance, expert witness testimony and CEQA/NEPA case law, energy and water resources planning, and project management. Tom regularly manages large-scale projects, including CEQA and/or NEPA environmental impact assessments, environmental permitting, integrated natural resources management plans, and feasibility studies. Tom is also an esteemed instructor, having taught numerous courses on CEQA, NEPA, Endangered Species Act and Clean Water Act compliance, and conflicts between environmental law and science for clients, the University of San Francisco, the University of California system, and the University of Texas at Austin. Tom is an adjunct instructor at the University of San Francisco and teaches a graduate-level course in CEQA/NEPA compliance.

EDUCATION

Ph.D., Biological Sciences, University of Texas, Austin 1995

B.A., Liberal Arts (English), University of Texas, Austin, 1987

PROFESSIONAL EXPERIENCE

Horizon Water and Environment, Sacramento, CA

- Principal (2013–present)

University of San Francisco, Department of Environmental Management

- Instructor (2016–present)

TRC Solutions, Mountain View, CA

- Principal and San Francisco Bay Area Practice Leader for Planning, Permitting and Licensing (2009–2013)

ICF/Jones & Stokes, San Jose, CA

- Senior Project Manager (2006–2009)

Science Applications International Corporation, Oakland, CA

- Senior Project Manager (2005–2006)

Jones & Stokes, San Jose, CA

- Senior Project Manager (1995–2005)

Science Applications International Corporation, Mountain View, CA

- NEPA Coordinator, National Aeronautics and Space Administration (1997–1999)

Aluminum Company of America, Rockdale, TX

PROJECT EXPERIENCE

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture; Statewide (2016–present). Tom is serving as senior CEQA advisor for the program EIR for CDFA's CalCannabis Cultivation Licensing Program. The key objectives of the program are to support the development and adoption of regulations that establish a framework for implementing CDFA's obligations under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (the Act), and to fulfill several other requirements of the Act, such as convening a multi-agency task force. A key challenge for the team is ensuring the programmatic EIR encompasses a comprehensive statewide evaluation of existing and potential future medical cannabis cultivation methods and the development of appropriate management measures to ensure that medical cannabis cultivation does not result in significant adverse environmental impacts, allowing for issuance of state licenses as a ministerial action.

Program EIR for Statewide Pest Prevention Program: California Department of Food and Agriculture; Sacramento, CA (2011–2014). Tom served as a technical reviewer for the program EIR for CDFA's Statewide Pest Prevention Program. The EIR evaluates impacts of the program's range of prevention, management and regulatory activities, carried out or overseen by CDFA against specific injurious pests, and their vectors, throughout California. The Draft Program EIR was published in August 2014. The EIR received a national award for excellence by the Association of Environmental Professionals in 2015.

CEQA Strategist and Expert Witness for Alameda County Water District's Appeal of the City and County of San Francisco Planning Department's Final EIR for the San Francisco Public Utilities Commission's proposed Alameda Creek Recapture Project: Alameda County Water District (2017–present). Tom is assisting ACWD in the development and implementation of a strategy for revising the EIR for the SFPUC's proposed Alameda Creek Recapture Project. Tom prepared a detailed written evaluation of the Final EIR for submittal by ACWD to the City and County of San Francisco's Board of Supervisors. On September 5, 2017, the Board of Supervisors overturned the certification of the Final EIR. The San Francisco Planning Department is currently revising the Draft EIR prior to recirculation for public review.

**PROFESSIONAL EXPERIENCE
(CONT.)**

- Environmental Management Consultant (1996–1997)

DLS Associates, Austin, TX

- Senior Scientist (1995–1996)

University of Texas at Austin, Austin, TX

- Assistant Instructor for Science and Environmental Law (1993–1995)

Microsoft Corporation, Redmond, WA

- Environmental Science Advisor (1993)

City of Austin, Austin, TX

- Environmental Quality Specialist (1992–1993)

CEQA Compliance for Pacific Gas & Electric and NextEra Energy Transmission West (NEET West) Estrella Substation and Paso Robles Area Reinforcement Project: California Public Utilities Commission.

Tom is serving as Project Manager for preparing an EIR for CPUC for PG&E and NEET West's proposed Estrella project in central California. The proposed project would involve the construction of a 230 kV substation, a 70 kV substation, a 230 kV transmission line interconnection, and a 70 kV double-circuit power line. Key issues being addressed during the CEQA evaluation include special-status species (e.g., San Joaquin kit fox, California red-legged frog, and Golden Eagle), noise impacts, air quality and greenhouse gas emissions, aesthetics, farmlands, and cultural resources.

CEQA Compliance for San Diego Gas & Electric Tie Line 649 Wood-to-Steel Replacement Project: California Public Utilities Commission.

Tom is serving as Project Manager for preparing all necessary CEQA documentation for a proposed project to replace existing wood poles supporting the powerline with steel poles to increase fire safety and service reliability. The portion of TL 649 in which the existing poles would be replaced is approximately 7 miles long, located in southern California, near San Diego and the United States-Mexico border. Key issues being addressed during the CEQA evaluation include unexploded ordnance hazards, historic structures, vernal pools, endangered species, noise impacts, and air quality and greenhouse gas emissions.

Delta Research Station EIR and EIS: California Department of General Services, California Department of Water Resources, and U.S. Fish and Wildlife Service; Sacramento, CA.

Tom assisted in the management of a joint EIR/EIS for the Delta Research Station, a combined Estuarine Research Station (ERS) and Fish Technology Center (FTC), which will be located within the San Francisco Bay Estuary. Under contract with the California Department of General Services (DGS), Horizon worked closely with both DGS, the California Department of Water Resources, U.S. Fish and Wildlife Service, and other responsible agencies. The ERS will consolidate over 160 state and federal employees from the Interagency Ecological Program, providing facilities for science and research efforts. ERS facilities will include office space, laboratory facilities, warehouses, and a marina. The FTC would be a center for propagation, conservation, and study of rare Delta fishes.

Allison Chan, M.S. Senior Associate

Allison Chan is a project manager with 11 years of experience managing and preparing CEQA and NEPA documents and permit applications for both small- and large-scale water infrastructure projects. She has a successful history of coordinating complex environmental evaluations for water resource, energy, and community development projects. She has worked with many water agencies and municipalities including the Santa Clara Valley Water District, San Francisco Public Utilities Commission, East Bay Municipal Utility District, City of Modesto, City of San Jose, Contra Costa County, and San Mateo County Department of Public Works. She is proficient in coordinating with clients, internal staff and subconsultant teams, and conducting quality assurance/quality control (QA/QC) for project deliverables. Allison has obtained regulatory permits from USACE, RWQCB, and CDFW for several routine maintenance projects. She is also experienced in preparing CEQA resource evaluations for land use, aesthetics, recreation, traffic, public services, utilities, water quality, and hazards/hazardous materials topics. Prior to joining Horizon, Allison was a project manager at Environmental Science Associates leading water resource and environmental compliance projects.

EDUCATION

M.S., Environmental Management,
University of San Francisco, 2014

B.S., Environmental Biology and
Management, University of
California, Davis, 2006

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Senior Associate (2016–present)
- Associate (2014–2016)

Environmental Science Associates
(ESA), San Francisco and Oakland, CA

- Senior Associate (2011–2014)
- Associate (2007–2010)

Camp, Dresser, and McKee (CDM),
Sacramento

- Intern (2006–2007)

State Water Resources Control Board,
Sacramento

- Intern (2005–2006)

PROFESSIONAL MEMBERSHIPS AND TRAININGS

Association of Environmental
Professionals (2007–present)

UC Davis Extension, Clean Water Act
Section 404: Nationwide and Other
Specialized Permits, 2015

NEPA Basics Training, Summer 2014

AEP Advanced CEQA Training, Spring
2011 and 2014

PROJECT EXPERIENCE

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present). Allison prepared the Land Use and Agricultural Resources sections of this statewide EIR. Horizon prepared a programmatic EIR for CDFA's CalCannabis Cultivation Licensing Program. The key objectives of the program are to support the development and adoption of regulations that establish a framework for implementing CDFA's obligations under the Medicinal and Adult-Use Cannabis Regulation and Safety Act, and to fulfill several other requirements of the Act, such as convening a multi-agency task force. CDFA's obligations under the Act primarily relate to the licensing of medical cannabis cultivation sites, and the implementation of a "track and trace" seed-to-sale program.

Modesto Wastewater Master Plan EIR: City of Modesto (2016–present). Allison is managing the City of Modesto Wastewater Master Plan EIR, a combined project- and program-level EIR that evaluates the City's proposed upgrades to the City's wastewater treatment and collection system facilities planned for implementation over a 25-year period. Allison also authored the aesthetics section.

Modesto Water Master Plan EIR: City of Modesto, Modesto, CA (2015–present). Allison is preparing the Land Use, Agricultural Resources, and Aesthetics sections for the City's Water Master Plan EIR. The EIR will analyze the plan's proposed upgrades to the water supply facilities, including pipelines, water tanks, and groundwater wells, and other associated infrastructure.

Delta Research Station Project: California Department of General Services (2014–2017). Allison was the deputy project manager and analyst for various portions of the Delta Research Station (DRS) EIR/EIS, including the aesthetics section. The DRS will be constructed in the Bay-Delta and involves construction of an estuarine research station and a fish technology center, which will be managed by the California Department of Water Resources and U.S. Fish and Wildlife Service. The purpose of the DRS is to enhance interagency coordination and collaboration by developing a shared research facility focused on Bay-Delta issues. The Final EIR/EIS was certified in May 2017.

**PROFESSIONAL
MEMBERSHIPS AND
TRAININGS (CONT.)**

UC Berkeley Extension Climate
Change, Environmental
Management and Sustainability
Course, Summer 2010

UC Berkeley Extension Landscape
Architecture, Principles and
Elements of Design, 2009

UC Berkeley Extension Landscape
Architecture Program, Introduction
to Landscape Architecture course,
2009

Del Rio Tank and Wells Project Environmental Impact Report: City of Modesto (2015–2016). Allison prepared the aesthetics section for a project involving the construction and operation of water wells, a storage tank, water pipelines, and associated distribution facilities on two project sites.

Infiltration Gallery Testing Project: Stanislaus Regional Water Authority (2017). The Infiltration Gallery Testing Project would allow the Stanislaus Regional Water Authority (SRWA) to conduct research, test, and temporarily operate its existing infiltration gallery within the Tuolumne River near the city of Hughson. This testing is needed to determine the feasibility of SRWA's proposed Surface Water Supply Project. Allison prepared the aesthetics impact evaluation for the Infiltration Gallery Testing Project Initial Study/Mitigated Negative Declaration (IS/MND).

Surface Water Supply Project: Stanislaus Regional Water Authority (2017–present). The Surface Water Supply Project would build off of information obtained through the Infiltration Gallery Testing Project, and would include development of a water treatment plant near the Tuolumne River and infiltration gallery location; construction of pipelines extending from the treatment plant to the cities of Ceres and Turlock, and installation of terminal water storage tanks to store water produced at the water treatment plant. Allison is preparing the aesthetics evaluation for the EIR.

Monterey County Water Resources Agency: Interlake Tunnel and Spillway Modification Project. Monterey and San Luis Obispo Counties (2016–present). Allison is one of the project coordinators and primary author of the aesthetics section of the EIR. The project is comprised of two separate but interrelated components: a water conveyance tunnel from Nacimiento Reservoir to San Antonio Reservoir, and modifications to the existing spillway at the San Antonio Dam. Because the Nacimiento Reservoir fills three times faster than San Antonio Reservoir, the MCWRA proposes to maximize unused storage in San Antonio Reservoir when Nacimiento Reservoir is at capacity and releasing flood spills. Reservoirs would be operated such that water would be conveyed via the tunnel from Nacimiento Reservoir to San Antonio Reservoir.

North Valley Regional Recycled Water Program: City of Modesto/U.S. Bureau of Reclamation (2014–2015). Allison was the aesthetics analyst and Horizon's project coordinator for the North Valley Regional Recycled Water Program EIS/EIR. The project includes construction and operation of a new recycled water pipeline that delivers up to 59,000 AFY of recycled water produced by the cities of Modesto and Turlock to Reclamation's Delta–Mendota Canal. The water would be conveyed to Del Puerto Water District customers or banked in the CVP system for storage during low water demand periods.

Janis Offermann, M.A., RPA

Director

Janis has over 40 years of experience in the fields of archaeology and cultural resources management within California. She meets the U.S. Secretary of the Interior's professional qualifications as an archaeologist and is a Registered Professional Archaeologist. Her career includes 26 years with the State of California: 17 years at the California Department of Transportation and nine years at the Department of Water Resources, where she was the statewide cultural resources manager for the department. Her time with the state has made her proficient in applying the California Environmental Quality Act (CEQA) to cultural resources, and she has been busy assisting clients implement the Assembly Bill 52 legislation, which requires that State agencies consult with Native American tribes on projects. Janis also has extensive experience working with Section 106 of the National Historic Preservation Act and coordinating those efforts with federal agencies, such as the U.S. Army Corp of Engineers, U.S. Bureau of Reclamation, U.S. Bureau of Land Management, U.S. Forest Service, Federal Energy Regulatory Commission, and Federal Highway Administration. On the state level, Janis has worked closely with the State Historic Preservation Office, California Department of Parks and Recreation, and the State Lands Commission. Her expertise includes northern California prehistoric archaeology and Native American consultation.

EDUCATION

M.A., University of California, Davis,
Anthropology, 1981
B.A., Sonoma State College,
Anthropology, 1977

CERTIFICATION

2010/Register of Professional
Archaeologists/ #989109

PROFESSIONAL EXPERIENCE

Horizon Water and Environment

- Cultural Resources Practice Leader (2015–present)

AECOM Corporation, Sacramento, CA

- Senior Cultural Resources Specialist and Cultural Resources Practice Leader California (2010–2015)

California Department of Water Resources, Sacramento, CA

- Senior Environmental Planner (2001–2010)

California Department of Transportation, District 3, Marysville, CA

- Associate Environmental Planner—Archaeology (1988–2001)

PROFESSIONAL EXPERIENCE

PROJECT EXPERIENCE

Cannabis Business Licensing Program Initial Study/Negative Declaration (IS/ND): Bureau of Cannabis Control; Statewide (2016–present). As cultural resources task lead, Janis prepared the cultural resources and tribal cultural resources chapters of the IS/ND. She also assisted the agency with AB 52 consultations, including the drafting of notification letters and tracking Bureau consultations.

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present). As cultural resources task lead, Janis prepared the cultural resources and tribal cultural resources chapters of the program EIR. She also assisted the agency with AB 52 consultations, including the drafting of notification letters, attending meetings with tribes who requested consultation, and tracking Department consultations.

Modesto Water Master Plan Program: City of Modesto; Modesto, CA (2017). The City of Modesto is preparing an EIR to update their Water Master Plan Program. As cultural resources task lead, Janis assisted the City with their AB 52 obligations, conducted archival research, and oversaw the archaeological survey that was conducted of proposed new and upgraded pipeline routes. She also oversaw preparation of the cultural resources technical report, and prepared the cultural resources and tribal cultural resources chapters of the EIR.

Modesto Wastewater Management Program: City of Modesto; Modesto, CA (2017). The City of Modesto is preparing an EIR to update their Wastewater Management Program. As cultural resources task lead, Janis assisted the City with their AB 52 obligations, conducted archival research, and oversaw the archaeological survey that was conducted of proposed new pipeline routes. She also oversaw preparation of the cultural resources technical report and prepared the cultural resources and tribal cultural resources chapters of the EIR.

CONT.

California Department of
Transportation, Sacramento, CA

- Archaeologist (1984–1988)

Private Consultants, Sonoma State
College (now Sonoma State
University), California State
University, Sacramento, CA

- Archaeologist (1974–1984)

TECHNICAL TRAINING

University of California, Davis,
Extension Management
Development Program, 2010
Consultation and Protection of Native
American Sacred Sites, 2010
Environmental Permitting, 2009
Advanced NEPA/CEQA Refresher,
2009
DWR Management Development
Program, 2007
Working Effectively with Tribal
Governments, 2007
Environmental Justice Workshop,
2004
NEPA/CEQA, 2003
Adult CPR/First Aid, continuous since
1984
PRE-2001
Section 106: Agreement Documents
Section 106: An Introduction

PROFESSIONAL AFFILIATIONS

Society for California Archaeology,
1976–2016
Society for American Archaeology,
1976–1998, 2010–2016

Surface Supply Water Project: Stanislaus Regional Water Authority: Stanislaus County, CA (2016–present). This two-part project involves preparation of a Mitigated Negative Declaration (MND) for the testing of an existing infiltration system in the Tuolumne River, and an Environmental Impact Report (EIR) for the construction of a new water treatment facility and water transfer pipelines from the river to Ceres and Turlock in Stanislaus County. As the cultural resources task lead, Janis participated in and oversaw the archaeological survey for the project, prepared the technical report, assisted with AB52 consultations, and authored the cultural resources and tribal cultural resources portions of the MND and EIR.

California Conservation Corps Placer Center Remodel IS/MND: California Department of General Services; Placer County, CA (2015–present). Janis is the cultural resources task lead for this project, which includes a historic architectural evaluation of the CCC facilities for eligibility for listing on the California Register of Historical Resources and the National Register of Historic Places, and an archaeological survey of the project site. Janis oversaw preparation of a cultural resources report in support of the project's CEQA environmental document. In addition to report preparation, tasks involved conducting a record search at the California Historical Resources Information Center and the Native American Heritage Commission; contacting local Native Americans who might have information about the project location and assisting DGS with AB52 requirements; and preparation of an Unanticipated Finds Plan. She also conducted an Extended Phase I archaeological investigation at the project site.

Hallwood Side Channel and Floodplain Restoration Project: Cramer Fish Sciences; Yuba County, CA (2016–present). The Hallwood Side Channel and Floodplain Restoration Project is a restoration project along the Yuba River that is being sponsored by the US Fish and Wildlife Service. As project manager for this project, Janis participated in the field survey, prepared the technical report, coordinated with Native American tribes, and oversaw the evaluation of the historic-era dredge tailings in the project area for National Register of Historic Places eligibility. She also drafted SHPO consultation letter for the US Fish and Wildlife Service, prepared a Finding of Effect document, and is currently drafting a Memorandum of Agreement to document mitigation measures to be implemented due to the adverse effect of the project on historic properties within the project area.

San Joaquin River Restoration Project Salmon Conservation and Research Facility Project: California Department of General Services; Fresno County, CA (2012–present). Janis is cultural resources specialist and was a project manager for this project while at AECOM. Janis coordinated the cultural resources field studies, reviewed the cultural resources reports prepared, and authored the cultural resources section of Mitigated Negative Declaration for the hatchery portion of this project. She also prepared the cultural resources chapter for the Environmental Impact Report for the re-introduction of salmon into the San Joaquin River, which is also a component of this project.

Laura Prickett, MCP, AICP, CPESC, QSD Senior Associate

Laura Prickett is a Senior Associate with Horizon Water and Environment. She has 20 years of experience as an environmental planner, project manager, with a specialization in stormwater control for development projects. Laura has extensive municipal stormwater permit experience and also manages CEQA environmental review and public outreach for transportation projects. Her stormwater experience includes managing the preparation of technical guidance manuals for implementing stormwater treatment requirements in development projects, and supporting the negotiation of municipal stormwater permit requirements.

EDUCATION

Master of Community Planning,
University of Rhode Island
(Environmental concentration), 1995

B.A., Boston University, International
Relations, 1984

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Senior Associate/Stormwater
Practice Leader (2015–present)

Parsons, San Francisco, CA

- Environmental Group Manager
(2015)
- Project Manager (2013–2014)

EOA, Inc., Oakland, CA

- Senior Planner III/Project Manager
(2004–2013)
- Senior Planner II (2003)

Parsons, San Francisco, CA

- Project Manager (2002–2003)
- Principal Planner (1999–2001)
- Senior Planner (1998)

City of Albany, CA

- Assistant Planner (1997–1998)

AECOM, Boston, MA

- Associate Planner (1995–1997)

CERTIFICATES/MEMBERSHIPS

American Institute of Certified
Planners (AICP) Certificate #013813

Certified Professional in Erosion and
Sediment Control (CPESC) Certificate
#7337

Qualified Storm Water Pollution
Prevention Plan Developer/
Practitioner (QSD/QSP) #24166

PROJECT EXPERIENCE

Alameda Countywide Clean Water Program, Municipal Regional Stormwater Permit Technical Services; Alameda County, CA. Laura is managing a contract to support 17 agencies within Alameda County in implementing stormwater requirements in development projects, and green infrastructure plans that demonstrate how the implementation of landscape-based stormwater treatment facilities will reduce pollutant loads. She served as project manager and primary author of the Countywide Program's C.3 Technical Guidance Manual for implementing project-level stormwater controls.

Port of Oakland, Oakland Army Base Development / Green Street Project; Oakland, CA. Related to the development of final design and preparation of construction bid documents for the Support Yard portion of the Outer Harbor Intermodal Terminal project, Laura provided quality control review for stormwater treatment measure design plans, confirming compliance with MRP design criteria as required by the project's environmental document for green street development.

San Mateo Countywide Water Pollution Prevention Program, Stormwater Permit Compliance Services; San Mateo County, CA. Laura provided permit compliance support to the Countywide Program and its 22-member agencies to implement stormwater requirements in development projects, serving as task manager and primary author of the Countywide Programs C.3 Technical Guidance Manual for implementing project-level stormwater controls.

Alameda County General Services Agency, Stormwater Treatment Facility Maintenance Plans; Alameda County, CA. Laura is managing the preparation of maintenance plans for stormwater treatment facilities installed at three County buildings managed by the General Services Agency.

Bransten Road Green Street Project, Bay Area Stormwater Management Agencies Association; San Carlos, CA. Laura provided oversight for USEPA-funded, multiple-benefit, green street pilot project to address PCBs and other contaminants, and manage stormwater flows. Managed design consultants; reviewed project design; managed public involvement.

**CERTIFICATES/MEMBERSHIPS
(CONT.)**

California Stormwater Quality
Association (CASQA) – member
since 2003

American Planning Association (APA) –
member since 1995

Santa Clara Valley Urban Runoff Pollution Prevention Program, Program Management Services; Santa Clara County, CA. Laura co-authored the Urban Runoff Program's 2010 update of its C.3 Handbook and represented the Program on the Santa Clara Basin Watershed Management Initiative's Land Use Subgroup. Laura chaired the Subgroup and initiated its award-winning collaboration with the Going Native Garden Tour to incorporate information on low impact development in the training of docents, on the tour's website, and at gardens included in the tour. Laura provided training on low impact development to Santa Clara County Master Gardeners and through a 2013 Gardening with Natives community outreach program sponsored by the California Native Plant Society.

Bay Area Stormwater Management Agencies Association, Clean Watersheds for a Clean Bay – Bransten Road Green Street Project, San Carlos, CA. Laura provided oversight for USEPA-funded, multiple-benefit, green street pilot project to address PCBs and other contaminants, and manage stormwater flows. Managed design consultants; reviewed project design; managed schedule, budget, public involvement. Prepared progress reports.

University of Texas-Austin and the Texas General Land Office, Guidance Manual for Sustainable Stormwater Drainage on the Texas Coast; Austin, TX. Laura provided assistance to the University of Texas at Austin's Center for Research in Water Resources (CRWR) in completing select tasks for the Texas General Land Office. Parsons is responsible for facilitating effective implementation of water quality best management practices (BMP) for roadways and urban development through the provision of technical guidance, training stakeholders in the use of this guidance, planning assistance, and implementation assistance. Laura developed training authored sections of the manual focused on green infrastructure for small communities.

Storm Water Management Plan, Island of Guam, Guam Department of Public Works. As a U.S. Territory, the Island of Guam is required to develop and implement a Storm Water Management Plan (SWMP) in compliance with Phase II National Pollutant Discharge Elimination System (NPDES) requirements for small municipal separate storm sewer systems (small MS4s). Laura conducted quality control review of Guam's island-wide SWMP, which identifies the actions to be conducted in compliance with the requirements for the six MS4 program elements identified in the USEPA's Stormwater Phase II Rule: public education and outreach, public participation/involvement, illicit discharge detection and elimination, construction site runoff control, post-construction runoff control, and pollution prevention/good housekeeping.

Julie D. Allison Senior Associate

Julie Allison is a senior project manager that supports the planning, permitting, public outreach, and compliance management of projects throughout California with an emphasis on marine oil terminals, electric transmission lines, natural gas pipelines, substations, and other energy and infrastructure projects. She is proficient in preparing environmental documents pursuant to the California Environmental Quality Act (CEQA), including Environmental Impact Reports (EIRs), Mitigated Negative Declarations (MND), and Environmental Assessments (EAs). Unique among her project work is her experience supporting clients through the California Public Utilities Commission's (CPUC) Permit to Construct and Certificate of Public Convenience and Necessity processes. Julie brings an exceptional level of organization and communication skills to ensure complete and efficient project coordination and management. She has extensive experience with editorial processing, technical document review, and data management for the organization of large environmental documents. Prior to joining Horizon, Julie was a project manager at TRC Solutions, Inc., managing complex permitting and environmental compliance projects, researching and writing various environmental documents related to sensitive plant and wildlife species, water resources, and restoration.

EDUCATION

B.S., California Polytechnic State
University San Luis Obispo, Ecology
and Systematic Biology, 2007

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Senior Associate (2016–present)

TRC Solutions Inc., San Francisco, CA

- Project Manager/Senior Planner (2011–2016)
- Biologist/Planner (2008–2011)
- Research Assistant (2007–2008)

Tenera Environmental, San Luis
Obispo, CA

- Laboratory Analyst (2006–2007)

TECHNICAL TRAININGS

CLE International CEQA Update, 2014

Department of Fish and Game CNDDDB
& BIOS Training, 2009

Rare Pond Survey Techniques
Workshop, Laguna de Santa Rosa
Foundation, 2008

Federal Energy Regulatory
Commission Compliance and
Regulatory Trainings, 2008

CPR Certified

PROJECT EXPERIENCE

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present).

Julie provides CEQA strategy guidance, project management support, and serves as one of the primary authors for multiple sections of this statewide EIR. Horizon is working to prepare a programmatic EIR for the CDFA's CalCannabis Cultivation Licensing Program. The key objectives of the program are to support the development and adoption of regulations that establish a framework for implementing CDFA's obligations under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (the Act), and to fulfill several other requirements of the Act, such as convening a multi-agency task force. CDFA's obligations under the Act primarily relate to the licensing of medical cannabis cultivation sites, and the implementation of a "track and trace" seed-to-sale program. A key challenge for the team is ensuring the programmatic EIR encompasses a comprehensive statewide evaluation of existing and potential future medical cannabis cultivation methods and the development of appropriate management measures to ensure that medical cannabis cultivation does not result in significant adverse environmental impacts.

Modesto Wastewater Master Plan EIR: City of Modesto; Modesto, CA (2016–present).

Julie prepared the land use analysis of the City of Modesto Wastewater Master Plan EIR, a combined project- and program-level EIR that evaluates the City's proposed upgrades to the City's wastewater treatment and collection system facilities planned for implementation over a 25-year period.

950-974 Market Street MND: Group I; San Francisco, CA (2013–2016). A lead planner and CEQA author for the 950-974 Market Street MND, the proposed project would demolish five existing buildings and develop most of the triangular Market-Turk-Taylor block of San Francisco with approximately 446,000 sq. ft. of mixed-uses in two towers including arts, education, residential, hotel, and retail space. The site is a key location in the Mid-Market area, where the City is pursuing policies to activate the corridor with new arts uses, other mixed uses, and improve the pedestrian conditions, upgrade streetscape, reduce the impact of vehicle traffic. The key issues for environmental review will be historic resources, transportation and circulation, land use planning.

Tesoro Avon Marine Oil Terminal Lease Consideration Project: California State Lands Commission; Contra Costa County, CA (2012–2015). Served as an Assistant Project Manager, Lead Editor, and CEQA Author for the proposed project, which involved the lease renewal for the existing Tesoro Avon Marine Oil Terminal and the modernization on the terminal for compliance with current Marine Oil Terminal Engineering Maintenance Standards (MOTEMS). Researched and prepared a public review draft and final EIR, assessing project-related environmental impacts associated with the anticipated MOTEMS mandated facility upgrades and continued operation of the existing Avon Marine Oil Terminal facility. Drafted several sections of the EIR, including the project description and alternatives analysis. Attended project meetings, participated in project site visitations, and communicated directly with the proponent and CSLC staff. Assisted with the management of an approximately 20-person team, including three subcontractors. Lead quality assessment and quality control program reviewing all portions of the document. Key environmental resources evaluated include marine terminal operations and safety/hazards analyses, aquatic and terrestrial biological resources, water resources, land use, noise impacts, land and marine transportation issues, air quality and GHG emissions associated with the project.

Fulton-Fitch Reconstruction Project: Pacific Gas and Electric Company; Sonoma County, CA (2012–2016). Assisted with the preparation of a PEA for the proposed project, involving pole replacement along an approximately 8.5-mile span and the installation of new conductor along a 10.1-mile span for the existing 60 kV Fulton Fitch Power Line located between the town of Windsor and PG&E's Fulton Substation in eastern Sonoma County. Drafted several sections of the PEA, including the Project Description, Agriculture and Forestry, Recreation, and Land Use Sections. Supported management with the preparation of other permitting applications, resource agency correspondence, and other related documents, including Cultural Resource Assessment, Paleontological Resources Assessment, and Wetland Delineation. Lead quality assessment and quality control program reviewing all portions of environmental permitting documents, and facilitates revisions from the client and resource agency staff.

Debra A. Z. Lilly, B.A.

Senior Associate

Debra Lilly has 17 years of experience as a project manager for environmental studies to satisfy the requirements of the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). She has worked with federal, state, regional, and local agencies; special districts; and private developers. Her areas of expertise include environmental impacts of programs, regulations, and regulatory programs; site selection and environmental review for school projects; and a broad array of infrastructure, development, transportation, and resource-related projects. Debra has managed and coordinated a wide range of projects, from quick-turnaround IS/MNDs to complex, statewide EIRs involving close coordination among the client, project team, subconsultants, and agencies in multiple locations. She maintains careful control of schedule, budget, subconsultants, and client communications to ensure project success. Debra has taught in-house courses in CEQA and technical writing/editing for environmental professionals. She also has 27 years of experience as a technical writer and editor for clients in the environmental, scientific, medical, legal, and publishing fields.

EDUCATION

B.A., English, Kenyon College, 1981

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Project Manager (2016–present)

GrassRoots Environmental,
Sacramento, CA

- Principal, Environmental Manager (2011–2016)

AECOM, Sacramento, CA

- Senior Associate (2008–2011)

EDAW, Sacramento, CA

- Associate (2006–2008)
- Project Manager (2003–2006)
- Project Coordinator (2001–2003)

Jones & Stokes, Sacramento, CA

- Environmental Analyst (1999–2001)
- Publication Specialist (1995–1999)
- Technical Editor (1989–1991, 1994–1995)

PROFESSIONAL MEMBERSHIPS

Association of Environmental Professionals, Superior California Chapter (2002–present)

Coalition for Affordable School Housing (2003–2010)

PROJECT EXPERIENCE

Colusa Triple Crown Cannabis Research and Development Business Park Project IS/MND: City of Colusa; Colusa County, CA (2018–present).

The City of Colusa is considering approval of the construction and operation of a Cannabis Research and Development Business Park. The project would encompass approximately 1,420,000 square feet on 84 acres and would include energy-efficient greenhouses for cannabis cultivation, plant processing spaces, facilities for creating infused products, a testing laboratory, research/ and development and training centers, distribution center, and corporate offices. Debra is managing preparation of an IS/MND for the project tiered from the CDFA CalCannabis PEIR and referencing the Bureau of Cannabis Control's IS/ND.

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present).

Debra is providing coordination, editorial review, and quality control for the EIR. She also assisted with coordination at public meetings throughout the state. She drafted responses to public comments for the Final EIR. This project is on a tight timeline to complete CEQA requirements before the regulatory program goes into effect in January 2018.

Cannabis Business Licensing Program Initial Study/Negative Declaration (IS/ND): Bureau of Cannabis Control; Statewide (2016–present).

Debra is providing coordination and editorial review for the IS/ND. She also assisted with coordination at public meetings throughout the state. This project is on a tight timeline to complete CEQA requirements before the regulatory program goes into effect in January 2018.

Kern River Flow and Municipal Use Program EIR: City of Bakersfield (2016–2017).

Debra coordinated preparation and distribution of the Recirculated Draft and Final EIR for the City's river flow increase program. The project involved a complex history of water rights, groundwater use, and municipal water aspects and was overturned based on a challenge to the adequacy of the project description.

TECHNICAL AND MANAGEMENT TRAINING

Coursework in the Land Use and Natural Resources certificate program, UC Davis Extension (1994–present)

PRESENTATIONS

Lilly, Debra, Jenifer King, and John Hunter, Ph.D. 2011. *The Evolution of Agricultural Conversion Analysis: Mechanisms of Development and Habitat Restoration Effects, Thresholds, and Viable Mitigation Options*. Presentation at the California Association of Environmental Professionals Annual Conference, March 9, 2011.

Lilly, Debra, Steven Looper, and Michael Rainforth. 2005. *CEQA and School Projects*. Presentation at California Association of Environmental Professionals Annual Conference, Sacramento, CA.

PUBLICATIONS

Phillips, Heather, Debra Lilly, Gary Jakobs, and Honey Walters. 2009 (February). Part 7, “Climate Change Analysis Under CEQA.” In California’s Coalition for Affordable School Housing, *Environmental Mitigation Handbook*.

Wissler Adam, Terri, & Janet Ilse; John Dacey & Brian Bergman; Lisa Mangione & Debra Lilly; and Marilyn Cleveland. 2009 (February). Part 8, “Addressing Mitigation in Perpetuity” – Section B, Habitat Mitigation Issues. In California’s Coalition for Affordable School Housing, *Environmental Mitigation Handbook*.

Del Rio Tank and Wells Project EIR: City of Modesto; Modesto, CA (2016–2017). Debra managed preparation of the City of Modesto’s Del Rio Tank and Wells Project EIR. This project was evaluated at a program level in the Water System Engineer’s Report Program EIR, which Horizon prepared in 2010. The EIR evaluated potential impacts of constructing and operating water wells, a storage tank, and associated distribution facilities. Completion of the EIR cleared the way for the City to address water pressure and fire flow insufficiencies for the Del Rio community.

Small Erosion Repair Program (SERP) Program EIR: California Department of Water Resources, Division of Flood Management (2009–2011). Debra managed preparation of a program EIR to satisfy CEQA requirements, a programmatic biological assessment under the federal Endangered Species Act, and a Programmatic Agreement to satisfy the requirements of Section 106 of the National Historic Preservation Act for the SERP. The program, as defined in the SERP Manual also prepared by the project team, was intended to allow for streamlined environmental clearances to allow expedited implementation of small erosion repairs within the Sacramento River levee system maintained by DWR.

Water Master Plan EIR: City of Modesto; Modesto, CA (2016–present). Debra is assisting with coordination, editorial review, and quality control for the Draft EIR.

Wastewater Master Plan EIR: City of Modesto; Modesto, (2016–present). Debra is assisting with coordination, editorial review, and quality control for the Draft EIR.

On-Site Wastewater Treatment System Regulations Program EIR: State Water Resources Control Board (2007–2008). Debra managed preparation of a complex program EIR to support the development of controversial statewide regulations for domestic septic systems being prepared by the State Water Resources Control Board, with input from regional water quality control boards, U.S. Environmental Protection Agency, and such important stakeholders as county health departments and the California On-site Wastewater Association. She assisted in developing the approach to the environmental analysis and coordinated the analysis of environmental issues, including hydrology and water quality, biological resources, geology and soils, and land use and growth trends. Following extensive public review and comment, the regulations were subsequently revised and a new environmental document was required.

McClellan Air Force Base Draft Final Reuse Plan Supplemental EIR: County of Sacramento; Sacramento, CA (2001–2002). As assistant project manager, Debra coordinated a multi-office team of technical and production staff for a supplemental EIR on the reuse plan. She was responsible for writing the project description and the public services, hazardous materials (groundwater and soil contamination), energy, cumulative impacts, and alternatives sections. She also coordinated subconsultant’s preparation of an EA to be submitted to the FAA for first-time approval of an airport layout plan for the McClellan Park Airport.

Patrick Donaldson, M.S.

Associate

Patrick Donaldson is an environmental planner who specializes in water use and recycling, water rights, and energy infrastructure. Patrick conducts environmental impact analyses for California Environmental Quality Act (CEQA) compliance documents, including evaluating impacts related to agriculture and forestry resources, land use and planning, hydrology and water quality, utilities and service systems, public services, hazards and hazardous materials, and geology, soils and seismicity. Patrick also coordinates the CEQA public outreach process and prepares permit applications for the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Boards (RWQCBs), California Department of Fish and Wildlife (CDFW), and the State Lands Commission. Patrick is knowledgeable of the State Water Resources Control Board's (SWRCB) water rights permitting process and has particular experience evaluating water rights issues on the Russian River. Patrick also has worked on several electric transmission infrastructure projects for the California Public Utilities Commission (CPUC) and has gained expertise in this area. Prior to joining Horizon, Patrick completed a Master of Science program in environmental management at the University of San Francisco (USF). For his Master's Project at USF, Patrick assessed the feasibility of potable water recycling and water reuse in San Francisco from the perspective of sustainability.

EDUCATION

M.S., University of San Francisco,
Environmental Management, 2012
B.A., McGill University, Environment
and Development, 2008

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Associate (2016-present)
- Analyst (2013–2016)

Rails-to-Trails Conservancy, San
Francisco, CA

- Trails and Greenways Intern
(2012-2013)

BlueGreen Alliance, San Francisco, CA

- State and Local Field Intern (2012)

TECHNICAL TRAINING

Project Planning for Permit
Integration, Spring 2013, UC Davis
Extension

Advanced CEQA Workshop, Spring
2013, Association of Environmental
Professionals

CEQA Basics Workshop, Fall 2012,
Association of Environmental
Professionals

PROJECT EXPERIENCE

Cannabis Business Licensing Program Initial Study/Negative Declaration (IS/ND): Bureau of Cannabis Control; Statewide (2016–present). Patrick supported development of the IS/MND for the Commercial Cannabis Business Licensing Program. Patrick prepared several technical sections of the IS/MND, including hazards and hazardous materials, public services, and utilities and service systems. Patrick's analysis considered such impacts as potential for increased crime associated with cannabis dispensaries. Patrick also prepared a detailed summary of the existing local (i.e., county and city) regulations governing commercial cannabis activities in California.

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present). Patrick prepared several technical sections of the CalCannabis Cultivation Licensing Draft EIR, including hazards and hazardous materials, public services, and utilities and service systems impact evaluations. The CalCannabis Cultivation Licensing program would provide a regulatory framework for cultivation of cannabis, in accordance with California voter initiatives to allow medical and recreational cannabis use. Patrick's analysis used available literature on cannabis cultivation to evaluate impacts associated with lawful cultivation, including those related to pesticide storage and handling, fire risk from indoor cultivation methods, and hazards to firefighters from indoor operations.

Wastewater Master Plan: City of Modesto; Modesto, CA (2017–present). The City of Modesto has developed a new wastewater master plan that identifies needed improvements to its wastewater collection and treatment system. Patrick prepared the hazards and hazardous materials, hydrology and water quality, and transportation and traffic impact evaluations for the program EIR. Patrick’s analysis considered the potential adverse effects of constructing and operating the proposed improvements (e.g., pipelines, pump stations, etc.) pursuant to the CEQA Guidelines Appendix G significance criteria. Patrick also conducted the cumulative impacts analysis considering the potential impacts of the program in combination with other past, present, and reasonably foreseeable projects in the area.

Water Master Plan: City of Modesto; Modesto, CA (2017–present). Similar to the wastewater master plan, the City of Modesto has prepared a master plan for its water system that identifies needed improvements in its service area, including new water pipelines, storage tanks, and groundwater wells. Patrick evaluated the potential impacts of developing the water master plan related to hazards and hazardous materials, hydrology and water quality, and transportation and traffic. Patrick also conducted the cumulative impacts analysis for the program EIR.

Infiltration Gallery Testing Project: Stanislaus Regional Water Authority (2017). The Infiltration Gallery Testing Project would allow the Stanislaus Regional Water Authority (SRWA) to conduct research, test, and temporarily operate its existing infiltration gallery within the Tuolumne River near the city of Hughson. This testing is needed to determine the feasibility of SRWA’s proposed Surface Water Supply Project. Patrick prepared the hydrology and water quality, public services, and utilities and service systems impact evaluations for the Infiltration Gallery Testing Project Initial Study/Mitigated Negative Declaration (IS/MND).

Surface Water Supply Project: Stanislaus Regional Water Authority (2017–present). The Surface Water Supply Project would include development of a water treatment plant near the Tuolumne River and infiltration gallery location; construction of pipelines extending from the treatment plant to the cities of Ceres and Turlock, and installation of terminal water storage tanks to store water produced at the water treatment plant. Patrick evaluated impacts to hydrology and water quality, public services, and utilities and service systems for the project EIR. This included conducting a groundwater balance analysis that modeled the net change in groundwater use by SRWA that would occur from the project based on historical data.

Del Rio Tank and Wells Project: City of Modesto; Stanislaus County, CA (2015–present). The Del Rio Tank and Wells Project is the City of Modesto’s plan to install two 1,000 gallons per minute groundwater wells, as well as a water storage tank and associated facilities, to improve the community of Del Rio’s water system. Patrick evaluated the potential impact of the project on groundwater. Patrick’s analysis considered potential adverse effects on nearby wells from operation of the proposed wells, as well as cumulative effects on groundwater level and aquifer storage volume in the Modesto Subbasin as a whole.

Johnnie Chamberlin, Ph.D. Analyst

Johnnie Chamberlin, Ph.D., has more than 10 years of experience working in environmental science and research. At Horizon, Johnnie is often the technical lead for analyzing CEQA topics, including air quality, greenhouse gas emissions, noise, hydrology, and water quality. Johnnie has an environmental engineering background and is skilled at quantitative analysis, modeling, and statistical evaluation. He also provides GIS support for a wide range of project types.

EDUCATION

PhD, Environmental Dynamics,
Graduate Certificate, Sustainability,
University of Arkansas, 2016

M.S., Duke University, Civil and
Environmental Engineering, 2005

B.A., University of California, Cognitive
Science, 2002

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Analyst (2016–present)

Project Drawdown, Sausalito, CA

- Research Fellow (2016)

Center for Toxicology and
Environmental Health, North Little
Rock, AR

- Environmental Scientist II (2010–
2011)

Audubon Arkansas, Little Rock, AR

- Director / Assistant Director of
Conservation (2005–2009)

CERTIFICATIONS

Graduate Certificate in Sustainability,
University of Arkansas, 2014

River Morphology and Applied Fluvial
Geomorphology, Wildland
Hydrology

AWARDS

2008, Audubon Team Award for GIS
Work

PROJECT EXPERIENCE

Cannabis Business Licensing Program Initial Study/Negative Declaration (IS/ND): Bureau of Cannabis Control; Statewide (2016–present). This statewide project includes an extensive initial study to determine potential impacts of the Cannabis Business Licensing Program, being developed by the California Department of Consumer Affairs. Johnnie is assisting the preparation of hazards, noise, and air quality sections of the IS/ND.

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present). Horizon is working to prepare a programmatic EIR for the CDFA's CalCannabis Cannabis Cultivation Licensing Program. The key objectives of the program are to support the development and adoption of regulations that establish a framework for implementing CDFA's obligations under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (the Act), and to fulfill several other requirements of the Act, such as convening a multi-agency task force. CDFA's obligations under the Act primarily relate to the licensing of medical cannabis cultivation sites, and the implementation of a track-and-trace seed-to-sale program. Johnnie worked on cataloging comments received during the public scoping period for this project and on responses to comments.

Modesto Water Master Plan EIR: City of Modesto; Modesto, CA (2017–present). Johnnie is assisting the preparation of air quality, greenhouse gases, and noise sections of a program EIR for the City's Water Master Plan, which will analyze the plan's proposed water supply facilities, including pipelines, water tanks, and groundwater wells, at program- and, where appropriate, project-level of detail.

Modesto Wastewater Master Plan EIR: City of Modesto; Modesto, CA (2017–present). Johnnie is assisting the preparation of the air quality, greenhouse gases, and noise sections of a program EIR for the City's Wastewater Master Plan, which will analyze the plan's proposed wastewater treatment and collection facilities, including pipelines, at program- and, where appropriate, project-level of detail.

CEQA Compliance for California Highway Patrol Facility Replacement Program: California Department of General Services (2017–present). Horizon is working with the California Department of General Services and California Highway Patrol (CHP) in providing CEQA support for the CHP Facilities Replacement Program, which is replacing 10 outdated CHP Area Offices with new facilities to meet CHP’s expanded service requirements and staffing increases, while complying with seismic and Americans with Disabilities Act requirements. Johnnie has assisted with the preparation of air quality, greenhouse gases, and noise sections for replacement facilities that will be built in Ventura, El Centro, and San Bernardino.

CEQA Compliance for Estrella: California Public Utilities Commission (2017–present). Johnnie is performing GIS, air quality, greenhouse gases, and noise analyses in support of the California Public Utilities Commission’s (CPUC’s) environmental review of the Estrella Transmission Project. This project would involve construction of new electrical transmission and repowering of existing transmission facilities in San Luis Obispo County to support voltage regulation.

Sierra Linda Mutual Water Company Consolidation, Metering and Water Treatment Project: California Department of General Services (2016–present). SLMWC is proposing to construct a water treatment plant and other drinking water system improvements. Johnnie is analyzing potential impacts to air quality, greenhouse gas emissions, and noise resources as part of a mitigated negative declaration document for this project.

Stream Maintenance Guidelines: Santa Clara Valley Water District; Santa Clara County, CA (2016–present). SCVWD is developing new stream maintenance guidelines for 10 selected creeks throughout Santa Clara County. The maintenance guidelines will provide a quantitative approach for identifying the need for maintenance actions, tailored specifically for each creek facility based on review of background information, field surveying, and hydraulic analysis. Johnnie is developing stream reach maintenance guidelines based on hydraulic, geomorphic, and vegetation analysis for 10 SCVWD creeks and flood control channels. The analysis will help SCVWD prioritize their maintenance needs and also to satisfy permitting requirements by the SF Bay RWQCB.

Lower Penitencia Creek Improvements CEQA Project: Santa Clara Valley Water District; Santa Clara County, CA (2016–present). The District is planning capital improvements to Lower Penitencia Creek, constructing channel improvements to provide additional flood protection. Project components include flood plains, relocated and/or raised levees, floodwalls on levees, bridge modifications, improved channel access roads, and sediment/vegetation removal. Johnnie is conducting the noise analysis for this project.

Brian Piontek, M.S.

Analyst

Brian Piontek is an environmental scientist specializing in watershed management, water quality, wetland restoration, and permitting. Brian is experienced with field sampling, data collection, monitoring, and instrumentation for soils, water quality, and biological resources. He has provided environmental monitoring for construction compliance, and conducted stormwater monitoring, Phase I and II Environmental Site Assessments, and topographical surveying. Brian has three years of experience conducting environmental impact analyses for CEQA compliance documents and preparing regulatory permit applications. Brian completed a master of science program in environmental management at the University of San Francisco. For his master's project at USF, Brian assessed soil characteristics and their effects on vegetative growth throughout a restoration site at Redwood Creek/Muir Beach in the Golden Gate National Recreation Area. Prior to joining Horizon, Brian worked for the East Bay Regional Park District, where his duties included overseeing daily park operations, patrolling trails and beaches, responding to emergencies, and supervising habitat restoration and invasive species removal projects. He has also worked as a scientific aide for the San Francisco Bay Regional Water Quality Control Board, managing the California Wetland Portable database, reviewing CWA Section 401 permit applications, and commenting on CEQA documents pertaining to water quality.

EDUCATION

M.S., University of San Francisco,
Environmental Management, 2015

B.S., California State University East
Bay, Environmental Science, 2011

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Environmental Analyst (2014–present)

BASELINE Environmental Consulting

- Environmental Scientist (2013–2014)

SF Bay Regional Water Quality Control
Board

- Scientific Aide (2012–2013)

East Bay Regional Parks District

- Park Ranger II (2010–2013)

Robery & Sons Construction

- Project Manager (2004–2009)

SPECIALIZED TRAINING

CEQA Compliance Training. University
of California, Davis, Extension.
Instructors: Terry Rivasplata and
Maggie Townsley. 2015

California Red-Legged Frog Workshop.
Alameda County Resources
Conservation District. Instructors:
Trish Tatarian and Greg Tatarian.
2015

PROJECT EXPERIENCE

North Valley Regional Recycled Water Program EIR/EIS: Del Puerto Water District and Cities of Modesto and Turlock; Stanislaus County, CA (2014–2015). The North Valley Regional Recycled Water Program (NVRWP) proposes to construct infrastructure to deliver recycled water produced by the cities of Modesto and Turlock to agricultural lands and wildlife refuges on the west side of the San Joaquin River. Brian assisted with wetland delineations for each alternative, and supporting CEQA/NEPA compliance documentation.

Infiltration Gallery/Surface Water Supply Project: Stanislaus Regional Water Authority; Stanislaus County, CA (2016–present). The Stanislaus Regional Water Authority (SRWA), a joint powers authority representing the Turlock Irrigation District and the Cities of Ceres and Turlock (Cities), is proposing to develop water supply infrastructure to deliver potable water to the Cities. The project redirects surface water supplies from the Tuolumne River via an existing infiltration gallery to a water treatment facility, then to the Cities through 12.3 miles of water transmission mains. Brian is authoring EIR analyses for geology, soils, and seismicity and hazards and hazardous materials. He is also assisting with field technical studies to support CEQA evaluations.

California Conservation Corps, Placer Center Kitchen/Dining Hall/Multipurpose Room and Dormitory Replacement, CEQA Compliance: California Department of General Services (2015–present). Horizon is preparing an IS/MND for the replacement of California Conservation Corps facilities in Placer County. The new facilities will be LEED certified Silver or better and comply with seismic safety standards and Americans with Disabilities Act requirements. Brian is the technical writer for several environmental impact analyses and is providing support for document and figure preparation.

SPECIALIZED TRAINING (CONT.)

Western Burrowing Owl Workshop.
Elkhorn Slough Coastal Training.
Instructors: Lynne Trulio and Greg
Hayes. 2015

OSHA Hazardous Waste Operations
and Emergency Response 40-Hour
(HAZWOPER) Training. Cal-OSHA.
2013–2015

Jurisdictional Delineation of Waters of
the U.S. University of San Francisco.
2013

Certificate in Cartography and GIS.
California State University East Bay.
2011

PRESENTATIONS

McCrory and Piontek. 2014. Ecological
Constraints of Willow Growth at a
Restored Riparian Corridor. Oral
presentation. Society for Ecological
Restoration of California (SERCAL)
conference.

Delta Research Station: Site Planning, EIR/EIS, and Technical Studies: California Department of General Services (2014–present). The Delta Research Station (DRS) is a proposed science and research center that would provide improved and additional facilities for the Interagency Ecological Program (IEP). Brian is assisting with site evaluations, wetland delineations, and comparative environmental analysis between potential sites. Brian will support the CEQA/NEPA compliance process throughout the duration of the project.

California Highway Patrol Facility Replacement Program, CEQA Compliance: California Department of General Services; Statewide (2014–present). The California Highway Patrol (CHP) and the California Department of General Services are evaluating the potential upgrade and replacement of up to 20 CHP field offices statewide. Horizon is supporting the client with environmental studies, assessments and permitting, and environmental documents required by CEQA. Brian is preparing environmental impact analyses for hydrology and water quality; geology, soils, and seismicity; mineral resources; public services and utilities; and recreation. Brian will continue to aid in the CEQA compliance and permitting processes as the program advances, including pre-construction field surveys for nesting birds and other sensitive biological resources.

Contra Costa Channel Maintenance Program: Contra Costa County Public Works, Contra Costa County, CA (2015–present). The Channel Maintenance Program (CMP) serves as the primary planning and guidance document for Contra Costa County. The CMP describes routine maintenance activities conducted at the county's flood control channels and other facilities. The CMP also describes natural resources at the maintained facilities and provides guidance and practices to avoid and minimize potential environmental impacts during maintenance. Brian is responsible for field data collection, synthesis, and presentation of the physical, geomorphological, hydrological, and biological conditions of the channels included within the CMP.

Stream Maintenance Guidelines: Santa Clara Valley Water District; Santa Clara County, CA (2014–present). SCVWD is developing new stream maintenance guidelines for 10 selected creeks throughout Santa Clara County. The maintenance guidelines will provide a quantitative approach for identifying the need for maintenance actions, tailored specifically for each creek facility based on review of background information, field surveying, and hydraulic analysis. Brian is involved with: processing and synthesizing existing background information; field data collection of biological and geomorphologic conditions; cross-sectional field surveys; and the organization of the final maintenance guidelines.

Oakville Cross Road Bridge Replacement Project, CEQA Compliance, and Permitting: Napa County Public Works Department; Napa County, CA (2015–present). This project entails replacing the Oakville Cross Road Bridge over the Napa River. The bridge site is known to support several special-status species, as well as archaeological resources. Brian assisted with regulatory reporting requirements and monitoring and relocation efforts of terrestrial and aquatic species outside the area of disturbance, including San Francisco dusky-footed woodrat, California freshwater shrimp, steelhead trout, and western pond turtle.

Robin Hunter, M.S. Associate

Robin Hunter is a biologist specializing in botany, plant ecology, and wetlands. She is skilled in plant identification, rare plant surveys, vegetation mapping, wetland delineations, environmental monitoring, and use of ArcGIS, and has four years of relevant experience. Robin has prepared CEQA compliance documents, permit applications, and ESA consultation documents. She has worked in a variety of ecosystems, throughout California and Nevada, with the majority of her field experience in the San Francisco Bay Area. In 2015 she completed a master's program in environmental management at the University of San Francisco. For her master's thesis, Robin investigated potential non-herbicide control methods for an invasive riparian shrub, *Sesbania punicea*.

EDUCATION

M.S., Environmental Management,
University of San Francisco, 2015

B.A., Biological Sciences,
Smith College, 2008

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Associate (2017-present)
- Analyst (2015–2017)

UC Santa Barbara, Santa Barbara, CA

- Research Assistant (2015)

University of San Francisco

- Teaching Assistant (2014–15)
- Research Assistant (2013–15)

Presidio Trust, San Francisco, CA

- Ecological Restoration Volunteer
(2013–14)

BioMarin Pharmaceutical, Novato, CA

- Analyst II, Quality Control
Microbiology (2012–13)
- Analyst I, Quality Control
Microbiology (2010–12)

Chicago Botanic Garden/Great Basin
Plant Material Center, Fallon, NV

- Conservation and Land
Management Intern (2009)

Royal Botanic Garden at Kew, London,
England

- Research Intern (2007)

PROJECT EXPERIENCE

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present). Horizon is working to prepare a programmatic EIR for CDFA's CalCannabis Cultivation Licensing Program. The key objectives of the program are to support the development and adoption of regulations that establish a framework for implementing CDFA's obligations under the Medicinal and Adult-Use Cannabis Regulation and Safety Act. Robin evaluated impacts to biological resources for the EIR.

Modesto Water Master Plan EIR: City of Modesto; Modesto, CA (2017–present). Robin is preparing the biological resources chapter for a program EIR for the City's Water Master Plan, which will analyze the plan's proposed water supply facilities, including pipelines, water tanks, and groundwater wells, at program-level of detail. She also prepared maps for this project.

Modesto Wastewater Master Plan EIR: City of Modesto; Modesto, CA (2017–present). Robin is preparing the biological resources chapter of a program EIR for the City's Wastewater Master Plan, which analyzes the plan's proposed wastewater treatment and collection facilities, including pipelines, at program- and, where appropriate, project-level of detail. She also prepared maps for this project.

San Joaquin River Restoration Program—Salmon Conservation and Research Facility EIR and Permitting: California Department of Fish and Wildlife; Fresno, CA (2015–2017). CDFW is planning several related actions to support the implementation of the San Joaquin River Restoration Program (SJRRP). A key component of the SJRRP is the construction of a Salmon Conservation and Research Facility (SCARF) capable of producing spring-run Chinook salmon for reintroduction to the river. Robin conducted pre-construction rare plant surveys and assisted with map production for the project.

Phoenix Lake Restoration and Preservation Plan: Tuolumne Utilities District; Sonora, CA (2016–present). Phoenix Lake is an 88-acre water supply reservoir located in the foothills of the Sierra Nevada. Sedimentation in the lake has degraded water quality and reduced storage capacity. Robin assisted with the wetland delineation for the project and wrote the biological resources chapter for CEQA analysis.

PROFESSIONAL MEMBERSHIPS AND TRAINING

California Native Plant Society

Northern California Botanists

Ecological Society of America

Association of Environmental Professionals

California Rapid Assessment Method (CRAM), 5-day General CRAM Training. Spring 2017, San Francisco Estuary Institute.

Carex Workshop, Spring 2016, Jepson Herbarium, UC Berkeley.

Poaceae Workshop, Spring 2016, Jepson Herbarium, UC Berkeley.

CEQA Basics Workshop, Fall 2015, Association of Environmental Professionals

50 Plant Families Course, Spring 2015, Jepson Herbarium, UC Berkeley.

Jurisdictional Delineation of Waters of the U.S., Basic, Spring 2014, and Advanced, Fall 2014. University of San Francisco.

PUBLICATIONS

Hunter, R. B., J. C. Callaway, A. P. Rayburn, and G.C. Coffman. 2016. Tarping and inundation as Potential Control Mechanisms for Seed Banks of Red Sesbania (*Sesbania punicea*). *Invasive Plant Science and Management* 9(4): 261-271.

Kelly, L. J., Leitch, A. R., Clarkson, J. J., Hunter, R. B., Knapp, S. and Chase, M. W. 2010. Intragenic Recombination and Evidence for Hybrid Speciation in Nicotiana (Solanaceae). *Molecular Biology and Evolution* 27: 781-799

PRESENTATIONS

Hunter, R.B, G.C. Coffman, A. Rayburn, and T. Meadows. 2015. Biology and control of *Sesbania punicea* seed banks by solarization. Oral presentation. California Invasive Plant Council Symposium.

CHP Area Office Replacement Projects: California Highway Patrol and Department of General Services (2017). The California Highway Patrol (CHP) is undertaking a statewide effort to replace aging or inadequate CHP field offices and other facilities. Robin prepared the biological resources MND sections for the Ventura, El Centro, and San Bernardino area office replacement projects. She also conducted reconnaissance surveys for these projects.

Oakland Vegetation Management Plan: City of Oakland; Oakland, CA (2016–present). Horizon is working to prepare a Vegetation Management Plan for the Oakland high fire-severity zone/wild land urban interface for the City of Oakland. Robin is leading the biological resource surveys and preparing the biological resource report to support the Vegetation Management Plan. She conducted habitat mapping across approximately 2,000 acres of land managed by the City of Oakland. She will also prepare the biological resource analysis for CEQA documentation.

Sierra Linda Mutual Water Company Water Treatment Project: California Department of General Services; Bass Lake Annex, CA (2016–2017). SLMWC is proposing to construct a water treatment plant. Robin wrote the project description and biological resources section of the IS/MND for the project. She also conducted the rare plant survey for the project.

Madera Canal Capacity Restoration Study: Bureau of Reclamation (2016). As part of the San Joaquin River Restoration Program, the Bureau of Reclamation committed to restoring capacity to the Madera Canal. Robin authored the Biological Assessment for potential improvements, and also supported the biology portion of the environmental assessment for the project.

Hoadley Peak Communication Tower, California Department of Transportation and DGS; Lewiston, CA (2017). The California Department of Transportation (CalTrans) is replacing communication tower facilities at Hoadley Peak. Robin conducted the rare plant survey for this project.

California Conservation Corps (CCC) Placer Center Multipurpose Room, Kitchen and Dorm Buildings Replacement Project: California Department of General Services; Placer County, CA (2016–Present). The CCC is replacing outdated facilities that no longer meet operational needs. Robin assisted with a wetland delineation for the project area, which includes a network of abandoned wastewater facilities and constructed drainages. Robin assisted with preparation of CWA 404 and 401 permit applications. The CWA 404 permit was deemed complete by USACE on the first submittal; the Water Board had only minor questions on the 401 application. The CWA 404 permit application was submitted in December 2017 and the permit was issued in February 2018.

Michael S. Lee

Analyst

Michael Lee is an analyst who conducts environmental impact analyses, collects and analyzes data, and supports permitting applications.

EDUCATION

B.S., Environmental Systems,
University of California, San Diego,
2015

Advanced Program in Sustainable
Management (Certification),
University of California, Berkeley
Extension, 2016-present

PROFESSIONAL EXPERIENCE

Horizon Water and Environment,
Oakland, CA

- Analyst (2016–present)

California Public Utilities Commission,
San Francisco, CA

- Regulatory Analyst Intern (Energy
Division) (2016)

Root Solutions, Oakland, CA

- Conservation Projects Assistant
(2016)

Shurin Laboratory, La Jolla, CA
Senior Research Intern (2014–2015)

PROJECT EXPERIENCE

CalCannabis Cultivation Licensing Program Environmental Impact Report (EIR): California Department of Food and Agriculture (CDFA); Statewide (2016–present). Michael is summarizing and inputting comments from comment letters received during scoping period for preparation of EIR. He also composed several environmental sections of the EIR, and has supported assembly of the Administrative Record for the project.

Surface Water Supply Infiltration Gallery Development and Testing Project: Stanislaus Regional Water Agency (2016–present). Michael compiled the following IS/MND sections: executive summary, agriculture and forestry, land use, mineral resources, public services, recreational resources, transportation and traffic. He conducted field survey of project site for presence of special status bat species.

Santa Clara Valley Water District Stream Maintenance Guidelines: Environmental Science Associates; Santa Clara County, CA. Michael performed edits to maintenance guideline documents to ensure consistency and accuracy of data. Streams included Stevens Creek, Llagas Creek, Calabazas Creek, Los Gatos Creek, and Lower Penitencia Creek.

Santa Cruz Route 1 HOV: Parsons Consulting; Santa Cruz, CA. Michael prepared memorandum sections for technical studies conducted to analyze cumulative impacts on special status species from the proposed project. He analyzed current city and county project reports to cross reference for any potential impacts to special status species within the sphere of influence of the proposed project.

Wastewater Management Plan EIR: City of Modesto; Modesto, CA. Michael authored the agricultural and forestry resources, and utilities and service systems sections of report. He analyzed federal, state and local regulations for preparation of report sections.

San Joaquin River Restoration Program: California State Department of General Services. Michael created a permit matrix consisting of specific requirements established by various permits applicable to the proposed project. He coordinated with the project lead to assist him with efficiently identifying the current status of each permit requirement.

Lower Penitencia Creek Improvements Project: Santa Clara Valley Water District; Santa Clara County, CA. Michael prepared impact tables outlining all potential environmental impacts determined to be affected by the proposed project.

Chris Stabenfeldt, AICP

Senior Environmental Planner

Mr. Stabenfeldt is a certified planner, team and project manager, and environmental analyst with more than 31 years of professional environmental and planning consulting experience. He has served in a broad range of roles including group manager, office manager, director of business development, and project manager. He has managed comprehensive and complex environmental documents and planning projects for public agencies and private sector clients including documentation and related compliance activities under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) throughout the west. He has managed preparation of numerous programmatic environmental documents and has worked on several projects in Nevada County including currently serving as project manager for biological resources, cultural resources and permitting for the Centennial Reservoir EIR being prepared for NID. He has a strong multidisciplinary background and has conducted technical studies in noise, air quality, geology, hydrology/water supply, infrastructure analysis, and land use policy assessment.

Education

B.A. Environmental Studies, University of California Santa Barbara

MCRP Coursework, City and Regional Planning, California Polytechnic University, San Luis Obispo

Registrations, Certifications, Permits and Affiliations

- American Institute of Certified Planners
- American Planning Association
- Association of Environmental Planners

Professional Experience

Environmental Impact Report and Regulatory Permitting for the Centennial Reservoir Project, Nevada and Placer Counties - Nevada Irrigation District.

Managing ECORP's work effort in support of this project. The Nevada Irrigation District (NID) has proposed the Centennial Reservoir Project to provide drought-mitigation and improve water supply reliability for NID's customers. The Proposed Project involves the construction of a new 110,000-acre-foot reservoir, on the Bear River between the existing Rollins and Combie reservoirs. ECORP is supporting NID, under subcontract to HDR, with biological and cultural resources and permitting expertise. ECORP has also been retained to prepare applications for federal and state regulatory permits in support of the project, including Clean Water Act Section 404 Individual Permit Application and Section 401 Request for Water Quality Certification, California Fish and Game Code Section 1602 Streambed Alteration Agreement, Endangered Species Act Section 7 Biological Assessment, California Endangered Species Act Section 2081 Incidental Take Permit (if necessary), and National Historic Preservation Act Section 106 Compliance. ECORP anticipates conducting a California red-legged frog habit assessment, red-legged frog protocol surveys, rare plant survey, Valley elderberry longhorn beetle protocol survey, and bat species habitat assessment in support of compliance with ESA, CESA, and CEQA.

Regional Water Supply Project EIR, Stantec, Nevada Irrigation District (NID), Nevada and Placer Counties. ECORP was retained in support of preparation of an EIR for a regional water supply project to serve western Placer County. In cooperation with the City of Lincoln, NID has proposed a comprehensive regional project to address increased demand, which includes pipelines, a raw water storage reservoir with earthen dam, a proposed regional water treatment plant including potable water reservoirs, a metering facility and hydroelectric facilities. ECORP, as a partner with Stantec, is addressing hydropower, water supply and hydrology. Mr. Stabenfeldt is serving as the project manager for coordination of ECORP's activities and is also serving as a key member of the project management team regarding CEQA strategy and approach. Mr. Stabenfeldt was Senior CEQA advisor to Stantec.

Northern California Region On-call Contract for Environmental Services, Department of General Services, Real Estate Services Division. Northern California. Mr. Stabenfeldt served as the Program Manager for this 3 year retainer contract. RESD provides planning and environmental compliance support to all other state agencies. Over the three year term of the contract ECORP completed over 40 task assignments. The projects included a wide range of types and included preparation of technical studies, environmental documentation, permitting support, public outreach and specialized services.

PG&E Hydrodivestiture EIR, California Public Utilities Commission, Northern California Counties. Mr. Stabenfeldt served as the team leader for assessment of the Shasta and DeSabra Regional Bundles including approximately 70,000 acres of land; stream systems; dams and diversions; canals, flumes, and tunnels; and reservoirs. Mr. Stabenfeldt provided services as overall task leader for land use, responsible for developing an impact assessment strategy for the potential change in use for more than 180,000 acres of watershed lands and was part of the management team that developed overall analytical strategies to address impacts associated with transfer of the all facilities and land to other entities.

Mendocino County General Plan Update and EIR, County of Mendocino, Mendocino County. Mr. Stabenfeldt served as Project director for the comprehensive update of the County General Plan and associated environmental documentation. The general plan had not been updated since 1988. He facilitated countywide workshops to solicit input from local citizens and was the key point of contact with the county over an eight-year period. Key issues included tension between economic development and resource conservation, protection of agricultural resources, limited surface and groundwater resources within the county and alternative energy sources.

East Area Specific Plan EIR, City of Galt, Galt. Mr. Stabenfeldt served as Project Manager for managing the specific plan EIR which covered 2,200+ acres and represented a proposed 40% increase in the town's population. Key issues included provision of services and transportation impacts.

General Plan EIR, County of Lassen, Lassen County. Mr. Stabenfeldt served as Project Manager for preparation of the General Plan EIR for Lassen County. The EIR was prepared concurrently with the draft general plan, evaluating the draft goals, policies, and implementation measures. Specific mitigation strategies were incorporated as policy directives prior to finalization and adoption of the general plan.

Thomas Scofield

Senior Biologist/Project Manager

Thomas Scofield has more than 27 years of professional experience (over 14 years with ECORP) working as a consultant to both public agencies and the private sector, and has served as project manager and principal biologist for permitting and environmental assessment projects. He has conducted wildlife studies for a variety of terrestrial and aquatic species, including numerous studies involving federally and/or State-listed threatened and endangered wildlife species. Mr. Scofield has conducted numerous biological resource investigations, habitat assessments, and jurisdictional wetland delineations for proposed projects. He routinely assesses existing biological resource databases and on-site survey data to evaluate potential impacts to special-status species including federal and/or state listed species, U.S. Forest Service Sensitive species, CNPS listed species, migratory bird species, and regionally sensitive species protected under local ordinances. These assessments often include the development of detailed study plans, developing and implementing literature and field studies, data acquisition, data analysis, impact assessments, mitigation planning, and other environmental documentation. Mr. Scofield has conducted studies and developed permits to meet the regulatory requirements of the federal Clean Water Act (Sections 404 and 401), the federal Endangered Species Act (Section 7), the California State Endangered Species Act (2050-2068), and the California Fish and Game Code Section 1602 governing activities that may affect fish and wildlife habitats associated with streams and lakes. He has developed several Biological Assessments per the USFWS and NOAA/NMFS guidelines and has worked on a variety of CEQA and NEPA documents including numerous NegDEC's, EIR's, EIS's, and EA's.

Education

B.S., Biology. Humboldt State University, 1990

Registrations, Certifications, and Affiliations

- The Wildlife Society
- California Waterfowl Association
- Ducks Unlimited
- California Department of Fish and Game, Wild Trout Project, Volunteer
- CDFG Scientific Collecting Permit (SC-007091)
- Wetland Training Institute – Wetland Delineation (1996)
- Wetland Training Institute – Advanced Hydric Soils (2003)

Representative Professional Experience

Loma Rica Specific Plan EIR, Nevada County –City of Grass Valley, Nevada County. Mr. Scofield served as the project manager for biological and cultural resources studies and EIR preparation and support for the Loma Rica Specific Plan EIR for a proposed 452-acre in-fill residential and commercial development project located adjacent to the City of Grass Valley in the upper foothills of the Sierra Nevada Foothills, Nevada County.

Centennial Reservoir Project, Nevada Irrigation District (NID), Nevada and Placer Counties. ECORP is conducting biological and cultural resources technical studies and preparing respective EIR/EIS sections for a proposed new dam and reservoir located on the Bear River in Nevada and Placer counties. ECORP is supporting NID under subcontract to HDR. Mr. Scofield is serving as the biological resources task manager responsible for overseeing biological technical studies and development of the biological resources documentation, including support for the Project's EIR/EIS and project permitting documents.

Bethel Church EIR Peer Review, City of Redding, CA. As a subconsultant to Kimley Horn, Mr. Scofield conducted a peer review of existing environmental documentation including biological technical resources documents provided to us pertaining to the proposed Bethel Church project (Project) located in the town of Redding. The review was conducted to determine if the existing biological resources documentation was sufficient for the purposes of identifying any potential biological resources data gaps and to assess whether any additional surveys may be necessary to support development of an EIR. In addition to reviewing the subject documents we conducted an aerial assessment using Google Earth to further evaluate current site conditions, distribution of vegetation communities and potential waters of the U.S., and occurrence of potential habitat for special-status species. Background information reviewed as part of the existing information included the California Natural Diversity Data Base (CNDDB) record search, the U.S. Fish and Wildlife Service (USFWS) Official Species List, the Calfish database records, Critical Habitat GIS data maintained by the USFWS and the National Marine Fisheries Service (NMFS), and Essential Fish Habitat (EFH) data.

Biological Resources Support Services for the Placer Vineyards Specific Plan EIR/EIS, Placer County – Placer Vineyards Property Owner's Group. Mr. Scofield prepared a Biological Assessment (BA) for this 5,000-acre specific plan, in support of Section 7 Consultation with the United States Fish and Wildlife Service regarding potential project related effects to federally-listed or petitioned species and critical habitat. Biological service rendered also included developing supportive data for the project's EIR/EIS.

Supplemental Environmental Impact Report (SEIR) and Wetland Delineation for the Cache Creek Resources Management Plan and Cache Creek Improvement Program, Yolo County. For the County of Yolo, Mr. Scofield prepared the biological resources section of a Supplemental Environmental Impact Report (SEIR) for the Cache Creek Resources Management Plan (CCRMP) and Cache Creek Improvement Program (CCIP). Biological information presented in the SEIR was used in support of obtaining re-issuance of a U.S. Army Corps of Engineers 404 permit, a State Regional Water Quality Control Board 401 Certification, and a California Department of Fish and Game 1601 Streambed Alteration Agreement.

California State Parks Trails and Roads Change-in-Use Evaluation Process PEIR, State of California – Ascent Environmental Inc. Mr. Scofield provided biological technical support for the California State Parks Trails and Roads Change-in-Use Evaluation Process PEIR. Information provided included descriptions of aquatic resources and habitat types (marine, estuarine, freshwater) and associated special-status species present within USFS ecoregions throughout California, federal and state regulatory requirements, potential impacts, standard and specific project avoidance and minimization measures, and appropriate mitigation associated with potential road and trail change-in-use projects.

Lisa Westwood, RPA

Director of Cultural Resources

Lisa Westwood is a Registered Professional Archaeologist with 23 years of cultural resource management experience. She exceeds the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeologist, holding a B.A. degree in Anthropology and an M.A. degree in Anthropology (Archaeology). Currently, she serves as Director of Cultural Resources for ECORP, as principal investigator and task manager for cultural resources services required for compliance with Section 106 of the National Historic Preservation Act and CEQA. Her technical areas of expertise include advanced Section 106 compliance and consultation, preparation and negotiation of agency agreement documents (Programmatic Agreements and Memoranda of Agreement), human bone (osteological) identification and analysis, historical archaeology, and lithic debitage identification. She is well versed in impact assessment and development of mitigation measures for CEQA and Section 106 projects, including on-call and task-order based contracts. Her previous experience as a CEQA/NEPA project manager gives her a broader perspective of regulatory compliance issues, and she is recognized by the private and public sector for her ability to build consensus among stakeholders and solve complex problems quickly and effectively. She is an active member of the Department of Anthropology faculty at California State University-Chico and Butte College.

Ms. Westwood provides expertise to agencies and private developers in managing their cultural resources compliance needs for highly complex projects. She recently developed, and is now implementing, complex Programmatic Agreements for large, 20-year, multi-applicant specific plan projects in Sacramento and Placer counties, which requires advanced Section 106 expertise and creative solutions. She also serves as Principal Investigator for all cultural resources studies in Northern California and others throughout California and Nevada, the majority of which require coordination with the US Army Corps of Engineers and the California Office of Historic Preservation. She is the sole, co-, or contributing author to nearly 300 cultural resources technical reports, research designs, and cultural resource management plans. She has written, contributed to, edited, and reviewed a variety of environmental compliance documents including Initial Studies (ISs), Environmental Assessments (EAs), Environmental Impact Statements (EISs), and Environmental Impact Reports (EIRs).

Education

M.A., Anthropology, Eastern New Mexico University, Portales

B.A., Anthropology and Pre-medicine, University of Iowa, Iowa

Registrations, Certifications, Permits and Affiliations

- Registered Professional Archaeologist, No. 11692

- State of Nevada Antiquities Permit-Principal Investigator (Statewide, non-federal lands)
- Bureau of Land Management, California Archaeological Investigations Permit-Principal Investigator
- Bureau of Land Management, Nevada Cultural Resource Use Permit-Principal Investigator Representative Professional Experience

Professional Experience

Centennial Reservoir Project, Nevada Irrigation District, Nevada County. Serves as Principal Investigator for the cultural resources compliance under Section 106 NHPA and CEQA. Responsible for the cultural resources survey, tribal consultation under AB 52, evaluations of eligibility of historic and prehistoric archaeological sites, and preparation of technical reports.

Loma Rica Specific Plan EIR, City of Grass Valley, Nevada County. Principal Investigator and task manager for the cultural resources constraints analysis and inventory for compliance with CEQA only. Provided CEQA support to EIR preparer.

Bethel Church EIR, City of Redding. ECORP Consulting, Inc. was retained to advise the City of Redding and the preparer of the CEQA document on the requirements and thresholds for compliance with Assembly Bill 52. Because no tribes had submitted general request letters at the time, ECORP subsequently authored the Tribal Cultural Resources section of the CEQA document that provided documentation of the AB 52 compliance and drew from other sources of information that led to a determination that no tribal cultural resources would be impacted by the proposed project.

Placer County Conservation Plan, County of Placer. Responsible for negotiating and developing a highly complex programmatic approach to guide multi-agency compliance with Section 106 NHPA and CEQA for this 50-year, 209,000-acre habitat conservation plan. The resulting Programmatic Agreement and Cultural Resources Management Plan, currently in development, will support an EIR/EIS and guide compliance for the US Army Corps of Engineers, US Fish and Wildlife, County of Placer, California Department of Fish and Wildlife, City of Lincoln, and the Office of Historic Preservation, and will incorporate stakeholder involvement from tribes, developers, historical societies, and the public. When complete, it will be the first HCP in California to incorporate US Army Corps of Engineers' compliance and will result in a phased delegation of authority to non-federal agencies.

Tesoro Viejo Specific Plan, Merced County. Principal Investigator responsible for coordinating the Section 106 consultation on behalf of the developer, in collaboration with the US Army Corps of Engineers and US Bureau of Reclamation. This includes ensuring no conflicts between the Section 106 process and the outcomes of the CEQA process, including its subsequent legal proceedings, which resulted in a Settlement Agreement when the EIR was challenged (ECORP was not involved in the CEQA process or the legal challenges to the project). Also responsible for an evaluation of eligibility of Lateral 6.2 and bridge crossings of the Madera Canal.

Scott Friend, AICP

Planning Services Director/Planning Task Manager

Mr. Friend manages the planning and environmental services activities of ECORP Consulting, Inc.'s (ECORP) Chico office. With over 23 years of professional planning and environmental analysis experience, he is responsible for project preparation and management activities, provides technical review and oversight of office staff and projects, and provides direct management of client projects. He specializes in current and long-range contract planning activities as well as the preparation and review of general plans, municipal codes and California Environmental Quality Act (CEQA) environmental compliance documents. Mr. Friend has provided principal direction and project management on projects ranging from policy documents such as general and specific plans to implementation documents and programs such as zoning ordinance updates, design review programs, and planning program guidelines. He also manages and prepares the full range of CEQA and National Environmental Policy Act (NEPA) environmental compliance and review documents. His experience includes long-range and current planning activities for both public and private sector clients. He regularly provides direct staff support to various boards, councils, and commissions and has extensive experience in the preparation and presentation of visual and oral presentations to citizens, citizen bodies, and appointed and elected officials.

Education

Graduate Studies – Masters of Environmental Planning Program (M.E.P.), Arizona State University, Tempe
BA, Political Science, California State University, Chico

Registrations, Certifications, Permits and Affiliations

- American Institute of Certified Planners (AICP)
- American Planning Association
- California Planning Association
- Association of Environmental Professionals (AEP)

Professional Experience

Agency/Contract Staffing. Serves as the off-site, contract City Planner/Environmental consultant for the City of Yreka; on-call contract staff planning consultant to Siskiyou County; and, as the contract Community Services Director overseeing the Planning, Building and Code Enforcement functions for the Cities of Orland and Red Bluff. Additionally, Mr. Friend has served as the interim City Planner for the City of Mount Shasta, the City Planner for the City of Biggs, and oversaw the Planning Department functions of the City of Live Oak, Sutter County, Yuba County and City of Oroville. He has provided principal oversight of direct on- and off-site contract planning staff for the Counties of Butte, Sutter, Yuba, Plumas and Lassen and the Cities of Chico, Orland, Oroville, Yuba City, Live Oak, Red Bluff, Mount Shasta, and Willows.

Ordinance Review and Preparation - Various. Acting in the capacity of the contract City Planner/Planning Consultant/Community Development Department Director, Mr. Friend is responsible for the preparation, adoption and implementation of Ordinances affecting the operations of the various agencies/clients under his Supervision. Mr. Friend has prepared hundreds of land use Ordinances, Resolutions and programs including multiple cannabis and cannabis-related cultivation, use, and code enforcement Ordinances in this capacity.

Nevada County, Rincon del Rio Continuing Care Retirement Community. Project Entitlement Planner and Assistant Project EIR Manager. Provided direct contact staffing assistance to the Nevada County Planning Department for the project, including the handling of all project negotiations, preparation of staff reports and presentations, presentation of the project to the Planning Commission and Board of Supervisors, project noticing, and applicant management. The project involved the processing of nine entitlement requests, certification of an EIR, approval of a Development Agreement, and coordination with outside service providers, outside legal counsel, and County department staff.

City of Orland, Pilot Flying J Travel Plaza. Project Entitlement Planner and Project EIR Manager. Provided direct contract staffing assistance to the City for the project, including the handling of all project negotiations, preparation of staff reports and presentations, presentation of the project to the Planning Commission and City Council, project noticing, and applicant management. The project involved the processing of seven entitlement requests, preparation and certification of an EIR, and coordination with outside service providers, outside legal counsel, and City and agency department staff.

City of Chico, General Plan Update and EIR. Assistant Project Manager. Provided oversight of project schedule and budget functions and assisted with the management of a 12-person General Plan Advisory Committee composed of members of the public and key representatives from various City boards and commissions. The General Plan update project included the preparation of an Existing Conditions Report, Key Issues and Vision identification report, Economic and Market Analysis, Land Use Alternatives Report, and revision to the General Plan policy document. In addition to the key deliverables identified above, the project included four key issues public workshops throughout the city and over 20 key stakeholder meetings, public hearings, and Planning Commission and City Council working sessions. The project also included the preparation of a programmatic EIR in support of the update effort.

City of Biggs, General Plan Update and EIR. Project Manager. The project included a Background Report and a substantially revised General Plan policy document. The project also included the preparation of a programmatic EIR with technical studies in support of the update effort and a public outreach and involvement component. The update effort included the incorporation of regional planning components, including a Sustainable Communities Strategy and Habitat Conservation/Natural Communities Conservation Plan.

City of Orland, General Plan Update and EIR. Project Manager. The project included a Background Report, a Key Issues and Opportunities Report, and an updated General Plan policy document. The project also included the preparation of a programmatic EIR with technical studies in support of the update effort and a public outreach and involvement component.

Clay DeLong

Associate Biologist

Mr. DeLong is a botanist/biologist and trained wetland delineator specializing in special-status species surveys, general floristic surveys, biological monitoring and wetland delineations. Mr. DeLong has six years of professional experience conducting floristic surveys, including surveys for special-status plants throughout Northern and Central California. His botanical expertise extends throughout the Central Valley, Coast Ranges, and the Sierra Nevada, with an emphasis on vernal pool, annual grassland, oak woodland, and coniferous forest communities. Mr. DeLong is an expert in data management techniques with years of experience in advanced database design. Mr. DeLong has overseen data collection and management for a broad range of biological studies, many involving complex longitudinal datasets.

Education

B.S. Environmental Biology and Management with Minor in Geographic Information Systems, University of California, Davis.

Registrations, Certifications, Permits and Affiliations

- State of California Authorization to Collect Voucher Specimens of State-Listed Plants (Number 2081(a)-14-032-V)
- California Rapid Assessment Method for wetlands and riparian areas (CRAM) Trained Practitioner

Professional Experience

Centennial Reservoir Project, Nevada Irrigation District (NID), Nevada and Placer Counties.

ECORP is conducting biological and cultural resources technical studies and preparing respective EIR/EIS sections for a proposed new dam and reservoir located on the Bear River in Nevada and Placer counties. ECORP is supporting NID under subcontract to HDR. Mr. DeLong is serving as the biologist responsible for biological technical studies and development of the biological resources documentation, including support for the Project's EIR/EIS and project permitting documents.

California Central Coast Veterans Cemetery Project at Former Fort Ord, Monterey County – California Department of General Services, Real Estate Division.

Mr. DeLong conducted special-status plant surveys for the proposed California Central Coast (CCC) Veterans Cemetery Project - Phase 1 (Project). The 16.9-acre Project area is located within a portion of the former Fort Ord in the City of Seaside in Monterey County, California. Surveys were conducted in accordance with guidelines promulgated by U.S. Fish and Wildlife Service (USFWS 2000), California Department of Fish and Wildlife (CDFG 1983), and California Native Plant Society (CNPS 2001). Mr. DeLong prepared a comprehensive plant list of the site, which included several populations of Monterey spineflower (*Chorizanthe pungens* var. *pungens*), a species listed as threatened pursuant to the Federal

Endangered Species Act. Based on these surveys, Mr. DeLong wrote sections of a CEQA IS/MND, and prepared a Biological Assessment (BA) for the CCC Veterans Cemetery Project in support of Endangered Species Act (ESA) Section 7 consultation with USFWS.

Sacramento Country Day Schools, Sacramento County – Easton Development Co., LLC. Assisted with wet season surveys with permitted biologists Todd Wood and Tara Collins. Conducted early season and late season rare plant surveys

Cordova Hills, Sacramento County – Cordova Hills Ownership Group. Cordova Hills is a ±2,500 acre proposed mixed-use development just east of Rancho Cordova. ECORP has conducted a full suite of biological surveys on this site, and is permitting all aspects of the site. Mr. DeLong assisted permitted biologist Todd Wood with wet season and dry season fairy shrimp surveys.

Riverfront Vegetation Management Plan, Yolo County – City of West Sacramento. Mr. DeLong conducted pre-construction surveys for special-status species, including western pond turtle and native bats at the Riverfront Vegetation Management Plan Project on the Sacramento River in West Sacramento, CA. Mr. DeLong monitored Project implementation activities, including tree pruning and removal of invasive species and hazardous trees. Mr. DeLong communicated with the California Department of Fish and Wildlife and assured compliance with Project mitigation measures and all applicable environmental regulations.

SMUD 69kV Installation Project, Sacramento County – Easton Development Co., LLC.

Mr. DeLong conducted pre-construction surveys for special-status plants, elderberries, and wetlands at the SMUD 69kV Project on Aerojet/Rocketdyne facilities in Rancho Cordova, CA. Mr. DeLong monitored construction activities to assure compliance with Project mitigation measures and all applicable environmental regulations.

Glenborough/Easton Place, Sacramento County – Easton Development Co., LLC. Mr. DeLong conducted pre-construction surveys for elderberries and native oak trees at the Glenborough/Easton Place Project on Aerojet/Rocketdyne facilities in Rancho Cordova, CA. Mr. DeLong monitored construction activities to assure compliance with Project mitigation measures and all applicable environmental regulations. He documented and reported the removal of native oak trees as per the requirements of the Project's oak mitigation measures.

Lincoln Village 5, Placer County – Richland Communities. Mr. DeLong conducted an early season rare plant survey for the approximately 1541-acre Lincoln Village 5 project, a proposed development in Placer County. Along with other biologists, he prepared a comprehensive plant list of the entire property. Surveys were conducted in accordance with guidelines promulgated by U.S. Fish and Wildlife Service (USFWS 2000), California Department of Fish and Wildlife (CDFG 1983), and California Native Plant Society (CNPS 2001). No rare plant species were documented.

Jeremy Adams

Cultural Resources Manager/Senior Architectural Historian

Mr. Adams is a Cultural Resources Manager and Senior Architectural Historian with eight years of experience in developing cultural resources management strategies and leading the implementation of cultural inventories, evaluations, effects analysis, and preparation of mitigation documents. He holds a Master of Arts degree in History (Public History), a Bachelor of Arts degree in History, and he meets the Secretary of the Interior's Professional Qualification Standards for Architectural History and History. Mr. Adams serves as principal investigator for all architectural history components of projects and is well versed in the practical application of the laws and regulations of Section 106 of the NHPA and CEQA. He is highly skilled at historical research and analysis and is familiar with numerous archives, libraries, museums, and other historical repositories throughout California. He has prepared historic contexts, property histories, and carried out architectural site documentation for buildings, structures, and historical landscapes. He has also prepared built-environment impact assessments and has developed mitigation measures for CEQA and Section 106 projects. In addition, he has carried out all three versions of HABS/HAER/HALS historical documentation, developed educational interpretive panels, has completed Caltrans SER documents, multiple versions of Finding of Effect documents, and has evaluated numerous historic-age buildings and properties, as well as assisted lead agencies with SHPO consultation. As the manager of ECORP's cultural resources department in Rocklin, he has led numerous cultural resources studies and is the principal investigator and author for multiple architectural history studies.

Education

M.A., History (Public History), California State University, Sacramento

B.A., History, California State University, Chico

Professional Experience

Nevada Irrigation District Centennial Reservoir Project, Placer and Nevada Counties. Cultural Resources Manager responsible for cultural resources strategic planning, management, and implementation of all cultural resources studies to support the Centennial Reservoir Project's Environmental Impact Report and Environmental Impact Statement for the 2,100+ acre project area. As Cultural Resources Manager, Mr. Adams participated and led numerous project planning meetings regarding preparation of cultural resources technical studies. Mr. Adams supervised implementation of cultural studies and also presented and defended to the NID Board of Directors regarding further stages of cultural resources compliance needs. Mr. Adams has provided ongoing support with consultation and strategic planning on behalf of NID with the USACE, Native American Tribes, and other federal and state agencies through implementation.

American Ranch Estates Project, Nevada County. Cultural Resources Manager responsible for the management and implementation of a cultural resources inventory of a 341-acre property. To support the USACE 404 permit for the project, Mr. Adams coordinated an archaeological inventory, records search, archival research, and preparation of a cultural resources inventory report. The project also required planning future project actions regarding cultural resources.

Dry Creek Greenway Multi-Use Trial EIR, Roseville, Placer County. Cultural resources task manager responsible for the implementation and completion of the cultural resources technical studies necessary for the project. The project required cultural studies to be prepared in compliance with the Caltrans Standard Environmental Reference. Cultural resources studies and documents prepared included preparation of an Area of Potential Effect (APE) map, Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR), Archaeological Evaluation Report (AER) that included Extended Phase 1 Investigations, and consultation with lead agencies on the Finding of Effect.

Cultural Resources Studies for the Tuolumne Utilities District, Heights Water Storage Project, Tuolumne County. Cultural Resources Manager responsible for planning strategy and implementation of the cultural resources inventory and evaluations for the TUD Cuesta Heights Water Storage Project located near Sonora, Tuolumne County. The project required a multi-phased approach to record, evaluate, and prepare a finding of effect impacts assessment for resources within the project impact area. Through project implementation, Mr. Adams participated in conference calls and led strategy discussions that supported the TUD through the CEQA process for impacts to cultural resources.

147 Beach Road Project, Belvedere, Marin County. Assistant Cultural Resources Manager responsible for coordination and management of a cultural resources inventory report. To support the CEQA project, Mr. Adams coordinated an archaeological inventory, records search, and preparation of a cultural resources inventory report. The project also required coordination with the City of Belvedere and their architects.

Twelve Bridges New High School Project, Placer County. Cultural Resources Manager responsible for the management and implementation of a cultural resources inventory report. To support the CEQA project, Mr. Adams coordinated an archaeological inventory, records search, archival research, and preparation of a cultural resources inventory report.

Royce Evans at Roble Road Project, Tuolumne County. Cultural Resources Manager responsible for planning strategy and implementation of the cultural resources inventory and evaluations for the Royce Evans at Roble Road Project located near Sonora, Tuolumne County. The project required a multi-phased approach to record and evaluate resources within the project impact area. Through project implementation, Mr. Adams participated in conference calls and led strategy discussions that supported the TUD through the CEQA process for impacts to cultural resources.



Thomas Trexler

Experience Summary

- Over twenty-four years of experience with environmental compliance and planning services.
- Responsibilities include project management, client relationships, and integrating the full-service disciplines of environmental compliance with programs at the local, state, and national levels.
- Recognized expert in CEQA/NEPA compliance, permitting support, and agency coordination.

Experience Description

Mr. Trexler is a Principal and Manager of ENERCON's Sacramento office. In addition to support and oversight of four departments and operational responsibilities, he is a Project Manager. His specific experience includes the following.

Strategy Lead for CEQA and Program Integration, California Department of Food and Agriculture, CalCannabis Cultivation Licensing Program Environmental Impact Report. Mr. Trexler is serving as the Strategy Lead for this California Environmental Quality Act (CEQA) EIR analyzing this new program which establishes a licensing and regulatory framework for the cultivation, manufacture, transportation, storage, distribution, and sale of commercial cannabis in the State of California. He is integrating the EIR with Program Requirements and supporting CDFA as an additional liaison with multiple state agencies including the Bureau of Cannabis Control and the State Water Resources Control Board.

Project Manager, Alameda Creek L303 Pipeline Replacement and Steelhead Restoration Project, Pacific Gas & Electric. Mr. Trexler served as the Project Manager to PG&E and Swaim Biological, Inc. (SBI) in the development of the Project Description and Draft Mitigated Negative Declaration for this Project. Tasks involved project construction screening criteria, development of project alternatives, and extensive coordination with multiple stakeholders and regulators. Anticipated construction and restoration activities would be completed by Fall 2018. The specific goals of the Project are to restore native Steelhead habitat in Alameda Creek by removing a fish passage barrier through the relocation of an existing natural gas pipeline.

Project Manager, CEQA/NEPA Support on North-South Project, Southern California Gas Company. Serving SoCalGas as the Project Manager, Mr. Trexler coordinated and actively participated in the development of five (5) key CEQA/NEPA support deliverables in the form of focused studies and technical memoranda. The deliverables analyzed potential impacts that would result from the construction and operation of a 65-mile, high-pressure 36" diameter natural gas pipeline that would be located in the northern Los Angeles basin. Studies included risk of upset, environmental justice, socioeconomics, environmental site assessments, and hazards/hazardous materials. The multi-year effort utilized a team effort under Mr. Trexler's leadership that included 25 staff in several offices. Ultimately, the Project was not implemented by SoCalGas due to factors unrelated to environmental constraints.

Project Director, On-Call Environmental Services, Sacramento Municipal Utilities District. Mr. Trexler has acted as the Project Director to SMUD on this Task Order based contract. To date, the environmental team has worked on several task orders with which he was the Principal-in-Charge,

a technical author, and/or an independent technical reviewer. Mr. Trexler is intimately familiar with SMUD's expectations, formats, and preferences. Key Task Orders that Mr. Trexler has managed to date include the following:

SMUD Collinsville Wind Energy Site Due Diligence: Mr. Trexler managed the task order and the team responsible for the preparation of several environmental studies and reviews of the Collinsville Wind Energy site in a due diligence process for SMUD's proposed purchase of the site. The work involved a study of existing environmental review and documentation prepared for the site and evaluated the potential occurrences of special-status species and jurisdictional streams, wetlands, and other waters of the U.S. The study included an assessment of proposed County General Plan Amendment that would affect wind development at the site. To help SMUD meet business goals, the analysis included estimated costs and schedules to complete the public environmental review and permitting process.

SMUD Hazel Avenue Electrical Facilities Relocation and Expansion Project Initial Study/Mitigated Negative Declaration: Mr. Trexler managed the Task Order and provided oversight of the team responsible for the preparation of a CEQA IS/MND for SMUD's proposed relocation and expansion of an electrical service substation. Key issues include construction traffic and noise, aesthetics, land use compatibility, and hazardous materials.

SMUD Station E Substation Project Initial Study/Mitigated Negative Declaration: Mr. Trexler managed the Task Order and provided oversight of the team responsible for the preparation of a CEQA IS/MND and associated technical studies for SMUD's proposed relocation and expansion of an electrical service substation. Key issues include biological resources (valley elderberry longhorn beetle, Swainson's hawks, burrowing owl, barn owl) construction traffic and noise, aesthetics, and hazardous materials.

North Area Deputy Project Manager, Transmission Line Infrastructure Environmental Reviews and Repairs, PG&E. NERC compliance for major California electrical transmission owner to assess and repair electrical transmission line conductors, towers, and poles throughout California. The work is to comply with NERC GO-131-D to assess and upgrade transmission lines to current standards, and involves approximately 5,000 individual repairs sites over 15,000 miles of conductors. Supported the environmental documentation and review, field surveys, and construction monitoring and reporting of dozens of biologists across multiple offices. As North Area deputy manager, was responsible to support the production environmental reviews and documentation, mapping, and development of repair options to avoid impacts to sensitive biological and cultural resources. Reviewed land rights documents, coordinated with public affairs and right-of-way staff, worked with engineering design and construction managers to avoid actions that would trigger regulatory discretionary permitting. The project is developing and delivering a robust administrative record of data, analysis, and impact avoidance and

Education and Professional Recognition

M.S., Environmental Science (Hydrology & Aquatic Chemistry), Honors — Yale University, New Haven, CT, 1999

B.A., Geography (Geomorphology), Cum Laude, minor Environmental Studies — University of Southern California, Los Angeles, CA, 1997



Michael D. Smith, Ph.D.

Experience Summary

- Nationally-recognized leader in California Environmental Quality Act (CEQA)/National Environmental Policy (NEPA) compliance and integrating GHG/Climate Change analyses into CEQA/NEPA impact assessments.
- Over 20 years' experience in environmental impact assessment, project and program management, policy development, land use planning, and training/education with the federal government, private sector, academia, and NGOs.
- Manages and serves as a strategic advisor and senior reviewer for CEQA and NEPA projects and programs for a wide variety of federal, state, and private-sector clients; provides policy compliance, scientific, technical, and QA/QC review of environmental analyses.

Education and Professional Registrations

Ph.D. in Sociology (Environment and Natural Resources emphasis) Utah State University, Logan, Utah, 1998

M.A. Geography (Natural Resource Management and Policy emphasis) University of Wyoming, Laramie, Wyoming, 1994

B.A. in Environmental Studies (Planning and Policy emphasis) University of California, Santa Cruz, Santa Cruz, CA, 1991

Experience Description

California Department of Food and Agriculture, CalCannabis Cultivation Licensing Program Environmental Impact Report. Dr. Smith is serving as the Energy Use and Greenhouse Gas Emissions/Climate Change Lead for this California Environmental Quality Act (CEQA) EIR analyzing this new program which establishes a licensing and regulatory framework for the cultivation, manufacture, transportation, storage, distribution, and sale of commercial cannabis in the State of California.

EIR for the Humboldt County Redevelopment Plan, County of Humboldt, CA. Dr. Smith served as lead author and team leader for the following sections of this California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) examining the impacts of creating redevelopment areas in seven communities: aesthetics and visual resources; cultural and archaeological resources; geologic resources, public health, hazards, and hazardous materials; recreation and open space resources; and utilities, services, and energy resources. He also assisted in the development of the purpose and need and alternatives sections of the document.

Lindsay Creek Project, Natural Resources Services Division, Redwood Community Action Agency, Eureka, CA. Dr. Smith served as co-principal investigator and co-lead author for the final report and a practitioner's manual for the Lindsay Creek Project, a California State Water Resources Control Board-funded project that created a model watershed-based land-use planning process for rural communities. In addition, he designed a resident attitude survey and sampling protocol, analyzed the results using multivariate statistical techniques, summarized the results in a final report, and presented the findings at several public forums.

Humboldt County, CA Resident Open Space and Trails Attitudes Survey. Dr. Smith served as lead investigator for a project funded by the California Coastal Conservancy involving surveying northern California residents about attitudes toward open space and recreational trail use. He designed the survey and sampling protocol, analyzed the results using multivariate statistical techniques, summarized the results in a final report, and presented the findings at several public forums.

SEIS for Keystone XL Pipeline – U.S. Department of State. Dr. Smith was a technical and NEPA compliance reviewer for the GHG emissions, climate change and life cycle assessment portions of the SEIS analysis as a subcontractor to ERM. Along with biological resources, this topic was one of the most contentious resource issues for the entire project.

EIS for New Corporate Fuel Economy Standards (CAFE) Rulemaking Standards–U.S. Department of Transportation - National Highway Traffic Safety Administration. Dr. Smith served as the Project Manager for the EIS for the 2011-2015 new rulemaking setting MPG requirements for passenger cars and light trucks. The EIS was the first ever prepared under NEPA to model the incremental climate change consequences of the proposed action, including the incremental effect of the proposed action on climate change-related factors including global mean temperature increase, changes in precipitation patterns, and sea level rise. The EIS won the NHTSA Administrator's Superior Accomplishment Award for 2008.

EIS for Deregulation of Genetically Engineered Alfalfa, U.S. Department of Agriculture, Animal Plant Health Inspection Service. Dr. Smith served as the Project Manager for this highly controversial EIS examining the impacts of a nation-wide proposal to deregulate glyphosate-resistant alfalfa. In addition to preparing the EIS chapters, twelve technical reports were prepared to support the EIS on topics ranging from the risk of genetic contamination of conventional and organic alfalfa, climate change impacts on alfalfa and herbicide/pesticide usage, and economic, social and trade impacts of a contamination event.

White Paper on Climate Change and Transportation Decision Making, California Department of Transportation (Caltrans). Dr. Smith was the lead author of the document section integrating climate change analysis into the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) process.

National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) Training, University of California, Davis Extension and University of California, Los Angeles Extension, Davis and Los Angeles, CA. Dr. Smith serves as a frequent trainer for courses focusing on NEPA and CEQA compliance.



Tod Monks PG, MS, MBA

Qualifications and Experience Summary

- More than 30 years of site characterization, remediation, groundwater resources, and NEPA/CEQA project experience throughout Northern California and Nevada.
- Support private and government client sectors across the west including energy; law firms; mining; telecommunications; municipal, county, and state agencies; Nevada Department of Transportation; Cal Recycle; Department of Energy; Department of Defense including the United States Air Force, Corps of Engineers, National Guard, and Navy.
- Experience includes soil and groundwater investigations, remediation, feasibility studies, mine site restoration, water supply development and management, conceptual and numerical groundwater flow and contaminant transport model development, industrial waste discharge permitting, feasibility studies, impact assessments, and numerous compliance projects.

Education

- B.S., Geology, 1983; Ohio University, Athens, Ohio
- M.S., Geology/Hydrogeology, 1988; Wright State University, Dayton, Ohio
- M.B.A., 2008; University of New Mexico, Albuquerque, New Mexico

Professional Licenses

- *Professional Geologist, California No. 8047 2005*
- *Registered Professional Geologist, Arizona No. 41586 2004*

Representative Northern California/Northern Nevada Experience

Uranium Mill Tailings Site Characterization and Remedial Action, Department of Energy, Western United States. Site Hydrogeologist. Responsible for site characterization at inactive DOE uranium mill tailings facilities located across the western United States. Performed statistical analyses for extensive water quality databases, designed and performed aquifer pumping tests, served as technical lead for baseline risk assessments, participated in the regulatory concurrence process with the Nuclear Regulatory Commission (NRC) and assisted in the NEPA process. Also provided technical oversight and evaluation of in situ field saturated permeability testing to determine the saturated permeability range of unsaturated sandstones and shales beneath mine tailings disposal cells. An accurate determination of the range of permeability was critical to understanding the long-term performance of the disposal cells.

Sacramento Municipal Utility District (SMUD) Groundwater Amendment (GA) Pilot Test Work Plan for SMUD-- Kramer Site. Project Hydrogeologist. Assisted in evaluation of the effectiveness of utilizing groundwater amendment in reducing the mass of the volatile organic compounds (VOCs) in the groundwater beneath the Site, thus causing an overall decrease in VOC concentrations in groundwater. The Site hydrogeologic conditions indicated that a groundwater recirculation design should be compared with alternate methods of direct amendment injection into groundwater using EHC® ISCR Reagent (EHC) or an equivalent product.

Basewide Groundwater Monitoring and Remediation, Naval Air Station (NAS) Fallon, Nevada. Project Hydrogeologist and Field Team Lead. Worked on projects involving basewide characterization and remediation at NAS Fallon. Assisted in the installation of a basewide groundwater monitoring network, including over 180 surface water and groundwater monitoring locations. In addition, I coauthored the first Basewide Hydrologic Monitoring Report

for NAS Fallon and was the primary author for the first Basewide Well Utilization Plan, which involved basewide management of over 500 monitoring wells.

Statewide Naturally Occurring Asbestos (NOA) and Erionite Characterization, Nevada Department of Transportation (NDOT), Nevada. Project Geologist. Worked on the NOA and erionite Sampling and Analysis Plan for this project. Other phases of this ongoing project include mapping along roads and rights-of-ways, including mapping up to a maximum of 100 feet beyond the rights-of-way boundaries. This project involved an initial desktop graphical information system, data review and analysis, data and field verification; and the delivery of the GIS geodatabase to NDOT.

Development of Hydrologic Site Conceptual Model, Barrick Gold Strike Mine, Gold Strike Mine, Nevada. Project Hydrogeologist. Conducted analyses of groundwater levels and hydrologic data in the vicinity of Barrick, Gold Strike Mine, Nevada.

Industrial Wastewater Effluent Discharge and Groundwater Monitoring, GE-Hitachi Nuclear Energy, Vallecitos Nuclear Center, Sunol, California. Project Manager. Monitoring and water quality evaluation conducted to determine the effectiveness of the Site's wastewater facility, measure groundwater conditions beneath the Site's disposal areas and identify any correction actions, if any, required to meet the Site's effluent limitations.

Quarterly Monitoring Reporting, Landfill Gas Mitigation Program, Kiefer Landfill, Sacramento California, Sacramento County Department of Waste Management and Recycling (DWMR), Sacramento, California. Project Hydrogeologist. Provided progress reports on activities completed during each quarter and estimate activities that will be completed during the next quarter. Landfill gas migration is evaluated through review of quarterly methane, carbon dioxide, oxygen and pressure data collected across the landfill.

Quarterly Monitoring Reporting, Landfill Gas Optimization Program, Elk Grove Landfill Waste Discharge Requirements, Elk Grove, California, Sacramento County Department of Waste Management and Recycling (DWMR), Sacramento, California. Project Hydrogeologist. Provided progress reports on activities completed during each quarter and estimate activities that will be completed during the next quarter. The scope of the quarterly reports includes discussion of new probe installations, results of pneumatic connectivity testing and documentation of Hydrogen Releasing Compound (HRC) injections.

Representative NEPA/CEQA Experience

Environmental Assessment, Johnston Island, Northern Pacific, Department of Defense. Technical lead for Hydrology, Water Quality, and Air Quality portions of an Environmental Assessment to evaluate potential impacts to both environmental and human resources due to disposal of plutonium-contaminated debris generated at nearby Johnston Atoll.

Environmental Assessments, Uranium Mill Tailings Site Characterization and Remedial Action Project, Western United States, Department of Energy. EA-Technical lead for Hydrology and Water Quality. Evaluated potential impacts to both environmental and human resources due to disposal of uranium mill wastes at Rifle Colorado and Grand Junction Colorado.

T-Mobile Corporation, Environmental Compliance Program Manager, Western United States. Environmental Compliance Program Manager. Managed a multi-state environmental compliance contract for a major telecommunications corporation for 10 years. Management responsibilities included financial management, training, coordinating, and managing staff involved in performing numerous assessments, including contamination assessments, biological assessments, cultural resources investigations, EAs and EISs.

