



EXECUTIVE COMMITTEE AGENDA

Thursday May 6, 2021

10:00 AM

<https://zoom.us/j/99385985130>

Or Telephone:

669-900-6833

Meeting ID: 993 8598 5130

For those joining by phone use: *9 to "raise your hand" and *6 to mute/unmute

ATTENTION: This will be a virtual meeting of the Executive Committee of the Marin Wildfire Prevention Authority pursuant to Executive Order N-29-20 issued by the Governor of the State of California. There will not be a public location for participating in this meeting, but any interested member of the public can participate telephonically by utilizing the dial-in information printed on this agenda.

1. Call to order.

2. Roll Call.

Bruce Goines

Dennis Rodoni

Sashi McEntee

Julie McMillan

Rachel Kertz

3. Agenda Adjustments.

4. Open time for public expression.

*The public is welcome to address the Executive Committee at this time on matters not on the agenda that are within the jurisdiction of the Committee. Please be advised that pursuant to the Government Code Section 54954.2, the Committee is not permitted to discuss or take action on any matter not on the agenda. Comments may be no longer than three minutes and should be respectful to the community. **Please silence your cell phones during the meeting / mute your microphone when not reporting out.***

5. Presentations.

Recommendation: receive presentations from Ascent Environmental and Panorama Environmental, ask follow up questions and make a recommendation to the full Board to award a contract to the desired firm.

- a. Environmental Consulting Proposal Presentations - Staff Report

[5a1 - Environmental Services Presentations Staff Report.pdf](#)

- b. Ascent Environmental

[AscentEnv_MWPA_OnCall_3.31.21.pdf](#)

- c. Panorama Environmental

[MWPA Env Comp Consulting_3_31 Panorama.pdf](#)

6. Executive Officer's Report - Verbal Report.

Information Only, such as information about Marin/Statewide Wildfire Status Update, Executive and Finance Committee Updates.

7. Consent Calendar.

The opportunity for public comment on consent agenda items will occur prior to the Executive Committee's discussion of the consent agenda. The Committee may approve the entire consent agenda with one action. In the alternative, items on the consent agenda may be removed by any committee or staff member, for separate discussion and vote.

- a. Approve April 1, 2021 Executive Committee Minutes

[7a1 - MWPA EXEC COMM 4-1-21.pdf](#)

- b. Approve April 7, 2021 Special Meeting of the Executive Committee Minutes

[7b1 - MWPA EXEC COMM - 4-7-2021.pdf](#)

8. Staff Reports.

- a. MWPA Legislative and Agency Policy Support Guidelines

Recommendation: receive a report from staff on the draft Legislative and Agency Policy Support Guidelines and provide feedback and input.

[8a1 - MWPA Legislative and Agency Policy Support Guidelines Staff Report.pdf](#)

[8a2 - Draft MWPA Legislative and Agency Policy Support Guidelines.pdf](#)

- b. Parcel Tax Levy Inflation Adjustment

Recommendation: receive a report from staff recommending that MWPA not impose an inflation adjustment for the 21/22 fiscal year and provide feedback and input.

[8b1 - Parcel Tax Levy Inflation Adjustment.pdf](#)

- c. Low-Income Senior Tax Exemption - Positive Contact of Receipt of Application

Recommendation: receive a report regarding a request to provide feedback to applicants for the Low-Income Senior Tax Exemption and provide direction to staff.

8c1 - Low-Income Senior Tax Exemption - Positive Contact of Receipt of Application Staff Report.pdf

8c2 - Correspondence Between CO\$T and MWPA.pdf

9. Board of Directors Meeting Agenda Review.

- a. April 20, 2021 Board of Directors Meeting Draft Agenda

Recommendation: provide staff feedback and input for the April 20, 2021 Board of Directors Agenda.

9a1 - DRAFT Marin Wildfire Prevention Authority Board of Directors-11.pdf

10. Information Items.

11. Committee Members Request Future Agenda Items.

12. Adjourn.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the MWPA at 415-539-MWPA (6972). Notification at least 48 hours prior to the meeting will enable the Agency to make reasonable accommodation to help insure accessibility to this meeting.

*Any writings or documents provided to a majority of the Executive Committee regarding any item on this agenda after the distribution of the original packet will be made available for public inspection at 28 Liberty Ship Way, Suite 2800, Sausalito CA 94965. *Note as of 4/30/20 offices are closed to the public. Therefore, documents will be made available upon request and will be available online at www.marinwildfire.org.*

Notice is hereby given that the Executive Committee may discuss and/or take action on any or all of the items listed on this agenda. If any of these matters above are challenged in Court, you may be limited to raising only those issues you or someone else raised at any public hearing described on this agenda, or in written correspondence delivered at, or prior to, this Committee meeting. Judicial review of an administrative decision of the Executive Committee must be filed with the Court not later than the 90th day following the date of the Committee meeting decision (Code of Civil Procedure Section 1094.6)

I certify that this agenda was posted on the Public Notice Bulletin Board on or before May 3, 2021 at 10 am.



Mark Brown, Executive Officer



MARIN WILDFIRE PREVENTION AUTHORITY

STAFF REPORT

For the Meeting of Thursday, May 6, 2021

To: Marin Wildfire Prevention Authority Executive Committee
From: Mark Brown, Executive Officer
Subject: Environmental Consulting Proposal Presentations

RECOMMENDATION:

Receive presentations from Ascent Environmental and Panorama Environmental, ask follow up questions and make a recommendation to the full Board to award a contract to the desired firm.

BACKGROUND:

At the February 18th, 2021 meeting the Board of Directors authorized the release of an Environmental Consulting Services Request for Proposals (RFP) to support environmental compliance for MWPA projects.

ANALYSIS:

The MWPA received two proposals, one from Ascent Environmental and one from Panorama Environmental. Both firms delivered comprehensive proposals and have demonstrated a history of quality work in their fields.

Staff recommends receiving presentations from both firms followed by a question and answer period. Following these deliberations, staff recommends the Executive Committee vote to make a recommendation to the full Board for the award of a professional services agreement to the chosen firm.

**FISCAL IMPACT:**

The overall fiscal impact is difficult to ascertain as the depth of the necessary compliance actions are impossible to predict. The costs of environmental compliance will be built into each proposed project.

ENVIRONMENTAL IMPACT:

Receiving presentations and making a recommendation for consulting services is not a "project" under the California Environmental Quality Act, because it does not involve an activity which has the potential to cause a direct or reasonably foreseeable indirect physical change in the environment. (Cal. Pub. Res. Code § 21065).

Respectfully submitted,

Mark Brown, Executive Officer



PROPOSAL

ENVIRONMENTAL COMPLIANCE CONSULTING SERVICES FOR WILDFIRE PREVENTION/HAZARD MITIGATION PROJECTS

SUBMITTED TO:

Mark Brown, Executive Officer
Marin Wildfire Prevention Authority (MWPA)
28 Liberty Ship Way, Suite 2800
Sausalito, CA 94965



March 31, 2021



Mark Brown, Executive Officer
Marin Wildfire Prevention Authority
28 Liberty Ship Way, Suite 2800
Sausalito, CA 94965

Emailed to: mbrown@marinwildfire.org

Subject: Proposal to Provide Environmental Compliance Consulting Services for Wildfire Prevention/Hazard Mitigation Projects

Dear Mr. Brown and members of the selection committee:

The Tubbs Fire in Sonoma, Napa, and Lake Counties, which at the time was the most destructive fire in state history, and other 2017 North Bay fires raised the warning flags about Marin County's vulnerability to severe wildfire hazard. The Marin County Board of Supervisors published a 2018 report that identified lessons from the 2017 North Bay fires. The Marin Civil Grand Jury published a 2019 report, entitled *Wildfire Preparedness: A New Approach*, describing a more proactive and consistent approach to public education, wildfire preparedness, evacuation options, and vegetation management. A historic County tax initiative, Measure C, was passed in 2020 with more than 70 percent of the vote to raise funds annually for wildland fire hazard reduction, resilience planning, and mitigation efforts. Following the passage of Measure C, the Marin Wildfire Prevention Authority (MWPA) was formed to lead member agencies in the County to a more fire-resilient future.

MWPA is an innovative, engaged, nimble, and determined joint powers authority representing essentially every Marin County community. It is pursuing leading-edge strategies for reducing wildfire risk and improving wildfire resilience that take into full account protecting not only the people and property of the County but also its environmental quality and biodiversity. To this end, MWPA established the Ecologically Sound Practices Partnership, a collaboration between fire officials and Marin County climate and environmental organizations to define the best practices for implementing wildfire prevention plans using sound science and careful stewardship of natural resources. The Vision Statement of MWPA captures well its commitment to Marin County communities:

Marin Wildfire Prevention Authority communities are informed, prepared, fire adapted, resilient and capable of withstanding a major fire limiting loss of life and major property damage while protecting our rich environmental diversity.

Recognizing the urgency of increasing the pace and scale of environmentally sound fire-fuel vegetation treatments in Marin County, MWPA is requesting advanced-level California Environmental Quality Act (CEQA) compliance services to help achieve the authority's vision and mission for wildfire preparedness and resilience. MWPA recognizes that it must engage a CEQA consultant that understands the authority's needs and provides leading-edge, state-of-the-law environmental compliance strategies.

Ascent Environmental (Ascent) fully understands the urgency of California's wildfire crisis. We have worked tirelessly with the California Board of Forestry and Fire Protection and California Department of Forestry and Fire Protection to create, through preparation of the California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (EIR), the newest innovation in tools for CEQA streamlining of vegetation treatment projects to reduce wildfire risk. This work includes designing an implementation process and supporting tools for agencies like MWPA and its members to conduct a Project-Specific Analysis of qualifying vegetation treatment projects in 2–4 months using a within-the-scope finding relying on the CalVTP Program EIR, along with streamlined CEQA compliance strategies for treatments in the Local Responsibility Area that rely on the CalVTP Program EIR. Ascent's work to provide communities with wildfire resilience support is not confined to our role in the CalVTP Program EIR process. We have also designed Senate Bill 901 Statutory Exemption approaches for the Sierra Nevada Conservancy to apply grant funding to projects in the Federal Responsibility Area, and we have prepared regional-scale program EIRs focused on the needs of specific communities of the region, such as the Hill Campus Wildland Vegetative Fuel Management Plan for the University of California, Berkeley, and the Tahoe Program Timberland EIR for the El Dorado and Placer County parts of the Lake Tahoe Basin.

We are excited to work with MWPA to develop advanced CEQA tools tailored specifically to Marin County's resources, jurisdictions, environmental advocates, and vulnerable community needs. Ascent Principal Curtis E. Alling, AICP, and Senior Environmental Project Manager Heather Blair, who both led preparation of the CalVTP Program EIR, would also lead the MWPA contract. Ascent staff have thorough knowledge of Marin County resources and issues from decades of CEQA document experience with the County's Community Development Agency. We believe there are approaches that can yield a considerable number of quick victories in the expeditious environmental review of urgent vegetation treatment projects. Additionally, we can objectively advise MWPA on a comprehensive analysis strategy to achieve sound environmental protection of sensitive Marin County resources while reducing wildfire risk, possibly including a locally defined, program-level EIR approach.

We greatly appreciate your consideration of our submittal. Curtis and Heather are your primary points of contact for this effort. Please contact either of us if you have any questions or require further information. As a principal and owner of the firm, Curtis is authorized to negotiate and execute a contract and will do so in full good faith.

Sincerely,



Curtis E. Alling, AICP
Principal

e: curtis.alling@ascentenvironmental.com
p: 916.930.3181



Heather Blair
Program Manager

e: heather.blair@ascentenvironmental.com
p: 916.732.3337

Enclosures 20210038.00

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A Resumes

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Team Qualifications



Ascent Environmental is the consultant author of the California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (Program EIR) and the architect of CalVTP's streamlining strategies for rapid California Environmental Quality Act (CEQA) compliance of wildfire risk reduction projects. The Marin Wildfire Prevention Authority (MWPA) can rely on Ascent to apply the streamlining benefits of the CalVTP to MWPA projects, including how to extend the benefits outside of the State Responsibility Area (SRA).

Ascent staff are experts in CEQA and National Environmental Policy Act (NEPA) compliance. Our clients rely on us to expeditiously complete wildfire risk reduction projects of all sizes and guide our client agencies to the best resource management outcomes using tailored and efficient regulatory compliance processes. We are also CEQA educators to agencies and other consultants and stay up to date on relevant case law and updates to CEQA and NEPA regulations. We coordinate regularly with the legal counsel in the Office of Planning and Research and California Natural Resources Agency on leading-edge thinking regarding the efficient practice of the CEQA process and preparation of high-quality document content. We leverage this in-depth expertise to creatively adapt CEQA compliance to our clients' needs—in this case, for informed decision making, resource protection, and legal defensibility, and to facilitate streamlining opportunities for MWPA's vegetation treatment projects. We think strategically, work collaboratively with clients to meet objectives that are in the best interests of the project, and implement the CEQA/NEPA process in a way that is transparent and credible to the public.

Across our staff of 100, we have depth of resources and extensive wildfire resiliency/vegetation management and on-call contract experience. Our references, presented in Section 5, "References," will attest to Ascent's strong record of responsiveness, our deep technical knowledge, and our ability to prepare quality products on time and within budget. Please contact them to discuss Ascent's performance on projects directly analogous to MWPA's needs.

Because Ascent has deep wildfire risk reduction project experience, MWPA can trust that the Ascent team will expertly identify the most expedited, credible strategies and prepare the substantial evidence supporting use of exemptions or the environmental documents required for treatment projects, and effectively coordinate with responsible and member response agencies, as needed.

Ascent has been on the leading edge of helping public agencies respond to California's wildfire crisis by streamlining environmental review of vegetation treatment projects.

We are on the front lines of developing CEQA strategy to increase the pace, scale, and effectiveness of agency response to the state's wildfire crisis, targeted direction from the governor's Executive Order B-52-18 and associated legislation (such as Senate Bill 901 and Senate Bill 1260, Statutes of 2018). Accordingly, we have prepared, or are currently working on, several of the state's most important and innovative contemporary environmental review programs for wildfire risk reduction and landscape resiliency. We have prepared EIRs for large-scale fire fuel management programs, including the Board of Forestry and Fire Protection's CalVTP Program EIR, which is being implemented statewide by many agencies.

We specialize in developing environmental review strategies for environmental programs and resource management plans ranging from the highly complex to the straightforward, including multiple fire fuel management plans that address small and large geographic areas and often span multiple jurisdictions. Relevant experience includes program EIRs for University of California (UC) Berkeley's Hill Campus Wildland Vegetative Fuel Management Plan and the Tahoe Program Timberland EIR, as well as extensive preparation of categorical exemptions and initial study/mitigated negative declarations (IS/MNDs) for the Sierra Nevada Conservancy and California Tahoe Conservancy. Through our work, we have developed collections of environmentally protective project requirements to minimize impacts, many of which have been vetted with resource agencies, including the California Department of Fish and Wildlife.

Subconsultant Qualifications



Matt Greene Forestry & Biological Consulting

Matt Greene Forestry & Biological Consulting is founded on the principle of achieving a balance between landowners' needs, water use and demand, and the needs of wildlife to ensure that the overall quality of natural lands is maintained. In recent years, Matt Greene, RPF, has continued to build the legacy of working to help land trusts, open space districts, and small landowners manage their lands and keep those lands productive, while helping to improve the health of the forests. Projects have involved management, monitoring, acquisition, valuations, permitting and legal compliance documents, biological and cultural surveys, fire protection/fuel treatment planning, and landscape level planning of forestlands and ranchlands.

Matt has spent over 21 years performing fire fuel assessments and reduction projects near structures and on a larger landscape level, conducting biological surveys, preparing erosion control plans, preparing and implementing Timber Harvest Plans and Non-Industrial Timber Management Plans for clients to manage their forests, preparing California Cooperative Forest Management Plans, and conducting timber inventories and timber valuations. He served on the California Licensed Forester Association Board of Directors from 2009 through 2015 and became president of the association in 2012. Matt has also served on the Board of Directors of Forest Landowners of California since 2018. He has the background and expertise to assist MWPA with a variety of needs, ranging from designing and implementing vegetation treatments to conducting biological and cultural surveys.

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Team Description

Ascent has assembled a highly qualified team of experts who specialize in CEQA and NEPA compliance for wildfire risk reduction projects. This team's unique experience with CalVTP Program EIR authorship and design of the Project-Specific Analysis (PSA) implementation approach will help MWPA move quickly to address the urgency of wildfire risk in Marin County.

Ascent has carefully selected a principal-in-charge and key project staff whose experience and expertise match well with MWPA's needs. All three members of the proposed contract management team were leaders of the CalVTP Program EIR preparation and are now managing the PSA implementation process. **Curtis E. Alling, AICP**, who has more than 40 years of CEQA compliance, planning, and natural resources management experience, will serve as principal-in-charge and will provide strategic direction and quality assurance. Serving as program manager, **Heather Blair** is a senior environmental project manager with 17 years of experience managing on-call environmental services contracts and complex environmental projects for agencies throughout California. Her practice includes natural resource management; CEQA and NEPA compliance; and environmental policy and regulation, including managing preparation of the CalVTP Program EIR. Heather will provide technical and strategic guidance and support quality assurance. She will be the primary, day-to-day point of contact with MWPA and will provide schedule, budget, and overall contract management. **Lily Bostrom** has more than 8 years of experience in project management and environmental review for fire fuel management, open space, and recreation projects, including preparing several technical sections of the CalVTP Program EIR and leading preparation of the Bear Creek Redwoods PSA. She will serve as the deputy program manager supporting Heather Blair with day-to-day contract and task order management duties.

The Ascent team includes four experienced task order managers supported by a deep bench of technical experts, allowing multiple projects to be conducted simultaneously. The task order managers supporting this contract have been carefully chosen based on their experience managing natural resource-related projects, including fire fuel management projects. The task order managers will be **Lily Bostrom; Adam Lewandowski, AICP; Stephanie Rasmussen;** and **Tiffany Lunday**.

The team is rounded out by the inclusion of **Matt Greene**, a Registered Professional Forester (RPF) who has spent two decades preparing and implementing management plans for wildfire risk reduction and forest management along the northern California coast, including conducting biological and cultural surveys. He is available to advise

MWPA on the technical aspects and prescriptions of treatment design, as well as support implementation of vegetation removal, including advising on options for biomass disposal.

Summary of Key Staff

The organizational chart below depicts the structure of the Ascent team, including roles and responsibilities. Each identified member of the Ascent team is available and committed to serving MWPA through the successful completion of this project. In addition, and as needed, we can draw on our environmental, natural resources, cultural resources, and climate services practice areas to perform technical elements of work orders. Ascent's staff availability is more than sufficient to ensure maximum responsiveness and provide high-quality service on multiple, concurrent task orders. Resumes describing the qualifications, relevant experience, and expertise of each key staff member are included in Appendix A.



**CURTIS E. ALLING, AICP****Principal-in-Charge****YEARS OF EXPERIENCE****40+****EDUCATION**

MA, Natural Resources Planning and Development, Texas A&M University

BS, Wildlife Science, Cornell University

CERTIFICATIONS

American Institute of Certified Planners (No. 040218)

Curtis E. Alling, AICP, is recognized statewide as an expert in CEQA and NEPA. He is also a specialist in complex environmental impact analysis for natural resources management programs, including fire fuel treatment/wildfire risk reduction projects. He also oversees several on-call environmental services contracts for state and local agencies, including for the Santa Clara Valley Open Space Authority, California Department of Fish and Wildlife, and California Department of Parks and Recreation (California State Parks). He has more than 40 years of experience and has managed or directed more than 1,000 environmental documents and planning and natural resources studies for federal, state, and local agencies. He has managed numerous complex, contentious projects and landscape-scale NEPA/CEQA documents. His project specialties include fire fuel reduction, biomass, forest habitat management, and other sensitive habitat management planning. Curtis has also led numerous controversial CEQA compliance projects in Marin County for more than 30 years, including for the Grady Ranch (Lucasfilm) Master Plan Update, Waldo Point Harbor Master Plan, Bel Marin Keys Planned Development, and Buck Center for Research in Aging.

As the principal-in-charge of the CalVTP Program EIR, Curtis served as the key CEQA strategist and helped the Board of Forestry and Fire Protection from the outset develop a sound CEQA compliance approach. Currently, he is overseeing the preparation of CalVTP PSAs and joint PSA/addenda. In addition, he has directed several of Ascent's forest management projects, including the North Tahoe Interagency Forest Health and Biomass Project IS/MND for the California Tahoe Conservancy, the Root Creek Drainage Forest Fuels Management Plan and Public Safety Improvement Project IS/MND for California State Parks, and NEPA compliance assistance to Los Padres National Forest for the restoration of burned areas of the Piru and Zaca fires for the National Fish and Wildlife Foundation and U.S. Forest Service.

Curtis has also regularly instructed for the Association of Environmental Professionals, American Planning Association, Continuing Legal Education International, and UC Extension on CEQA and NEPA practice, natural resources management, and climate change issues.

**HEATHER BLAIR****Program Manager****YEARS OF EXPERIENCE****17****EDUCATION**

MS, Conservation Biology, California State University, Sacramento

BS, Ecology, California State University, Sacramento

Heather Blair is a senior project manager and environmental scientist experienced in the managerial and technical aspects of environmental review of projects throughout California. Heather has extensive experience managing on-call environmental services contracts for government agencies, including the California State Lands Commission, California Public Utilities Commission, Sacramento Municipal Utility District, and Western Area Power Administration. With 17 years of professional experience, she has prepared and managed the preparation of environmental documents pursuant to federal, state, and local environmental regulations, including CEQA, NEPA, the California Fish and Game Code, and the federal Endangered Species Act.

Notably, as the project manager for the CalVTP Program EIR, she successfully led the preparation of the highly complex and controversial Program EIR through to completion under challenging schedule constraints. Currently, she is managing the CalVTP implementation program through preparation of several PSAs and PSA/addendums throughout California and a statewide training program on CEQA streamlining using the CalVTP Program EIR. She is relied upon by agency clients to advise on strategic regulatory compliance pathways to expedite delivery of wildfire risk reduction and landscape resilience projects throughout the state.

**LILY BOSTROM****Deputy Program Manager
Task Order Manager****YEARS OF EXPERIENCE** 8**EDUCATION**

MS, Environmental Science and Management, University of San Francisco

BS, Marine Biology, University of California, Santa Cruz

Lily Bostrom is a senior environmental planner and project manager with 8 years of experience in environmental consulting. She has managed several programmatic and project-level environmental compliance documents for wildfire risk reduction and forest management plans, open space land use plans, and park and trails planning projects, including preparation of associated “within the scope” checklist documents. Most recently, Lily has been managing an on-call contract for the Santa Clara Valley Open Space Authority, managed the preparation of a PSA under the CalVTP, and served as the deputy project manager for the UC Berkeley Wildland Vegetative Fuel Management Plan EIR.

In addition to managing projects, Lily has extensive experience in writing technical sections for all types of CEQA and NEPA environmental documents for a variety of projects, including vegetation treatment projects; park and open space development; land use plans; and transportation infrastructure, including highways, bike and pedestrian paths, bridges, bus rapid transit, and high-speed rail. In her free time, Lily serves on the Board of Directors for the California Association of Environmental Professionals in the Bay Area; she has been the acting treasurer since early 2017.

**ADAM LEWANDOWSKI, AICP****Task Order Manager****YEARS OF EXPERIENCE** 19**EDUCATION**

MA, Environmental Planning, Prescott College

BA, Wildlands Ecology and Management, Sterling College

AA, Natural Resources Management, Sterling College

Adam Lewandowski, AICP, is a senior project manager and environmental planner with 19 years of experience. His expertise includes natural resource, recreation, and community planning, as well as CEQA and NEPA compliance. In his previous roles as the long-range planning manager at the Tahoe Regional Planning Agency and as an environmental planner for the California Tahoe Conservancy, he played a lead role in numerous successful long-range planning and environmental projects in the Lake Tahoe Basin. Adam brings an in-depth understanding of the federal, regional, state, and local environmental regulations affecting fire fuel management plans and vegetation treatment projects. In addition to planning and environmental compliance expertise, Adam has experience in public outreach and facilitation, restoration and mitigation design, and environmental policy and regulation. His project experience includes a variety of long-range planning, vegetation treatment for fuel reduction, natural resource, recreation, and environmental policy projects. He also has technical knowledge in the areas of scenic resources, recreation, and land use and zoning.

He managed preparation of the Tahoe Program Timberland EIR and is currently supporting a regional, multiagency implementation effort. He has managed more than a dozen task orders under Ascent’s Sierra Nevada Conservancy and California Tahoe Conservancy contracts, including categorical exemptions and IS/MNDs for wildfire risk reduction and forest health projects.

**STEPHANIE RASMUSSEN****Task Order Manager****YEARS OF EXPERIENCE** 17**EDUCATION**

BS, Environmental Biology and Management, University of California, Davis

Stephanie Rasmussen has 17 years of experience as an environmental analyst, project manager, and assistant project manager. She prepares project- and program-level CEQA documents, environmental checklists, habitat conservation plans, and resource management plans. Her project experience includes work on public and private sector projects, including fire fuel management, natural resources, water resources, and public facilities projects. Stephanie’s responsibilities include project management and coordination, as well as writing, editing, and compiling the various sections of environmental documents. She understands the regulatory guidelines and legal requirements, as well as the fundamentals, of preparing and delivering these documents.

She was the assistant project manager for the CalVTP Program EIR, authored several sections of the CalVTP Program EIR, and coordinated extensively with the California Department of Forestry and Fire Protection (CAL FIRE) on its CEQA requirements. She was the lead planner for preparation of the Yuba Foothills Healthy Forest Project PSA/Addendum and managed preparation of UC Berkeley’s Grouse Ridge PSA/Addendum.



TIFFANY LUNDAY

Task Order Manager

YEARS OF EXPERIENCE 12

EDUCATION

MPil., Geography, University of Cambridge, 2007

BA, Geography, University of British Columbia

Tiffany Lunday is an environmental planner with 12 years of experience. She has prepared documents for CEQA, NEPA, and Tahoe Regional Planning Agency regulatory compliance, including water quality baseline reports, EIR and environmental impact statement (EIS) sections, and environmental assessments (EAs). Tiffany has managed a variety of projects, including for the Sierra Nevada Conservancy's Proposition 1 Grant Program for forest management and watershed restoration projects and NEPA assistance for the Los Padres National Forest, Zaca and Piru Fires Grant Program.

Tiffany also has experience preparing permit applications for a variety of federal and state-level permits, including Water Pollution Control Permits, National Pollutant Discharge Elimination System permits, Section 404(b) permit applications, and state stormwater general permit applications. She specializes in surface water and groundwater quality analysis and remediation, surficial and subsurface geological analysis, and preparation of environmental review documents in compliance with NEPA.



LARA RACHOWICZ, PhD

Wildlife Biologist

YEARS OF EXPERIENCE 23

EDUCATION

PhD, Ecology, Department of Integrative Biology, University of California, Berkeley

MPH, Biostatistics/Epidemiology, University of California, Berkeley

BS, Geography, University of Wisconsin, Madison

Lara Rachowicz, PhD, is an ecologist with 23 years of technical and project management experience throughout California, with a focus on special-status species. She manages and supports the preparation of environmental documents for resource management programs (e.g., vegetation management to reduce wildfire risk and promote ecological restoration). Lara manages the implementation of compliance and mitigation programs and provides senior technical review and quality assurance of permitting and environmental documents. She has extensive experience effectively coordinating with resource agencies, including the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife (CDFW). Her ecological research and federal resource management experience has focused on threats to vulnerable wildlife populations, primarily amphibian and avian species.

As the co-lead biologist for the CalVTP Program EIR, Lara designed and prepared an analysis to cover hundreds of species in the treatable landscape to maximize the usefulness of the Program EIR for later treatment projects. To this end, she coordinated extensively with CDFW. She is now serving as the senior biologist for the preparation of multiple PSAs under the CalVTP Program EIR and managing implementation of the mitigation monitoring and reporting program for the Yuba Foothills Healthy Forest Project PSA/Addendum.



TAMMIE BEYERL

Botanist and Wetland Ecologist

YEARS OF EXPERIENCE 19

EDUCATION

MS, Plant Biology (Ecology), Southern Illinois University, Carbondale

BS, Plant Biology, Southern Illinois University, Carbondale

Tammie Beyerl is a senior botanist and wetland ecologist specializing in biological analyses for compliance with CEQA/NEPA, Clean Water Act, state and federal Endangered Species Act, and California Fish and Game Code requirements. She is particularly skilled at preparing environmental compliance documents for projects with complex biological resource issues. Her expertise includes environmental review and impact analysis for vegetation management plans. She has extensive experience coordinating with resource agencies to develop and implement appropriate mitigation and design solutions. Tammie has 19 years of field practice in vegetation and wetland ecology and plant taxonomy in the Sacramento and San Joaquin Valleys, the Sierra Nevada, the Central and Southern Coast Ranges, and the Great Basin.

As the co-lead biologist for the CalVTP Program EIR, she coordinated with CDFW to analyze impacts on more than 100 special-status plants and on sensitive natural communities. From her experience on fire fuel management and forest health projects, she has extensive knowledge of the fire ecology of vegetation in California, including natural fire return intervals and impacts related to type conversion.



ALTA CUNNINGHAM

Cultural Resources Specialist

YEARS OF EXPERIENCE 21

EDUCATION

MA, Historic Preservation, Savannah College of Art and Design

BS, History, University of California, Davis

Alta Cunningham has 21 years of experience in environmental consulting. Her experience as an architectural historian includes records searches, archival research, historic building and structure surveys and evaluations, and cultural resources documentation for NEPA and CEQA projects ranging from single building evaluations to districtwide surveys. Alta has completed evaluations for historic ranch complexes on open space preserves, higher education facilities, pre- and post-World War II residential and commercial buildings, agricultural properties, and water conveyance systems. She meets the Secretary of the Interior's Professional Qualification Standards for architectural history and history.

Alta provides archaeological, historical, and tribal cultural resources expertise for CEQA documents and has prepared numerous cultural resources sections. She has also supported agencies with tribal consultation for a wide variety of projects throughout the state. She prepared the archaeological, historical, and tribal cultural resources section of the CalVTP Program EIR and supported the Board of Forestry and Fire Protection with tribal consultation. Recently, she prepared the cultural resources section for the Yuba Foothills Healthy Forest PSA/Addendum and the North Tahoe Interagency Forest Health and Biomass Project IS/MND.



CHRISTOPHER LOVETT, PhD

Air Quality/GHG Specialist

YEARS OF EXPERIENCE 13

EDUCATION

PhD, Environmental Engineering, University of Southern California

MS, Environmental Engineering, California State University, Fullerton

BS, Biochemistry and Molecular Biology, University of California, Santa Cruz

Christopher Lovett, PhD, is an experienced air quality engineer who has worked at the California Air Resources Board, as well as various consulting firms in southern California and the Pacific Northwest. He also spent 2 years at the University of Southern California as a Viterbi research fellow investigating the health impacts of particulate matter in urban areas, including Los Angeles, Beirut, and Milan. This research formed the basis of his PhD dissertation and resulted in several publications in peer-reviewed journals. Through his extensive consulting experience, Christopher has gained a detailed knowledge of the rules, regulations, and test methods of the U.S. Environmental Protection Agency, California Air Resources Board, Bay Area Air Quality Management District, and South Coast Air Quality Management District. He is also experienced in performing environmental impact analyses and preparing environmental documents (e.g., EIRs, EISs, EAs, and IS/MNDs) as part of CEQA/NEPA processes. Most recently, Christopher prepared the air quality and greenhouse gas analysis for the UC Berkeley Wildland Vegetative Fuel Management Plan EIR and expanded his repertoire to include noise modeling and impact analysis.



KELLEY KELSO, CPESC, QSD/QSP, QISP

Soil and Water Resources Specialist

YEARS OF EXPERIENCE 20

EDUCATION

MS, Geology, University of California, Davis

BS, Geology, University of California, Los Angeles

Kelley Kelso, CPESC, QSD/QSP, QISP, is an experienced environmental scientist who has worked in the natural resource, water quality, and stormwater field since 1999. Her professional experience includes working for nonprofit organizations, private companies, educational institutions, and local and state resource agencies. Kelley has successfully worked in the complex regulatory environment of the Lake Tahoe Basin in both Nevada and California on a variety of natural resource, erosion control, and stormwater compliance programs and projects. Her experience includes working closely with clients in developing and delivering stormwater and environmental compliance, construction site BMP programs, erosion control and stormwater retrofit programs, environmental permits, and CEQA and NEPA documents. Kelley has project management experience, as well as performs technical fieldwork, such as wetland delineations and biological resource surveys. She is also adept at assisting clients with outreach and education efforts associated with their stormwater and erosion control programs.

Kelley prepared the geology and soils section of the CalVTP Program EIR, the Yuba Foothills Healthy Forest Project PSA/Addendum, and the UC Berkeley Wildland Vegetative Fuel Management Plan EIR. She served as a technical analyst for the Los Padres Forest-Wide Invasive Plant Treatment Program EA and the North Tahoe Interagency Forest Health and Biomass Reduction Project IS/MND.



MATT GREENE, RPF

Treatment Design and Implementation

YEARS OF EXPERIENCE 20

EDUCATION

BS, Forestry and Wildlife Management, University of California, Berkeley

CERTIFICATIONS

Registered Professional Forester #2747

Matt Greene is a Registered Professional Forester with more than 20 years of experience helping agencies and small landowners manage their lands and keep those lands working, while helping to improve the health of those forests. Matt has spent more than 21 years performing fire fuels assessments and reduction projects near structures and on a larger landscape level, conducting biological surveys and erosion control plans, preparing and implementing Timber Harvest Plans and Non-Industrial Timber Management Plans for clients to manage their forests, preparing California Cooperative Forest Management Plans, and conducting timber inventories and timber valuations. His client base ranges from Santa Cruz County north to Mendocino County and includes numerous nonindustrial private and public landowners, summer camps, recreation properties, watershed utilities, and other small landowners. Notable project experience includes the UC San Francisco Suto Forest Eucalyptus Forest Management Plan and EIR and the Salt Point State Park Bishop Pine Management Plan and Forest Treatments. Matt is advising on a permitting process (within the Coastal Zone) to work within and supervise the operations of the removal of dead and dying Bishop pine within Salt Point State Park. The Forest Management Plan is being designed as a long-term planning document on how to deal with and treat a large array of insects and diseases that are currently affecting the coastal pines.

3

Understanding and Approach

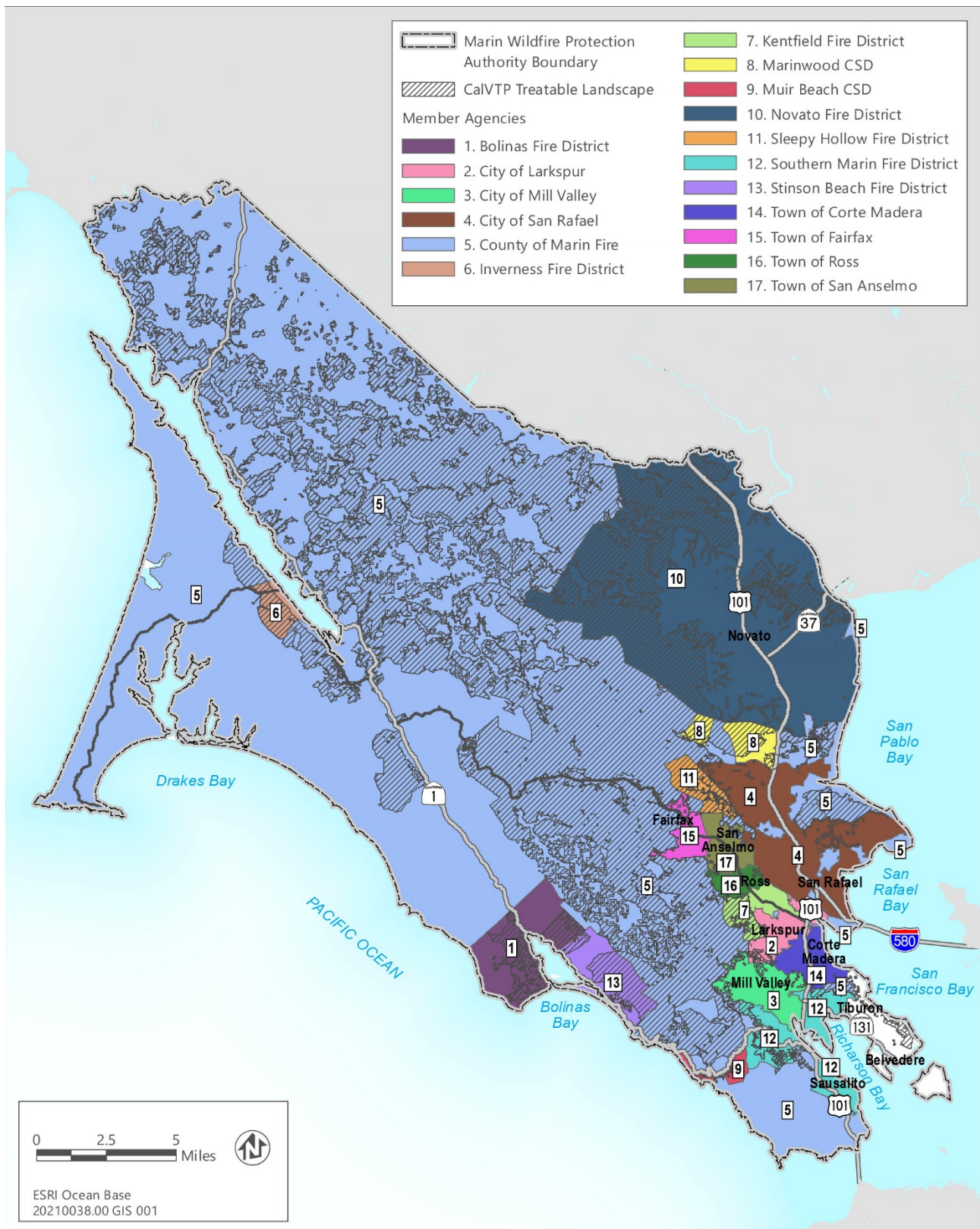
Understanding of MWPA's Needs

MWPA, a 17-member Joint Powers Authority (JPA), has been formed to lead a new wildfire resilience program funded by a voter-approved parcel tax, Measure C, which passed with overwhelming support in 2020. This historic wildfire prevention measure will fund proactive state-of-the-art wildfire prevention and preparedness efforts in Marin County for the next 10 years. The need for MWPA to implement vegetation treatments and other measures to reduce wildfire risk is urgent to avoid and reduce the damaging effects of a catastrophic wildfire.

Since 2017, California has seen some of the deadliest and most destructive wildfires in recorded history, and 2020 brought the largest wildfire season in California's modern history. A rare, dry lightning weather event followed by strong winds ignited and fueled hundreds of fires throughout northern California during August 2020, including the Woodward Fire in West Marin, which burned through rugged terrain in the Point Reyes National Seashore and triggered evacuation of nearby communities.

MWPA's jurisdiction encompasses nearly all of Marin County (see figure below). From its coastal beaches and chaparral to the grasslands, oak woodlands, and redwood groves of the coastal hills and valleys, Marin County consists of federal land (owned primarily by the National Park Service), several incorporated cities, and cultivated agricultural lands. The County's land area is largely rural, with most of the population in the City-Centered Corridor, located in the eastern portion of the county, along U.S. Highway 101. The northwest region of the county is primarily agricultural rangeland, whereas the western part of the county, in and around Point Reyes National Seashore, is distinguished by its numerous recreation areas and parks. Approximately 60,000 acres and 65 percent of living units are located within the wildland-urban interface of Marin County, where vegetative fuels and the built environment meet¹. Furthermore, Marin County is considered a biological hotspot and is recognized by the United Nations

¹ Marin County Fire Department. 2020 (December). *Marin County Community Wildfire Protection Plan*. Adopted in 2016. Woodacre, CA. Prepared by Sonoma Technology, Petaluma, CA. Available: <https://drive.google.com/file/d/1eYRFu3CRK-8NvXX7DwllrIX948Ua0l5x/view> Accessed March 18, 2021.



MWPA Jurisdiction, Member Agencies, and CalVTP Treatable Landscape

Educational, Scientific and Cultural Organization as containing globally significant habitats and biodiversity². MWPA serves the citizens of Marin County, who are passionate about reducing wildfire risk while protecting the County's prized natural areas and who are politically engaged in efforts to seek accountability from local officials using public funds.

In response to the urgency expressed by the community and the immediacy of the wildfire threat to the lives, property, and natural resources of the County, MWPA seeks to implement wildfire reduction measures at an accelerated pace. Approximately 40 percent of MWPA's budget will fund projects likely to require compliance with CEQA and/or NEPA. Projects requiring CEQA/NEPA support include vegetation management, defensible space, and hazard mitigation projects—projects similar to and potentially including projects listed in MWPA's 2020 Work Plan and the *Marin County Community Wildfire Protection Plan*. Proposed projects identified in these plans, such as removal of ground vegetation and ladder fuels to enhance evacuation routes and defensible space surrounding communities, maintenance and expansion of ridgetop fuel breaks in the wildland-urban interface, hazardous tree removals to improve egress for residents and access for emergency vehicles in rural areas, and establishment of shaded fuel breaks to enhance defensible space surrounding communities, may require environmental review. Environmental review and use of community funding for these projects must occur quickly and efficiently, with complete transparency and meaningful public involvement.

The scope of work entails providing a varying range of environmental consulting services, including strategic advice and documentation pertaining to compliance with CEQA and NEPA, as well as technical studies and other regulatory support services for proposed vegetation management, defensible space, and hazard mitigation projects within MWPA's jurisdictional boundaries. As explained in detail below, numerous MWPA projects may be covered under the CalVTP Program EIR.

² United Nations Educational, Scientific and Cultural Organization. 2017. Biosphere Reserves. Data last updated 2017. Available: <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/united-states-of-america/>. Accessed March 18, 2021.

Approach to Completing the Scope of Work

Based on our understanding of MWPA, its needs, and the community it serves, and informed by Ascent's state-of-the-art work on tailored strategies for streamlining CEQA review of vegetation treatment projects, we offer an approach to completing the scope of work that is centered on the following principles:

- ▶ **Expert regulatory compliance strategy.** Ascent is at the leading edge of implementing CEQA and NEPA streamlining strategies for wildfire risk reduction to increase the pace and scale of vegetation treatment. We work to provide the correct level of environmental documentation to meet our clients' needs for public transparency and legal defensibility—no more, no less.
- ▶ **Meaningful public involvement.** Ascent acknowledges the interest of the community in MWPA's use of Measure C funds and MWPA's actions to reduce wildfire risk. The MWPA Board must be accountable to the community. Ascent is available to the Board at its request to ensure it is informed and will provide clear, concise, and accurate information to the public.
- ▶ **Efficient use of public funding.** Ascent takes an objective, professional, and fiscally responsible approach to environmental review. Our demonstrated capability to provide the correct level of environmental documentation and adhere to the agreed-upon schedule and budget will ensure efficient use of Measure C funds. We will compile the necessary cost information to help MWPA objectively assess the cost-effectiveness of continuing to use existing streamlining strategies or to prepare a Program EIR for MWPA projects.

MWPA can rely on Ascent to provide objective, evidence-based information and to interface with MWPA and the public effectively and professionally to explain issues and environmentally sound compliance approaches.

As-Needed Environmental CEQA/CalVTP/NEPA Consultation

At Ascent, we are CEQA/NEPA experts, strategists, and educators, trusted by agency clients to advise on legislative updates and to provide CEQA and NEPA compliance services for their most important and complex programs, as well as first-of-their-kind projects requiring expert knowledge of CEQA and NEPA.

We stay up to date on the evolving and dynamic requirements of the environmental planning practice. We offer professional instruction, including instruction related to published CEQA case law, changes to the CEQA statute and guidelines, and other laws and regulations. We create innovations in CEQA compliance approaches, tailored to special circumstances (such as the need to increase the pace and scale of vegetation treatment for wildfire risk reduction). Ascent principals and senior leaders have also been directly involved in CEQA legislative review and guidelines development, and we are regularly invited as instructors for the UC Davis Extension, American Planning Association, Association of Environmental Professionals, Continuing Legal Education, and client agencies on CEQA practice, case law updates, and other topics.

We have prepared, or are currently working on, several of the state's most important and innovative contemporary environmental review programs for wildfire risk reduction and landscape resiliency. We are at the leading edge of developing regulatory streamlining strategies to expedite project implementation. As consultants to the Board of Forestry and Fire Protection to support CalVTP implementation, we are aware of issues that arise for project proponents using the CalVTP.

With our CEQA expertise and CalVTP implementation experience, we have streamlining strategies for CEQA compliance in the Local Responsibility Area.

The most frequently asked question regarding the CalVTP is how to use the CalVTP for CEQA compliance when treatment areas extend outside of the State Responsibility Area treatable landscape (e.g., into Local Responsibility Area). In the "PSA/Addendum" section, below, we describe an approach that uses a combined PSA and addendum to the CalVTP Program EIR to address this issue. At contract kickoff, we will discuss proposed and upcoming MWPA projects in detail and will request any available spatial data for the treatment areas. Depending on the extent and composition of project areas outside of the treatable landscape and the potential effects of proposed treatments, an

addendum may suffice. If not, a supplement to the CalVTP Program EIR may be considered to encompass all lands outside of the treatable landscape within MWPA's jurisdiction.

We will apply this expertise to advise the Board and MWPA staff on project issues and compliance approaches under CEQA (including CalVTP) and NEPA. This may entail participating in one-on-one calls, face-to-face meetings, video conferences, or conference calls and developing memoranda or reports on issues and questions raised by Board members or the public.

At the end of the on-call contract, or as requested, we will objectively advise MWPA, based on Ascent-compiled data on the time and resources required to complete environmental documentation for MWPA-funded projects, whether it is more cost-effective to continue using existing CEQA streamlining strategies or to prepare a Program EIR for MWPA projects. Our professional focus as CEQA consultants and our interest as Californians is to rapidly reduce wildfire risk while protecting our natural resources.

Determining the Most Advantageous Streamlining Approaches

We fully recognize the importance of not only speeding the approval of wildfire risk reduction actions, but also doing so in an environmentally protective manner. Ascent is relied upon to identify the most expeditious and effective pathway to regulatory compliance with embedded requirements for environmental protection. It can involve application of an exemption, use of an existing program EIR (i.e., CalVTP), or preparation of a separate CEQA document. Each project submitted to Ascent for a scope of work would undergo a stepwise evaluation to identify the appropriate environmental document:

- 1) confirm whether or not environmental regulations even apply (e.g., whether it is a "project" pursuant to State CEQA Guidelines Section 15378);
- 2) if CEQA and/or NEPA requirements are applicable, determine what level of review is required, what document(s) should be prepared, and whether any streamlining tools apply (e.g., application of an exemption, use of the CalVTP Program EIR); and
- 3) identify and execute necessary technical studies to support completion of the environmental document(s).

This approach would save MWPA time and cost when exemptions, exclusions, and other streamlining tools (i.e., using the CalVTP) are found to be available for specific projects. We have successfully employed this approach for both small, straightforward projects as well as complex projects.

Depending on the type and complexity of the project, it is most likely that Ascent may prepare scopes of work for categorical exemptions, PSAs, PSA/Addenda, and other focused CEQA documents relying on the CalVTP Program EIR. Ascent's program manager and proposed task order manager would meet with MWPA staff to discuss the specific parameters of the environmental documentation and would provide the appropriate project-specific team and a scope and budget to complete the work.

The following sections describe our approach to preparing CEQA (including CalVTP) and NEPA documentation for MWPA projects. For all environmental documents, as required, Ascent will coordinate the distribution of public notices and file required documentation (including payment of filing fees) with the State Clearinghouse and County Clerk. Ascent will also prepare or support MWPA staff (some clients prefer their counsel to prepare these documents) with the preparation of decision hearing materials, including mitigation monitoring and reporting plans (MMRP), findings of fact, and statement of overriding considerations.

Exemptions

Statutory Exemptions

The most expeditious pathway to CEQA compliance is with the application of a statutory exemption. The following statutory exemptions are potentially applicable to MWPA projects:

- **Public Resources Code Section 4799.05(d)(1) – Senate Bill 901 (Statutes of 2018).** This exemption applies to vegetation projects on federal land when the NEPA process has been completed and the

primary role of the state or local agency (e.g., MWPA) is funding or staffing. However, the use of this exemption remains operative only if the Secretary of the Natural Resources Agency certifies annually that NEPA has not been substantially amended. The Secretary has not recertified Senate Bill 901 in 2021. Because amendments to NEPA regulations were finalized in September 2020, it has been widely interpreted that this exemption cannot apply to projects for which the NEPA document was completed after September 2020. For MWPA projects on federal land, Ascent will advise MWPA on the application of this statutory exemption.

- ▶ **Declared Emergency (State CEQA Guidelines §15269[a]).** This exemption stems from the 2015 emergency declaration for tree mortality and associated wildfire risk, which was reinforced by Executive Order B-42-17. It applies to removal of dead and dying trees that threaten power lines, roads, structures, and critical infrastructure in designated high hazard areas. Use of an emergency exemption has limits, however, based on court decisions.

Categorical Exemptions

The categorical exemption that will most likely apply to MWPA projects is the **Class 4 Exemption: “Minor Alterations to Land”** (State CEQA Guidelines Section 15304). This class “consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes.” An example for fuel management is provided in Subsection (i):

Fuel management activities within 30 feet of structures to reduce the volume of flammable vegetation, provided that the activities will not result in the taking of endangered, rare, or threatened plant or animal species or significant erosion and sedimentation of surface waters. This exemption shall apply to fuel management activities within 100 feet of a structure if the public agency having fire protection responsibility for the area has determined that 100 feet of fuel clearance is required due to extra hazardous fire conditions.

We agree with Remy Moose Manley’s advice to MWPA that this exemption may be applied farther than 100 feet from a structure. In our experience, it is possible to undertake fuel management activities on a larger scale than what is described in the example and still be exempt. For the Sierra Nevada Conservancy, California Tahoe Conservancy, and other agencies, we have successfully applied this exemption to fuel management activities exceeding 30 acres. When applying this exemption, it is critical for MWPA to clearly document its reason for proceeding with the exemption. In addition to documenting that there are no exceptions to the exemptions (pursuant to the requirements of State CEQA Guidelines Section 15300.2), we recommend that the documentation explain why the project:

- ▶ Involves only “minor” alterations to land
- ▶ Does not involve the removal of any mature scenic trees
- ▶ Does not occur on lands with a slope of greater than 10 percent
- ▶ Does not occur in any waterway or wetland
- ▶ Does not result in the taking of endangered, rare, or threatened plant or animal species
- ▶ Does not result in significant erosion or sedimentation of surface waters

In addition, we will document that the project occurs in an area with extrahazardous fire conditions, using evidence of fire risk provided by MWPA member agency fire districts, including the Marin County Fire Department, and CAL FIRE, as well as the recent occurrence of catastrophic wildfire in and around the County.

Documents Using the CalVTP

The CalVTP Program EIR is a powerful CEQA streamlining tool, specially designed for use by many agencies, to expedite delivery of vegetation treatment projects in California. It is a cornerstone in the state’s response to the wildfire crisis and improving regulatory efficiency by enhancing CalVTP implementation was identified as a key action in *California’s Wildfire and Forest Resilience Action Plan: A Comprehensive Strategy* of the Governor’s Forest Management Task Force, which was released in January 2021.

The geographic scope of the CalVTP Program EIR is called the “treatable landscape,” which comprises 20.3 million acres of grass, shrub, and tree vegetation communities in the State Responsibility Area. The treatable landscape was modeled by CAL FIRE’s Fire Resource Assessment Program by dividing the State Responsibility Area into vegetation types from the California Wildlife Habitat Relationship system and excluding those vegetation types with negligible wildfire risks (e.g., wet meadow, estuarine, agriculture). This process resulted in a highly pixelated treatable landscape layer that appears as a checkerboard in some areas.

The CalVTP Program EIR can be used to streamline CEQA compliance of vegetation treatment projects wholly within the treatable landscape, as well as those projects located in the Local Responsibility Area, using a PSA, PSA/addendum, or other focused CEQA document, as described in the following sections.

Project-Specific Analysis

Bear Creek Redwoods Open Space Preserve Vegetation Treatment Project Project-Specific Analysis

Midpeninsula Regional Open Space District



- ▶ 300 acres, wholly within the treatable landscape
- ▶ Draft PSA completed 2 months after finalization of treatment design
- ▶ Treatments designed to eradicate Sudden Oak Death and benefit rare plants
- ▶ Ascent biologists led consultation with CDFW to maintain habitat function for mountain lion
- ▶ Presented as example of how to prepare PSAs by the Board of Forestry and Fire Protection

The CalVTP includes a project-specific implementation checklist for streamlining CEQA review of later site-specific vegetation treatment projects consistent with the Program EIR, in accordance with procedures described in State CEQA Guidelines Section 15168. With its broad suite of treatment types and activities, comprehensive impact analysis, adaptable and agency-vetted mitigation measures, and PSA checklist template, the CalVTP was designed to maximize the ability for agencies to make the finding that later vegetation treatment projects are “within the scope” of the CalVTP and the Program EIR, thereby facilitating an increase in the pace and scale of project approvals while maintaining environmental protection.

To make a “within the scope” finding, Ascent will use the PSA checklist to evaluate MWPA’s proposed vegetation treatment project to determine whether the proposed treatments have been analyzed in the Program EIR and will make a determination regarding the extent to which the proposed project area overlaps with the CalVTP treatable landscape. Such evaluations must ascertain whether these future vegetation treatment projects are consistent with the activities contained in the CalVTP and would have effects that were analyzed in the Program EIR. If this evaluation determines that the impacts were analyzed in the Program EIR and that no new or substantially more severe significant effects could occur and that no new mitigation measures would be required, the project falls within the scope of the Program EIR. In this circumstance, no additional CEQA documentation would need to be prepared or publicly circulated (State CEQA Guidelines Section 15168[c][2] and [4]). The Board may approve the proposed treatment project using the PSA and the Program EIR for CEQA compliance purposes. If the project is approved, Ascent, on behalf of MWPA, would file a notice of determination.

PSA/Addendum

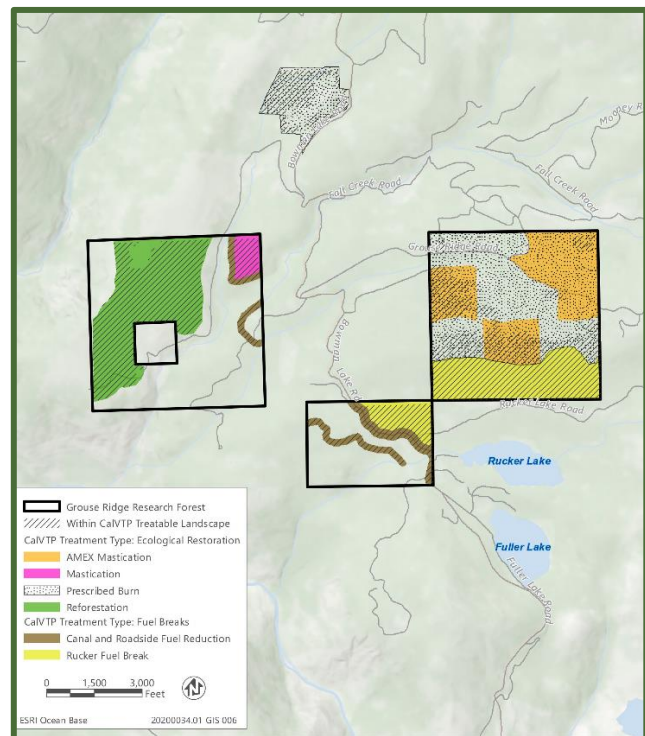
Almost 40 percent of MWPA’s jurisdictional boundaries fall within the State Responsibility Area treatable landscape, as shown in the map above, and it is expected that numerous projects proposed by MWPA could obtain CEQA compliance as later activities covered by the Program EIR in a PSA. However, given the highly pixelated nature of CAL FIRE’s treatable landscape mapping, proposed projects naturally contain areas within and outside the CalVTP treatable landscape (i.e., they extend into Local Responsibility Area). For projects that extend outside of the treatable landscape, and in some cases projects that are wholly outside of but adjacent to or otherwise surrounded by the treatable landscape, but that have landscape conditions that are essentially the same as, or at least substantially similar to, those in the adjacent areas in the treatable landscape, the environmental analysis in the Program EIR would be applicable. In these cases, Ascent may recommend preparing a streamlined document that is both a PSA and an

addendum to the CalVTP Program EIR (PSA/addendum) to provide CEQA compliance for the proposed CalVTP treatments within and outside the treatable landscape.

An addendum to an EIR is appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in new or substantially more severe significant environmental impacts, consistent with CEQA Section 21166 and State CEQA Guidelines Sections 15162, 15163, 15164, and 15168. In the case of a treatment project in a Local Responsibility Area, the change is the inclusion of areas outside of the treatable landscape analyzed in the CalVTP Program EIR in a proposed treatment project.

The PSA checklist template includes the criteria to support an addendum to the CalVTP Program EIR for the inclusion of areas outside the CalVTP treatable landscape. The template evaluates each resource in terms of whether the later treatment project, including the “changed condition” of additional geographic area, would result in significant impacts that would be substantially more severe than those covered in the Program EIR and/or would result in any new impacts that were not covered in the Program EIR. Like a PSA, a PSA/addendum does not need to be circulated for public review and, in the case of a legal challenge, is evaluated against the substantial evidence standard of review, which is deferential to the lead agency.

This approach has been successfully applied in the preparation of the Grouse Ridge Vegetation Treatment Project PSA/Addendum (see map at right), for which 406 of the 1,134 acres were outside of the treatable landscape, and the Yuba Foothills Healthy Forest Project PSA/Addendum, for which 1,500 of the 4,055 acres were outside of the treatable landscape. Please refer to Section 4 for descriptions of these projects and Section 8 for links to the PSA/addendum for each project, both of which are included as example work products.

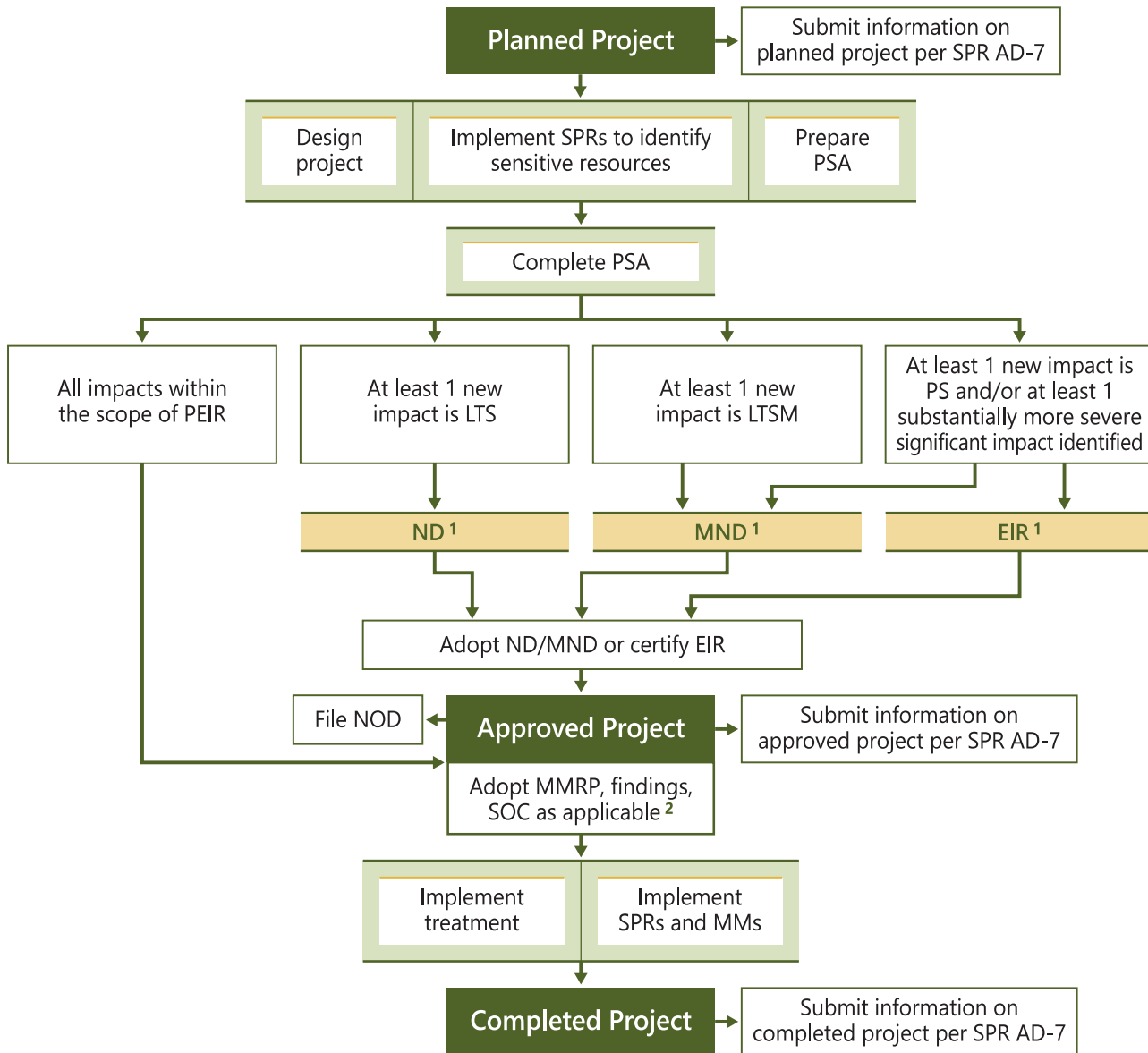


Grouse Ridge Vegetation Treatment Project area showing CalVTP treatable landscape coverage.

Focused ND, MND, or EIR Using the CalVTP Program EIR

If a proposed project is not within the scope of the CalVTP Program EIR, then MWPA could prepare additional CEQA documentation that accompanies the Program EIR for CEQA compliance. Pursuant to State CEQA Guidelines Section 15168(d), a later ND could be prepared if the new impact(s) would be less than significant, or an MND could be prepared if the new impact(s) could be clearly mitigated to less than significant. The ND or MND would be focused on the new impact(s). If a new or substantially more severe significant impact(s) could not be clearly mitigated to less than significant, an EIR would be prepared that would focus on the new or substantially more severe significant impact(s). In these cases, the PSA checklist would function as the IS to identify the new or substantially more severe significant impact(s) and document the remainder of the impact(s) as being within the scope of the CalVTP Program EIR. Refer to the CalVTP CEQA Process Flow Chart below.

CalVTP CEQA Process Flow Chart



¹ The CEQA document will be limited to impact(s) not within the scope of PEIR. Impacts within the scope of PEIR will be documented in PSA. PSA will function as an Initial Study for new impacts.

² Findings are required for any LTSM or SU impacts identified in an EIR, including impacts within the scope of PEIR. SOC is required for any SU impact identified, including impacts within the scope of PEIR. MMRP is required if any SPRs or MMs are identified as applicable in the PSA or CEQA document.

Note: This figure illustrates the process to implement later vegetation treatment projects under the CalVTP. It may not identify every detail of the steps required for CEQA compliance. Please refer to the relevant sections of the PSA and PEIR for additional information.

EIR: environmental impact report
LTS: less than significant
LTSM: less than significant with mitigation incorporated

MM: mitigation measure
MMRP: mitigation monitoring and reporting program
MND: mitigated negative declaration

ND: negative declaration
PEIR: Program EIR
PS: potentially significant
PSA: Project-specific Analysis

SOC: statement of overriding considerations
SPR: Standard Project Requirement

NEPA Documentation, including Recommendation to Prepare an EIS

MWPA's jurisdiction encompasses federal land managed by the National Park Service, including the Point Reyes National Seashore, Golden Gate National Recreation Area, and Muir Woods National Monument. As shown on the map above (MWPA Jurisdiction, Member Agencies, and CalVTP Treatable Landscape), the Marin County Fire Department also provides wildland fire protection services and associated fire prevention activities to approximately 100,000 acres of the Federal Responsibility Area.

NEPA compliance is required for major federal actions, which are defined, in relevant part, as those entirely or partly financed, assisted, conducted, regulated, or approved by a federal agency. When a project involving a federal action is identified under the on-call contract, Ascent, in coordination with MWPA and the National Park Service, will review U.S. Department of the Interior NEPA regulations and the National Park Service's NEPA implementing procedures to determine whether the project is categorically excluded from the NEPA process. If it is not, Ascent will prepare an EA. If no significant impacts are identified, Ascent will prepare a finding of no significant impact. If it is determined that the project would significantly affect the quality of the human environment, an EIS would be necessary. Analogous to an IS in the CEQA process, if it is evident that an EIS is warranted, MWPA may forgo preparation of the EA and proceed directly to preparation of an EIS. We understand that MWPA may solicit a consultant through an RFP process outside of this on-call contract for the preparation of an EIS; Ascent will advise MWPA on the need for an EIS and would welcome the opportunity to support MWPA with its preparation.

If MWPA (including the Marin County Fire Department or other member agency) has a discretionary action on federal land (e.g., funding or staffing for project implementation), CEQA compliance is also required. As described above (see the "Statutory Exemptions" section), a CEQA statutory exemption pursuant to Public Resources Code Section 4799.05 may be applied to vegetation projects on federal land when the NEPA process has been completed and the primary role of the state or local agency (e.g., MWPA) is funding or staffing; this exemption may be available depending on the date when the NEPA document was completed. If the NEPA document was recently completed, a CEQA document may be prepared that incorporates the NEPA document and relevant information therein by reference and presents an analysis of issues required by CEQA that are not typically addressed in a NEPA document (e.g., climate change, plant and wildlife species considered by the state to be rare). Ascent may also advise MWPA on the preparation of joint CEQA/NEPA documents and, in doing so, will consider the provisions of Secretarial Order 3355, which applies to agencies under the U.S. Department of Interior (e.g., National Park Service). Secretarial Order 3355 (enacted under the previous administration and currently under review by the current administration) dictates the length (i.e., number of pages) and schedule of NEPA documents, which affects the approach to preparing joint CEQA/NEPA documents.

Other Environmental Services: Research/Surveys/Studies/Monitoring

Ascent staff are experienced in completing environmental research, surveys, analysis, and documentation in support of CEQA and NEPA documents or permit applications. To maximize efficiency and cost-effectiveness, our approach begins with a thorough investigation to identify applicable existing information resources for project sites. Ascent will assess the accuracy and adequacy of this information to determine whether additional or updated information (e.g., studies, surveys, and/or technical reports) needs to be collected. Ascent will coordinate with MWPA to plan for field investigations (including mapping) as necessary.

Our team features a bench of field specialists to support multiple, concurrent MWPA projects as needed. Matt Greene, a Registered Professional Forester (RPF) with more than 20 years of experience with vegetation management, is highly qualified to conduct archaeological and biological surveys, advise MWPA on treatment design, and support implementation of treatment in the field, including overseeing project operation and monitoring compliance with environmental requirements. He and the staff of Matt Greene Forestry & Biological Consulting are located in Cazadero, close to Marin County, where they are able to quickly mobilize for MWPA, as needed.

Regulatory Assistance

Assisting our clients with the complexities of environmental and natural resources–related regulatory approvals is a cornerstone of Ascent’s consulting services. We have extensive experience in applying strategic and effective approaches for securing environmental permit approvals. Our approach emphasizes providing credible and complete information and pursuing open and engaging coordination with regulatory decision makers. It has been our experience that regulatory agencies need to trust the credibility and balanced objectivity of the information on which they will base their permit approvals. Our expertise includes:

- ▶ California Endangered Species Act Section 2081 Incidental Take Permits and Section 2080.1 Consistency Determinations
- ▶ Porter-Cologne Water Quality Control Act
- ▶ California Fish and Game Code Section 1602 Streambed Alteration Agreements
- ▶ California Coastal Act
- ▶ Coastal Zone Management Act (consistency determination for federal actions)
- ▶ Clean Water Act Section 404 wetland permits and Section 401 water quality certifications
- ▶ Endangered Species Act Section 7 Biological Assessments, Opinions, and Consultations
- ▶ Endangered Species Act Section 10(a) Habitat Conservation Plans and Incidental Take Permits
- ▶ National Historic Preservation Act
- ▶ Fish and Wildlife Coordination Act
- ▶ Migratory Bird Treaty Act
- ▶ Native American Graves Protection and Repatriation Act
- ▶ Federal Clean Air Act
- ▶ California Clean Air Act
- ▶ Applicable air district rules, regulations, and guidance documents
- ▶ Local noise ordinances and general plan noise elements
- ▶ Executive Orders 11593 (Cultural Resources), 11988 (Floodplains), 11990 (Wetlands), 12898 (Environmental Justice), and 13653 (Preparing the United States for the Impacts of Climate Change)

Addressing Bay Conservation and Development Commission requirements for projects in the bay jurisdiction and shoreline band jurisdiction

The CalVTP Program EIR can be used to streamline the CEQA review of responsible agencies with secondary approvals pertaining to the vegetation treatment project. To achieve this regulatory streamlining, Ascent worked closely with CDFW, the California Coastal Commission, the California Air Resources Board, and the State Water Resources Control Board to include the information required by these agencies into the Program EIR. Regulations relevant to MWPA projects that are also considered in the CalVTP include the California Fish and Game Code (lake and streambed alteration agreements and incidental take permits), Porter-Cologne Water Quality Control Act (waste discharge requirements), and California Coastal Act (coastal development permits [CDPs]).

Compliance with the California Coastal Act, in particular, presents a challenge for expediting the delivery of vegetation treatment projects in the Coastal Zone, even in jurisdictions with a local coastal program, such as Marin County. All vegetation treatment projects in the Coastal Zone that qualify as “development” under the definition presented in the Coastal Act (Public Resources Code Section 30106) would require the project proponent agency to obtain a CDP, which can require a substantial amount of time, typically exceeding 1 year. The definition of “development” in the Coastal Act includes “the removal or harvesting of major vegetation other than for agricultural purposes”; therefore, pursuant to the Coastal Act, all vegetation treatment projects implemented in the Coastal Zone currently require a CDP. Ascent led interagency discussions about various streamlining strategies between the Coastal Commission, the Board of Forestry and Fire Protection, and CAL FIRE and prepared the Program EIR to accommodate the requirements of the Coastal Commission as a responsible agency. Although the need for a CDP adds time to project approvals, Ascent is uniquely positioned to support MWPA with Coastal Act compliance for projects implemented under the CalVTP.



MWPA Jurisdiction, Coastal Zone, and CalVTP Treatable Landscape

Preliminary Project Review and Preparation of an Initial Study, including Recommendation to Prepare an EIR

The project description is the foundation of any environmental compliance document. It identifies the mechanisms by which impacts would occur and informs the public and decision makers about the proposed project. For documents relying on the CalVTP Program EIR, the treatment description is a critical component of the evidence to determine whether a project is “within the scope” of the CalVTP pursuant to State CEQA Guidelines Section 15168. Ascent will work with MWPA staff to develop the project description for use in environmental documents. Ascent team member Matt Greene, RPF, is also available to advise on treatment prescriptions. The Ascent team’s knowledge of short- and long-term impacts resulting from vegetation treatment and the prescription elements that can be modified to reduce impacts adds value to the project description development process by possibly avoiding the need for mitigation and/or permitting requirements.

For documents relying on the CalVTP Program EIR, the PSA checklist can serve as the IS if a focused ND, MND, or EIR is warranted; this process is described above (see the “Focused ND, MND, or EIR Using the CalVTP Program EIR” section). Please also refer to the “As-Needed Environmental CEQA/CalVTP/NEPA Consultation” section, above, for a description of Ascent’s approach to advising MWPA in determining the proper course of action for environmental review. Because of the comprehensive nature of the CalVTP, a stand-alone CEQA document that does not rely on the CalVTP would be needed only if the proposed project is not a covered activity under the CalVTP (e.g., road construction, structure demolition, other development or rehabilitation). The Ascent team is experienced in preparing

CEQA documentation for a wide variety of project types. The first step in preparation of a CEQA document is often completion of an IS, which includes the project description. The purpose of an IS is to determine whether a project may have a significant effect on the environment. If the IS shows that there is no substantial evidence that the project may have a significant effect on the environment, MWPA may prepare an ND or MND. If the IS shows that the project may have a significant effect on the environment, however, an EIR must be prepared. If it is evident in the project planning stage that an EIR is warranted, MWPA may forgo preparation of the IS and proceed directly to preparation of an EIR. We understand that MWPA may solicit a consultant through an RFP process outside of this on-call contract for the preparation of an EIR; Ascent will advise MWPA on the need for an EIR and would welcome the opportunity to support MWPA with its preparation.

4

Relevant Experience

The competence of the Ascent team is expressed through its breadth of knowledge and expertise with projects directly analogous to those identified in MWPA’s Work Plan and others that may be identified as part of this on-call contract. Below we present descriptions of several of our most relevant wildfire risk reduction and landscape resilience projects—specifically, those that are directly related to the CalVTP, those requiring NEPA compliance, those applying the use of CEQA statutory and categorical exemptions, and those completed under on-call environmental services contracts for public agencies. We also present our extensive project experience in Marin County to demonstrate our knowledge of local resources, environmental issues, and public concerns. **Work samples are provided for the projects below marked with an asterisk (*).** Please refer to Section 8, “Work Samples,” for the link to access the documents.

Wildfire Risk Reduction and Landscape Resilience Projects

The projects included below demonstrate our relevant experience with strategy development for, and the preparation of, a variety of CEQA and NEPA documents for wildfire risk reduction and landscape resilience projects, including program EIRs, PSAs and addendums, NEPA documents, and CEQA exemptions. As demonstrated by the successful completion of these projects and as would be attested to by the clients we served on these projects (see Section 5, “References”), Ascent is at the leading edge of developing innovative and defensible regulatory streamlining strategies to increase the pace and scale of vegetation treatments while maintaining environmental protections.

CalVTP-Related Experience

CalVTP Program EIR*

Client: Board of Forestry and Fire Protection



As the prime consultant for preparation of the CalVTP California Vegetation Treatment Program EIR, Ascent developed the environmental strategy and led the effort to prepare a new EIR. Work began with evaluation of the 2017 VTP Draft Program EIR, which evaluated fuel treatment activities with an annual target of 60,000 acres per year. Ascent provided advice regarding EIR revisions, recommended preparation of a new Draft Program EIR in recognition of the expanded treatment target (250,000 acres per year) and led Program EIR preparation. Statewide in scope, the Program EIR analyzes the resources within treatable landscape that will serve as the basis of evaluation for later activities. One of the objectives of the Program EIR is to streamline later treatment projects consistent with the program, including using “within the scope” findings according to CEQA Guidelines Section 15168 to facilitate an increase in the pace and scale of vegetation treatments in order to reduce wildfire risk while maintaining environmental protection. The Program EIR was designed for use by many local and state agencies. Extensive coordination was conducted with the California Department of Fish and Wildlife (CDFW), California Air Resources Board, California Coastal Commission, and State

Water Resources Control Board to gather input relative to each agency’s jurisdiction and discuss regulatory streamlining options. Ascent also prepared a PSA checklist template for use by project proponents to streamline the CEQA review of later site-specific vegetation treatment projects and an example PSA for a hypothetical project to be used as a tool for implementation of the CalVTP Program EIR.

Key Staff: Curtis Alling (PIC), Heather Blair (PM), Stephanie Rasmussen (APM), Lily Bostrom, Adam Lewandowski, Lara Rachowicz, Tammie Beyerl, Kelley Kelso, Alta Cunningham

Relevance to MWPA: Unmatched familiarity with the streamlining approach designed into the CalVTP Program EIR specifically to help agencies like MWPA expedite CEQA review of qualifying projects; expert knowledge of its application to expedite implementation of later vegetation treatment projects.

CalVTP Training and Implementation*

Client: California Board of Forestry and Fire Protection



The Board certified the CalVTP Program EIR in December 2019 and retained Ascent to support its implementation. Under this contract, Ascent is designing, preparing the curriculum for, and conducting a CalVTP training program. The primary objective of the training program is to educate participants on how to complete a PSA and how to use the CalVTP Program EIR as a source of environmental information and analysis. As part of the training curriculum, Ascent prepared a joint PSA and addendum to the CalVTP Program EIR (PSA/Addendum) for UC Berkeley’s Grouse Ridge Vegetation Treatment Project and prepared a PSA for the Midpeninsula Regional Open Space District’s Bear Creek Redwoods Open Space Preserve Vegetation Treatment Project. Both documents are included as sample work products (see Section 8, “Work Products”) and described below. The target training audience includes representatives of any of the dozens of state and local agencies that could use the CalVTP Program EIR to streamline CEQA review of vegetation treatment projects.

- **Grouse Ridge Vegetation Treatment Project PSA/Addendum.** The Regents of the University of California (UC Regents) propose vegetation treatments on 1,134 acres of land within the Grouse Ridge Research Forest in Nevada County to reduce wildfire risk and improve forest health; 405.8 acres of the treatment area extends outside of the CalVTP treatable landscape. Ascent prepared a PSA and addendum to the CalVTP Program EIR to evaluate whether the proposed project is within the scope of the EIR (CalVTP Program EIR) and whether the expansion of treatment areas outside of the treatable landscape would result in any new or substantially more severe significant impacts than were covered in the Program EIR. Ascent also prepared the project-specific mitigation monitoring and reporting program, which identified the specific standard project requirements and mitigation measures from the CalVTP Program EIR that apply to the Grouse Ridge Project. CalVTP treatment types include fuel break and ecological restoration treatments. Treatment activities include mechanical and manual treatments, herbicide application, and prescribed burning.
- **Bear Creek Redwoods Open Space Preserve Vegetation Treatment Project PSA.** The Midpeninsula Regional Open Space District is proposing vegetation treatments on 214 acres within its Bear Creek Redwoods Open Space Preserve. The CalVTP treatment type that would be implemented is ecological restoration, with the objective to promote forest health and resiliency by removing trees heavily damaged by sudden oak death, removing heavy brush and invasive species, and improving habitat for the special-status Hickman's poppy (*Plagiobothrys chorisianus* var. *hickmanii*). Ascent led consultation with CDFW pursuant to the streamlined requirements of the CalVTP for impacts on mountain lion, a newly designated candidate for listing under the California Endangered Species Act (CESA). The final PSA is complete and is expected to be approved in April 2021.

Key staff: Curtis Alling (PIC), Heather Blair (PM), Lily Bostrom (Task Order Manager), Stephanie Rasmussen (Task Order Manager), Lara Rachowicz, Tammie Beyerl

Relevance to MWPA: Experience preparing CalVTP PSAs and PSA/Addendums that is directly analogous to the potential needs of MWPA; educators of local agencies on the use of CalVTP for streamlining and resource information; required consultation with CDFW for impacts on CESA candidate species.

Yuba Foothills Healthy Forest Project PSA/Addendum*

Yuba County Water Agency



Yuba County Water Agency was awarded a Forest Health Grant for the Yuba Foothills Healthy Forest Project, which would entail conducting forest management actions within an approximately 6,787-acre area to reduce wildfire risk and achieve other forest health benefits. Ascent prepared a PSA/Addendum that analyzed the noncommercial treatments that would be implemented on 4,055 acres, approximately 1,500 of which are outside of the CalVTP treatable landscape. Treatment types included wildland-urban interface fuel reduction; the use of fuel breaks; and ecological restoration treatments using prescribed burning, mechanical and manual treatments, and herbicides. This complex project involved coordination with eight public and private landowners. Coordination with CAL FIRE and the Board of Forestry and Fire Protection was necessary to develop the CEQA strategy for this first PSA/Addendum document, which was approved in October 2020, just 2 months after finalization of the treatment description.

Key staff: Curtis Alling (PIC), Heather Blair (PM), Stephanie Rasmussen, Tammie Beyerl, Kelley Kelso, Alta Cunningham, Lara Rachowicz

Relevance to MWPA: Application of the CalVTP for treatment areas extending outside of the treatable landscape, including into the Local Responsibility Area; largest land area considered in a PSA/Addendum completed to date; involved multiple private landowners; completed on accelerated schedule (2 months from final treatment design to project approval).

NEPA Compliance Experience

Prather-Medusa Forest Resilience Project EA and Specialists Reports

U.S. Forest Service/National Fish and Wildlife Foundation



Ascent, under contract to the National Fish and Wildlife Foundation, worked collaboratively with the Stanislaus National Forest to develop treatments under the Prather-Medusa Forest Resilience Project and prepare an EA in compliance with NEPA. The project involves forest resilience treatments across 7,136 acres of national forest lands. Ascent worked closely with U.S. Forest Service specialists to design forest resiliency treatments that were consistent with the Forest Plan and tailored to address management goals within specific emphasis areas, including habitat for California spotted owl and northern goshawk, the wildland-urban interface, forest plantations, fuel breaks, and aspen and meadow restoration areas. To support NEPA compliance, the Ascent team conducted biological and cultural resource surveys; developed treatment project design criteria; and prepared technical specialist reports, including a biological assessment, a biological evaluation, an invasive plant risk assessment, a hydrology and soils report, and a cultural resources report. Ascent also prepared an EA consistent with NEPA and U.S. Forest Service requirements. Key issues included special-status species, Forest Plan consistency, temporary soil erosion and stream water quality, and effects on outdoor recreation activities.

Key staff: Curtis Alling (PIC), Adam Lewandowski (PM), Tiffany Lunday (APM), Lara Rachowicz, Tammie Beyerl, Kelley Kelso

Relevance to MWPA: Experience with vegetation treatment design for forest resilience and NEPA compliance.

Los Padres National Forest Invasive Plant Treatment Program NEPA Compliance

National Fish and Wildlife Foundation/U.S. Forest Service, Los Padres National Forest



Ascent prepared an EA to evaluate the environmental effects of invasive plant treatments in the Los Padres National Forest. The project involved an integrated management approach with mechanical and chemical treatments for nonnative plants and biocontrol for the management of the invasive tamarisk plant throughout the forest. The proposed action addressed areas and species not previously covered by the Tamarisk Removal Project EIS, which addressed invasive weed treatments on U.S. Forest Service lands in the Piru Creek, Lockwood Creek, Cuyama River, Santa Ynez River, Sespe Creek, Sisquoc River, and Arroyo Seco River watersheds. The Los Padres National Forest Invasive Plant Treatment Program EA covers the entire national forest, spanning Ventura, Santa Barbara, Kern, San Luis Obispo, and Monterey Counties. In addition to preparing the EA, Ascent also prepared several specialist technical reports to support the analysis, including a biological evaluation and biological assessment for sensitive plant and wildlife species.

Key staff: Curtis Alling (PIC), Tiffany Lunday (PM), Kelley Kelso, Tammie Beyerl

Relevance to MWPA: Experience with NEPA compliance for vegetation treatments spanning multiple jurisdictions.

Use of CEQA Exemptions to Expedite Treatment Project Implementation

Sugar Loaf Mountain Fuel Reduction Project Notice of Exemption*

Sierra Nevada Conservancy



Ascent prepared a notice of exemption (NOE) for site improvements and restoration activities involving brush and small-diameter ladder fuels reduction on 31 acres of forestland. Ascent, in collaboration with the Sierra Nevada Conservancy, determined that the project was categorically exempt from the provisions of CEQA pursuant to CEQA Guidelines Section 15304, Class 4, which consists of minor public or private alterations in the condition of land, water, and/or vegetation that do not involve removal of mature scenic trees except for forestry and agricultural purposes. As a part of the NOE, Ascent identified the exceptions from CEQA Guidelines Section 15300.2 and included a discussion of why each exception did not apply to the project. The discussion included an evaluation of the project location; cumulative impacts; and potential significant effects related to aesthetics, agriculture/forestry, air quality/greenhouse gas emissions, biological resources, cultural and historical resources, geology/soils, hazards/hazardous materials, hydrology/water quality, noise, transportation, land use, mineral resources, population and housing, public services, recreation, and utilities and service systems.

Key staff: Curtis Alling (PIC), Adam Lewandowski (PM), Tiffany Lunday

Relevance to MWPA: Experience with CEQA exemptions for vegetation treatment.

Senate Bill 901 CEQA Exemption for the French Meadows Prescribed Fire Project

Sierra Nevada Conservancy



Working closely with the Sierra Nevada Conservancy, Ascent prepared an NOE under CEQA for the French Meadows Prescribed Fire Project, pursuant to Senate Bill (SB) 901. Under SB 901, CEQA does not apply to prescribed fire, thinning, or fuel reduction projects undertaken on federal lands to reduce the risk of high-severity wildfire that have been reviewed under NEPA, if the primary role of a state or local agency is providing funding or staffing for those projects. For the French Meadows Prescribed Fire Project, the Sierra Nevada Conservancy was providing funding to conduct prescribed burning activities on 700 acres of federal lands within the Tahoe National Forest to reduce wildfire risk. The actions to be undertaken by this project were reviewed in their entirety pursuant to NEPA through an EA and finding of no significant impact. Accordingly, Ascent and the Sierra Nevada Conservancy determined that the project was statutorily exempt from CEQA and prepared the necessary documentation.

Key staff: Curtis Alling (PIC), Adam Lewandowski (PM), Tiffany Lunday

Relevance to MWPA: Experience with SB 901 CEQA exemptions for vegetation treatments to reduce wildfire risk, which may be useful for MWPA-staffed or -funded projects on federal land in Marin County. Because the Secretary of Natural Resources did not recertify the use of this exemption at the start of 2021, the application of this exemption is currently limited and dependent on the date when the relevant NEPA document was competed.

Program EIRs for Streamlining Later Treatment Projects

Hill Campus Wildland Vegetative Fuel Management Plan EIR

UC Berkeley



UC Berkeley's Hill Campus Wildland Vegetative Fuel Management Plan describes vegetation management activities it would implement to prevent and protect against wildfire and promote sustainable forest management on its 800-acre Hill Campus. The Hill Campus is located in a Very High Fire Hazard Severity Zone, as identified by CAL FIRE, and is located near residences and university assets at risk.

Ascent first prepared an IS to focus the EIR on those environmental topics that could be affected by the Wildland Vegetative Fuel Management Plan and required further evaluation. Thereafter, Ascent prepared a joint program and project EIR to evaluate the potential environmental impacts associated with implementation of the plan, as well as near-term identified treatment projects that the university wanted to implement after certification of the EIR, which occurred in early 2021.

Key staff: Heather Blair (PM), Lily Bostrom (APM), Stephanie Rasmussen, Lara Rachowicz, Kelley Kelso, Christopher Lovett, Claudia Garcia

Relevance to MWPA: Application of CEQA strategy to streamline regulatory compliance for near-term and long-term vegetation treatment projects; required consultation with CDFW and the U.S. Fish and Wildlife Service for impacts on federally and state-listed species and candidate species for listing; accelerated project schedule to meet grant conditions.

Lake Tahoe Program Timberland EIR

Sierra Nevada Conservancy



The Lake Tahoe Program Timberland EIR (PTEIR) evaluates the effects of vegetation management actions across private, local, and state lands throughout the wildland-urban interface on the California side of the Lake Tahoe Basin consistent with CEQA and the Forest Practices Act. Covered activities include mechanical and hand thinning of forests, prescribed fire activities, and biomass extraction and utilization. Ascent led a strategy development effort to identify the most efficient and effective approaches to conduct the programmatic environmental review, comply with CEQA and Forest Practice Act requirements, and streamline the approval and delivery of vegetation management projects. Following development of the environmental review strategy, Ascent worked cooperatively with CAL FIRE, local fire protection districts, the California Tahoe Conservancy, and the U.S. Forest Service Pacific Southwest Research Station to prepare a PTEIR that streamlines subsequent project approvals through a tiered, checklist-based approach. The PTEIR incorporates applicable science and modelling prepared as part of the Lake Tahoe West initiative to provide a rigorous cumulative analysis that can inform long-term management decisions.

Key staff: Curtis Alling (PIC) Adam Lewandowski (PM), Jessica Mitchell (APM), Rachel Kozloski, Kelley Kelso, Heather Blair, Stephanie Rasmussen, Christopher Lovett

Relevance to MWPA: Experience developing CEQA strategy for vegetation management across private, local, and state lands; wildland-urban interface treatments; interagency collaboration; preparing a program EIR aimed at streamlining subsequent project approvals.

Lake Tahoe West Landscape Restoration EIR/EIS/EA

California Department of General Services, Real Estate Services Division

The Lake Tahoe West (LTW) Restoration Partnership is a collaborative effort led by the U.S. Forest Service, California Tahoe Conservancy, California State Parks, Tahoe Regional Planning Agency (TRPA), Tahoe Fire and Fuels Team, and National Forest Foundation. The effort involves the restoration of forest and watershed resiliency on approximately 60,000 acres of federal, state, local, and private lands on the west shore of the Lake Tahoe Basin.

Ascent developed an environmental documentation and regulatory framework for the LTW Restoration Partnership. This task involved the development of recommendations for the most efficient environmental review and permitting processes for the LTW restoration partnership, which was determined to be the preparation of a joint CEQA EIR, TRPA EIS, and NEPA EA (EIR/EIS/EA). Ascent is preparing the EIR/EIS/EA, making sure to achieve consistency between the CEQA, TRPA, and NEPA portions of the document. Ascent drafted the project description consistent with varied requirements of CEQA, NEPA, and TRPA for use in the EIR/EIS/EA. Ascent also drafted tribal consultation letters, contributed to the scoping package, participated in multiple public meetings, and reviewed scoping comments received and prepared a memorandum identifying key issues. The public review draft EIR/EIS/EA is expected to be released in early 2022.

Key staff: Curtis Alling (PIC), Nanette Hansel (PM), Rachel Kozloski

Relevance to MWPA: Experience developing strategy for multiple agency partners for efficient environmental review and permitting; preparation of complex environmental analyses for forest management work.

On-Call Environmental Services Contracts for Public Agencies

We have the depth of resources and expertise to manage multiple task orders simultaneously as exhibited by the numerous on-call contracts we have secured, many of which have become repeat contracts. Three of our most relevant on-call contracts are summarized below.

CEQA Compliance for Sierra Nevada Conservancy Forest Management Grant Program

Sierra Nevada Conservancy

Ascent has served as the master services CEQA consultant for the Sierra Nevada Conservancy (SNC) for over 8 years. Work has focused on confirming that CEQA compliance is complete for vegetation treatment project grant applications or preparing compliance documents when needed. CEQA documents have included categorical exemptions, initial study/negative declarations (IS/NDs) and MNDs, and SB 901 statutory exemptions for fire fuel projects on National Forest System land when funded by SNC. Scores of vegetation treatment projects have been approved during Ascent's contract period. Critical to the success of this program has been devising the most efficient approach to CEQA compliance for vegetation treatment projects, depending on the circumstances of each proposed treatment. Ascent staff have also trained SNC project staff on the various CEQA compliance options and criteria for different approaches. Task orders have included, but are not limited to:

- ▶ Wolf and Grizzly Creeks Municipal Watershed Project IS/ND (thinning and prescribed burning on 500 acres)
- ▶ Caples Creek Watershed Restoration Project IS/ND (prescribed burning on 6,800 acres)
- ▶ Upper North Yuba Forest Health and Resilience Project IS/MND (thinning of 267 acres)
- ▶ Cabbage Patch Restoration Project IS/MND (thinning and pile burning on 1,219 acres)
- ▶ Lakes Basin Hazardous Fuels Reduction Project IS/MND (thinning on 661 acres)

- ▶ Little Grass Valley Reservoir Watershed Protection Project IS/MND (thinning and pile burning on 1,814 acres)
- ▶ Sagehen Forest Project IS/MND (broadcast burning on 1,500 acres)
- ▶ South Fork Mokelumne Restoration Project IS/MND (thinning on 900 acres)
- ▶ Lassen Volcanic National Park North Fork Feather River Headwaters Fire Management IS/MND (thinning and prescribed burning on 1,940 acres)
- ▶ Butterfly Twain Fuels and Forest Health Project IS/MND (thinning of 4,641 acres)

Key staff: Curtis Alling (CEQA strategist), Adam Lewandowski (PM), Stephanie Rasmussen, Lara Rachowicz, Alta Cunningham, Kelley Kelso, Tiffany Lunday

Relevance to MWPA: Successful execution of several concurrent assignments under an on-call contract; successful management of an on-call contract for vegetation treatment projects (as evidenced by the length of time Ascent has held the contract [over 8 years]).

CEQA/NEPA Environmental Consulting Services for Open Space and Recreation Projects

Santa Clara Valley Open Space Authority

Since early 2019, Ascent has been assisting the Santa Clara Valley Open Space Authority (Authority) with preparation of environmental, biological, and cultural studies and documents for projects in the Santa Clara Valley. Five task orders, which have involved preparation of CEQA documents, targeted biological or cultural studies, and environmental strategy development, have been executed since 2019. Lily Bostrom has been managing the contract and task orders, which include but are not limited to the following:

- ▶ **Coyote Ridge Open Space Preserve IS/MND and Checklist.** This task involves the development of an IS/MND for the proposed development of public access and recreation at a newly acquired open space preserve, as well as a “within the scope” checklist for proposed recreational improvements at a preserve currently enrolled in the Santa Clara Valley Habitat Agency’s Reserve System. The checklist evaluates proposed trail improvements and new overlooks and picnic areas in the context of the Habitat Agency’s Habitat Plan EIR/EIS.
- ▶ **Program EIR for the Integrated Pest Management Program.** This task involves the preparation of a program EIR for the Authority’s proposed Integrated Pest Management (IPM) Program. The IPM Program includes various physical, chemical, cultural, and biological control methods for managing pest plants and animals on Authority-owned open space lands. Rather than prescribing a specific treatment for each type of pest, the document outlines an approach to determining the appropriate treatment based on the relevant factors that influence its effectiveness, efficiency, and risks. Ascent is preparing a program EIR to evaluate the potential environmental effects of the proposed IPM Program for use on all of the Authority’s lands.
- ▶ **Llagas Creek Bridge and Day Use Area Biological and Cultural Studies.** The Authority is considering developing new public access, including a pedestrian bridge and new day use area, within an existing open space preserve. Ascent is conducting various biological and cultural studies to help with siting and design of the new amenities.

Key staff: Curtis Alling (PIC), Lily Bostrom (PM), Lara Rachowicz, Alta Cunningham, Rachel Kozloski

Relevance to MWPA: Experience managing multiple simultaneous task orders under an on-call contract, from biological and cultural survey efforts to the preparation of different types of CEQA compliance documents; creative CEQA streamlining approach using an existing program EIR.

Environmental Services Retainer for Lake Tahoe Basin and Truckee River Watershed Region, Lake Tahoe, California

California Tahoe Conservancy and California Department of General Services

Since 2014, Ascent has assisted the California Tahoe Conservancy (Conservancy) and California Department of General Services, Real Estate Services Division, with preparation of environmental, biological, and cultural studies and documents for projects in the Lake Tahoe Basin and the California portion of the Truckee River watershed under two retainer contracts. Thirteen task orders have been executed. Tasks under this contract include preparation of CEQA documents, targeted biological or cultural studies, and environmental strategy development. Example task orders have included:

- ▶ **Lake Tahoe West Environmental Review Strategy.** This task involves the development of recommendations for the most efficient environmental review and permitting processes for the LTW restoration partnership. LTW is proposing the restoration of forest and watershed resiliency on approximately 59,000 acres on Lake Tahoe's West Shore through a partnership of the Conservancy, U.S. Forest Service Lake Tahoe Basin Management Unit (LTBMU), California State Parks, TRPA, the Tahoe Fire and Fuels Team, and the National Forest Foundation. The environmental review framework development included consultation with numerous Basin agencies and coordination with the three lead agencies for environmental review: the Conservancy, LTBMU, and TRPA.
- ▶ **North Tahoe Forest Health and Biomass Project.** This task involved preparation of an IS/MND that analyzed forest treatments and the hauling and use of biomass from selected Conservancy, LTBMU, California State Parks, and private lands within the wildland-urban interface on the North Shore of Lake Tahoe. The project description evolved to focus on the Conservancy's Dollar Creek property. In addition to CEQA compliance and site-specific cultural and biological surveys, Ascent completed rigorous greenhouse gas emission and carbon sequestration analysis necessary to support a grant application to CAL FIRE.
- ▶ **Dollar Creek Forest Health and Biomass Project.** This task involved site-specific surveys and preparation of an IS/MND for forest treatments on the Conservancy's Dollar Creek Property. The IS/MND incorporated relevant analysis from the North Tahoe Interagency Forest Health and Biomass Project IS/MND.

Key staff: Curtis Alling (PIC), Adam Lewandowski (PM), Stephanie Rasmussen, Lara Rachowicz, Alta Cunningham, Kelley Kelso, Heather Blair, Tiffany Lunday

Relevance to MWPA: Successful management of an on-call contract requiring multiple, simultaneous task orders and interagency coordination for fire fuel and biomass utilization projects.

Marin County Project Experience

Senior staff at Ascent have led CEQA compliance for many significant projects in Marin County for over 30 years. The work has been performed under contract to the Community Development Agency. We have substantial firsthand, local experience that provides us with a thorough understanding of Marin County environmental issues, nongovernmental organizations participating in environmental review processes, and community concerns that may be encountered. Work performed by Ascent staff includes the following examples:

- ▶ **Lucasfilm Grady Ranch Master Plan Update EIR, Lucas Valley** – EIR evaluation of a master plan update for the proposed development of digital production facilities supporting filmmaking at the nearby Skywalker Ranch
- ▶ **CEQA Training Workshop for County Staff, Marin County Civic Center** – CEQA seminar for Community Development Agency staff regarding updates to the State CEQA Guidelines
- ▶ **North Coast Landholdings Project EIR, Strawberry** – EIR for residential, college, senior care, and health club land uses at a former seminary site on the Strawberry Peninsula (recently awarded, contract pending)

- ▶ **Waldo Point Harbor Master Plan EIR, Richardson Bay** – EIR for the development of houseboat docks and related infrastructure to support houseboat residents, including resolution of unauthorized houseboats of the Gates Cooperative
- ▶ **Affordable Housing Project EIR, Point Reyes Station** – EIR for proposed development of affordable housing units adjacent to existing development in Point Reyes Station
- ▶ **Lawson’s Landing Master Plan EIR, Tomales Bay** – EIR for an update to the master plan controlling uses and development at Lawson’s Landing recreational camping, day use, and boating facilities
- ▶ **Bel Marin Keys Planned Development EIR/EIS, Bel Marin Keys** – preparation of the EIR/EIS for development of residential uses, recreational trails, and restoration of diked baylands outside of Novato
- ▶ **Buck Center for Research in Aging EIR, Novato** – innovative medical research facility EIR for the proposed Buck Center for Research in Aging on a hillside project site near Novato

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References

We believe past clients provide the best testimony to the quality of our work. To that end, we encourage you to contact our clients and references below.

REFERENCE	PROJECT
Ascent Environmental	
Matt Dias, Executive Officer Board of Forestry and Fire Protection 1300 U Street Sacramento, CA 95818 p: 916.653.8007 e: matt.dias@bof.ca.gov	CalVTP Vegetation Program EIR CalVTP Implementation Services <i>"A huge congratulations to you and all who have worked on the VTP effort. This milestone is a BIG deal. And is the result of an impressive, coordinated, collaborative push over the last several months.</i> <i>"There is more work to be done no doubt, but it's worth reflecting for a moment on what you all were able to accomplish. Please pass along my sincere appreciation to your teams for remarkable work on this effort."</i> RE: California Statewide Vegetation Treatment Program EIR Wade Crowfoot, California Secretary for Natural Resources California Natural Resources Agency <i>"Thank you so much for your work getting the CalVTP across the finish line. You each invested so much in creating a high-quality work product, and you made it all happen in an ambitious timeframe. Everyone on this end is deeply appreciative."</i> RE: California Statewide Vegetation Treatment Program EIR Chris Calfee, Deputy Secretary and General Counsel California Natural Resources Agency

REFERENCE	PROJECT
Rachel Reid, Environmental Planning Manager Marin County Community Development Agency 3501 Civic Center Drive, Room 308 San Rafael, CA 94903 p: 415.499.6863 e: RReid@marincounty.org	County of Marin - CEQA Workshop Grady Ranch (Lucasfilm) Master Plan Update CEQA Compliance
Shannon Ciotti, Grant Program Coordinator Sierra Nevada Conservancy 11521 Blocker Drive, Suite 205 Auburn, CA 95603 p: 530.823.4689 e: Shannon.Ciotti@sierranevada.ca.gov	CEQA Compliance for Sierra Nevada Conservancy Forest Management Grant Program <i>"Can't believe how fast you pulled these together!... You are way ahead of schedule!"</i> RE: RESD – Environmental Services and Related Studies for Proposition 1 and 85 Grant Programs, Sierra Nevada Region Shannon Ciotti, Grant Program Coordinator Sierra Nevada Conservancy
Donna Plunkett, Planning Manager Santa Clara Valley Open Space Authority 33 Las Colinas Lane San Jose, CA 95119 p: 408.224.7476 e: dplunkett@openspaceauthority.org	CEQA/NEPA Environmental Consulting Services Contract for Open Space and Recreation Projects
Raphael Breines, Senior Planner UC Berkeley 2227 Piedmont Avenue Berkeley, CA 94720 p: 510.642.6796 e: rbreines@berkeley.edu	Hill Campus Wildland Vegetative Fuel Management Plan EIR Grouse Ridge Vegetation Treatment Project PSA/Addendum <i>"It seems that the end is near and that is bittersweet for me: one the one hand, I will be elated to be done with this project, but on the other hand, unhappy that I will not be able to connect with you and your team regularly, and will miss your team's collective intelligence, passion, flexibility, diplomacy, dependability and overall excellence."</i> RE: Hill Campus Wildland Vegetative Fuel Management Plan EIR to Heather Blair Raphael Breines, Senior Planner, Physical & Environmental Planning UC Berkeley

REFERENCE	PROJECT
Matt Greene Forestry & Biological Consulting	
Morgan Vaisset-Fauvel, Landscape/IPM program manager Campus Life Services, Facilities Service University of California, San Francisco p: 415.653.9629 e: Morgan.Vaisset-Fauvel@ucsf.edu Brendan O'Neil, Senior Environmental Scientist Sonoma Mendocino Coast District California State Parks p: 707.322.8262 e: Brendan.ONeil@parks.ca.gov	Salt Point State Park - Bishop Pine Management Plan and Forest Treatments
Nina Hapner, Director of Environmental Planning Kashia Band of Pomo Indians Stewarts Point Rancheria 1420 Guerneville Road, Suite 1 Santa Rosa CA 95403 p: 707.591.0580 x 107 e: nina@stewartspoint.org	Kashia Band of Pomo Indians of the Stewarts Point Rancheria - KCR Forest

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Rates

Ascent Environmental Rate Schedule

Labor Classification	Billing Rate
Environmental Principal II	\$345
Environmental Principal I	\$240
Project Director II	\$225
Project Director I	\$210
Senior Project Manager III	\$195
Senior Project Manager II	\$175
Senior Project Manager I	\$170
Project Manager II/Senior Environmental Planner/Scientist II	\$165
Project Manager I/Senior Environmental Planner/Scientist I	\$160
Environmental Planner/Scientist III	\$150
Environmental Planner/Scientist II	\$140
Environmental Planner/Scientist I	\$135
Environmental Analyst III	\$130
Environmental Analyst II	\$125
Environmental Analyst I	\$120
Project Analyst II	\$115
Project Analyst I	\$90

Project Support

Labor Classification	Billing Rate
Project Accountant	\$115
Finance/Contract Specialist	\$115
Technical Editor	\$140
Document Production Specialist	\$125
Senior Graphic Designer	\$135
Graphic Designer	\$115

Direct Costs

A project-support management cost of 10 percent will be applied to subcontractor costs.

Direct Costs	Rates
Reproduction: 8½" by 11"	\$0.07/page (black and white); \$0.26/page (color)
Reproduction: 11" by 17"	\$0.14/page (black and white); \$0.52/page (color)
Reproduction: plotter	\$5/square foot
Reproduction: CDs	\$10/disc
Automobile mileage (IRS rate in effect)	\$0.545/mile
Noise meter	\$100/half day, \$150/day, \$200/day plus overnight, \$500/week
Lodging and/or per diem	Government rates or as negotiated
Other direct costs	As incurred
Subcontractors	As incurred

Matt Greene Forestry & Biological Consulting 2021 Rate Schedule

Labor Classification	Billing Rate
Forester I	\$120
Forester II	\$90
Forest Tech	\$75

General Assumptions

Lump-Sum Price. Task order costs will be calculated using these billing rates. Once the work is authorized, the work authorization will become a fixed, lump-sum price for the approved scope of work; if costs for authorized work exceed the fixed price, Ascent will be responsible for that cost. Monthly invoices will be issued based on the percentage of progress toward completion of the work.

Price Allocation to Tasks or Staff. A task order cost presentation will allocate funding to specific tasks and staff. Ascent may reallocate budget within authorized tasks and between project staff during the course of work, as long as the total fixed price is not exceeded.

Annual Billing Rate Adjustment. The proposed billing rates apply to the current calendar year. At the end of each calendar year, the cost of new task order authorization, out-of-scope work augmentations, and contract amendments will be based on billing rates for the then-current year. Billing rates increase by 4 percent annually. Billing rates will not change for previously approved scopes of work in task orders.

7

Contract Commitments

Ascent has reviewed the Agreement for Professional Services attached to the Environmental Compliance Consulting Services for Wildfire Prevention/Hazard Mitigation Projects RFP.

Ascent commits to negotiate in good faith and, subsequent to such negotiation, has the ability to execute a professional services agreement for completion of the tasks outlined in the Scope of Work, including a not-to-exceed compensation total for expenses and reimbursables.

Ascent is willing (and would welcome the opportunity) to offer separate “piggyback” contracts to MWPA member agencies that will have terms at least equal to the contract terms agreed to by MWPA and Ascent. Rates will be the same as those offered to MWPA.

Ascent commits to treating MWPA as a “most favored nation” client. As shown in Section 4, we have demonstrated the capability to manage multiple concurrent task orders under on-call contracts, meeting all schedule and budget targets. We have structured our team with a breadth and depth of technical and management resources to provide maximum responsiveness to MWPA. One or more of the management team members (Curtis Alling, Heather Blair, Lily Bostrom) will always be available to MWPA. To this end, we commit to responding within the same business day, targeting no more than 4 hours, via email or cell phone to any inquiry received from MWPA.

Ascent requests the opportunity to negotiate in good faith the indemnification clause (Part 11) to reflect the role of negligence and willful misconduct in the determination of indemnity. Ascent has no other comments or requests for discussion regarding the terms in the MWPA standard agreement.

8

Work Samples

Samples of work from projects recently completed by Ascent are provided at the links below. Each project is exemplary of the types of CEQA documents that will be prepared for MWPA projects under the on-call contract. Descriptions of each project are presented in Section 4, "Relevant Experience."

California Vegetation Treatment Program

Board of Forestry and Fire Protection

- ▶ [Final Program Environmental Impact Report, Volumes 1 and 2 \(December 2019\)](#)

Bear Creek Redwoods Open Space Preserve Vegetation Treatment Project

Midpeninsula Regional Open Space District

- ▶ [Project-Specific Analysis \(March 2021 – preapproval\)](#)

This document will be considered for adoption at Midpeninsula Regional Open Space District's Board meeting scheduled for April 14, 2021. It is being included with permission from the District for the purpose of proposal evaluation. **Please do not distribute this document for any other purpose.**

Grouse Ridge Vegetation Treatment Project

University of California, Berkeley

- ▶ [Project-Specific Analysis/Addendum to the CalVTP Program EIR \(December 2020\)](#)

Yuba Foothills Healthy Forest Project

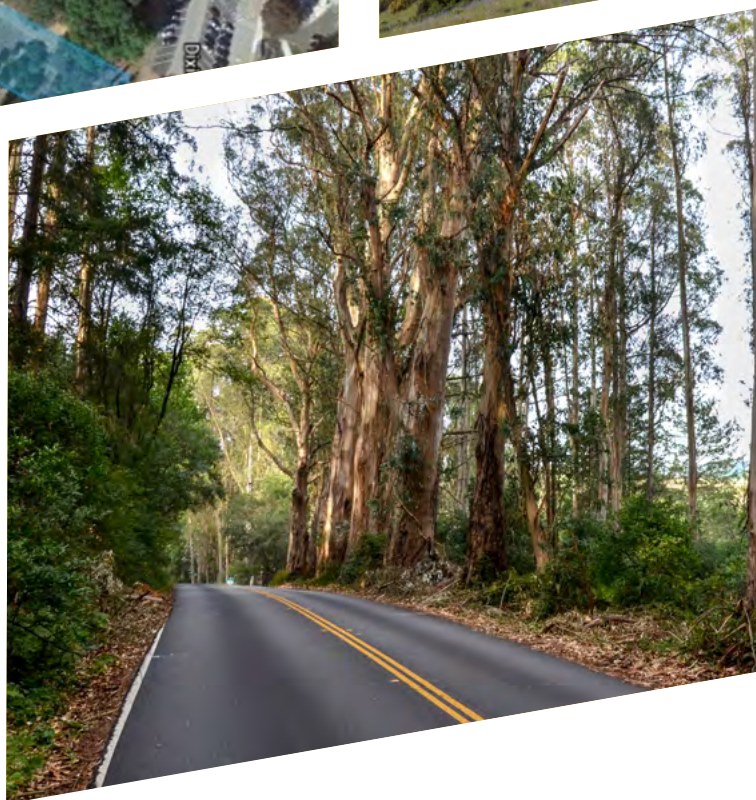
Yuba County Water Agency

- ▶ [Project-Specific Analysis/Addendum to the CalVTP Program EIR \(October 2020\)](#)

Sugar Loaf Mountain Fuel Reduction Project

Sierra Nevada Conservancy

- ▶ [Categorical Exemption Memorandum](#)



APPENDIX A RESUMES



Curtis E. Alling, AICP

PRINCIPAL-IN-CHARGE

YEARS OF EXPERIENCE 40

EDUCATION

MA, Natural Resources Planning and Development, Texas A&M University

BS, Wildlife Science, Cornell University

CERTIFICATIONS

American Institute of Certified Planners (No. 040218)

PROFESSIONAL AFFILIATIONS

American Planning Association California (APACA); Legislative Review Team (2005–present); Co-chair, Enhanced CEQA Action Team (ECAT, 2011–2015)

APACA, PLAN Mentor, Sacramento Valley Section (2013, 2014)

Capitol Region Climate Readiness Collaborative, Steering Committee (2015–2018)

Association of Environmental Professionals (AEP); Chair, Legislative Review Committee (1995–2004)

Governor's Climate Resilience Technical Advisory Group (2016)

AWARDS AND HONORS

State Wildlife Action Plan Update, AEP Outstanding Environmental Resource Plan

State Park Road and Trail Change-in-Use Program EIR, AEP Outstanding Environmental Analysis Document

Lake Tahoe Sustainability Action Plan, APA National Award for Environmental Planning

AEP Institutes, Various Locations and Virtual, Wildfire Resilience, Climate Adaptation, Environmental Justice, Speaker (2016 – present)

California Trails and Greenways Conference, Various Locations and Virtual, CEQA Updates and Trail Planning Issues, Instructor (2015 – present)

Curtis E. Alling, AICP, is recognized statewide as an expert in CEQA and NEPA, and a specialist in complex environmental impact analysis for natural resources management programs, including wildfire resilience and vegetation treatment for fire fuel reduction. He has 40 years of experience and has managed or directed more than 1,000 environmental documents, planning, and natural resources studies for federal, state, and local agencies and in private industry. He has managed numerous complex, litigious projects and large-scale joint NEPA/CEQA documents. His project specialties include fire fuel reduction, biomass, forest habitat management, and other sensitive habitat management planning. He has led several of Ascent's forest management projects, including the CalVTP Program EIR, Lake Tahoe West Restoration Program, the Lake Tahoe Program Timberland EIR, and NEPA Compliance Assistance to Los Padres National Forest for the Restoration of Burned Areas of Piru and Zaca fires for the USFS. He also has prepared many controversial CEQA documents for Marin County projects over the last thirty years, such as for the Grady Ranch/Lucasfilms Master Plan Update and Lawson's Landing Master Plan.

PROJECT EXPERIENCE

California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Protection

Project Director/Principal-in-Charge

The Board certified a new statewide California Vegetation Treatment Program (CalVTP) in December 2019 to support fire fuel treatment of 250,000 acres per year in the State Responsibility Area in response to the growing wildfire crisis. The Program EIR is now available substantially streamline implementation of later activities consistent with CalVTP strategies for fire fuel reduction, fuel break development, and ecosystem restoration. Treatment actions include fire breaks, fuel reduction through mechanical removal and controlled burns, and habitat restoration. Other VTP goals include control of unwanted vegetation, including invasive species, improvement of rangeland for livestock grazing, improvement of fish and wildlife habitat, enhancement and protection of riparian areas and wetlands, and improvement of water quality in priority watersheds. Ascent was the prime consultant for EIR preparation, with Curtis leading environmental strategy approaches and quality assurance.

California Vegetation Treatment Program Implementation, Statewide

California Board of Forestry and Fire Protection

Project Director/Principal-in-Charge

Under this contract Ascent is designing, preparing the curriculum for, and conducting a CalVTP training program. The primary objective of the training program will be to educate participants on how to complete a Project-specific Analysis (PSA) and how to use the PEIR as a source of environmental information and analysis to maximize CEQA streamlining and expedite delivery of wildfire risk reduction projects throughout California. Other tasks related to implementation include coordination with the California Coastal Commission regarding streamlining under the Coastal Act, the State Water Quality Control Board regarding finalization of its General Order for vegetation treatment projects implemented under the CalVTP, and CDFW regarding analysis of impacts to Candidate species for listing under the California Endangered Species Act. Curtis is serving as project director for environmental strategy approaches and quality assurance.

Curtis E. Alling, AICP

Yuba Foothills Healthy Forest Project PSA/Addendum and MMRP Implementation, Yuba County

Yuba County Water Agency

Principal-in-Charge

Yuba County Water Agency (YWA) was awarded a Forest Health Grant for the Yuba Foothills Healthy Forest Project, which would entail conducting forest management actions within an approximately 6,787-acre area to reduce wildfire risk and achieve other forest health benefits. Ascent prepared a PSA/Addendum to evaluate if the proposed other work on private and YWA lands is within the scope of the CalVTP PEIR, consider revisions or changes to the PEIR that would expand its coverage to include all project areas, and provide environmental information to the YWA. Treatment activities include wildland-urban interface fuel reduction, fuel break, and ecological restoration treatments. Treatment activities include prescribed burning, mechanical and manual treatments, and use of herbicides. Curtis is serving as project director.

Lake Tahoe Program Timberland EIR Preparation and Implementation, Placer/El Dorado County

Lake Valley Fire Protection District

Principal-in-Charge

The Lake Tahoe Program Timberland EIR (PTEIR) is an example of a regional program EIR intended to streamline approvals of vegetation management actions. The PTEIR evaluated vegetation treatment across private, local, and state lands throughout the wildland-urban interface on the California side of the Lake Tahoe Basin. Consistent with CEQA and the Forest Practices Act (because commercial timber projects were included), the covered activities included mechanical and hand-thinning of forests, prescribed fire activities, and biomass extraction and utilization. Ascent led the programmatic environmental review to comply with CEQA and Forest Practice Act requirements and streamline the approval and delivery of vegetation management projects. Currently, Ascent is assisting in the implementation of project streamlining through the preparation of pilot project-specific analyses. Curtis is serving as project director.

Forest-Wide Invasive Plant Treatment Program NEPA EA, Los Padres National Forest

U.S. Forest Service, Los Padres National Forest/National Fish and Wildlife Foundation

Principal-in-Charge

The EA was prepared to evaluate the environmental consequences of invasive plant treatment in the Los Padres National Forest. The Proposed Action would address areas and species not previously covered by the Tamarisk Removal Project EIS, which addressed evaluation of invasive weed treatments on Forest Service lands in the Piru Creek, Lockwood Creek, Cuyama River, Santa Ynez River, Sespe Creek, Sisquoc River, and Arroyo Seco River watersheds. The Forest-Wide Invasive Plant Treatment Program EA covers the entire National Forest and evaluates treatment techniques not previously evaluated. Curtis served as project director for the EA preparation.

Lake Tahoe West Restoration Joint Environmental Document (NEPA/CEQA/TRPA), Tahoe Basin

California Tahoe Conservancy

Principal-in-Charge

Lake Tahoe West (LTW) is an interagency, multi-jurisdictional initiative that includes stakeholder participation and a science team. The goal of the LTW Restoration Partnership is to accelerate the pace and enlarge the scale of activities needed to restore the resilience of the forests, watersheds, recreational opportunities, and communities along Lake Tahoe's West Shore. Ascent prepared a recommendations memo to discuss strategies for an effective CEQA, NEPA, and TRPA joint environmental review process, and is currently preparing the joint NEPA/CEQA/TRPA environmental document to support increasing the pace and scale of approvals and implementation of activities resulting from the efforts of the Restoration Partnership. Curtis is the project director, and serves on an Integration Team for resolving issues about joint document approaches to meet the needs of the three lead agencies (US Forest Service, California Tahoe Conservancy, and Tahoe Regional Planning Agency).

Prather/Medusa Projects NEPA Compliance Support for Stanislaus National Forest

U.S. Forest Service/National Fish and Wildlife Foundation

Principal-in-Charge

The U.S. Forest Service Stanislaus National Forest, Calaveras Ranger District proposed to conduct forest landscape resilience treatments across the 7,136-acre project area. The objectives of the project are to reduce future fire intensity and severity, enhance the general health of forested stands, and maintain and enhance wildlife habitat and mature forest ecosystem values. Treatment activities include mechanical thinning, salvage, biomass removal, prescribed burning, mastication, and hand thinning. Ascent prepared an EA under NEPA and associated Specialist Reports. Curtis served as project director.



Heather Blair

PROGRAM MANAGER

YEARS OF EXPERIENCE 17

EDUCATION

MS, Conservation Biology, California State University, Sacramento

BS, Ecology, California State University, Sacramento

PROFESSIONAL AFFILIATIONS

California Association of Environmental Professionals (AEP)

REPRESENTATIVE PROFESSIONAL WORKSHOPS/PRESENTATIONS

AEP Northern Conference. Panelist: NEPA Workshop, NEPA Primer and Recent Federal Directives to Streamline NEPA. Anderson, CA. September 2018.

AEP CEQA Basics Workshop (presenter). Sacramento. 2018.

AEP Advanced CEQA Workshop (curriculum preparer). 2018, 2019.

CLE CEQA Conference. Panelist: CEQA Streamlining for Wildfire Risk Reduction Projects. San Francisco. 2019.

AEP Statewide Conference. Panelist: CEQA's Role in the Wildfire Crisis: Notes from the Fireline. 2020.

AWARDS

2016 Association of Environmental Professionals, Outstanding Environmental Analysis Document Merit Award, Analysis of Oil and Gas Well Stimulation Treatments in California EIR

2014 National Association of Environmental Professionals, NEPA Excellence Award, Burning Man 2012–2016 Special Recreation Permit Environmental Assessment

2009 Association of Environmental Professionals, Outstanding Environmental Analysis Document Merit Award, Sunrise Powerlink Transmission Project EIR/EIS

PUBLICATIONS

Fuller, A., L. Rachowicz, H. Blair. 2020. The California Vegetation Treatment Program: integrating biological resource protection into wildfire risk reduction. California Fish and Wildlife, Fire Special Issue; 46-51.

Heather Blair is a senior project manager and environmental scientist experienced in the managerial and technical aspects of environmental review of projects throughout California. Heather has extensive experience managing on-call environmental services contracts for government agencies throughout California. In response to the escalating climate crisis, she has a focused expertise on CEQA and regulatory streamlining strategies for landscape resilience programs and projects, including wildfire risk reduction and forest health. She has experience preparing and managing the preparation of environmental documents pursuant to federal, state, and local environmental regulations, including CEQA, NEPA, the California Fish and Game Code, and the federal Endangered Species Act. With over 17 years of professional experience, Heather has managed or otherwise contributed to a variety of projects: statewide analyses of regulatory programs promulgated by the California legislature, multistate on-call environmental services contracts, and highly controversial infrastructure projects related to energy generation and transmission, resource extraction, and water resources development.

PROJECT EXPERIENCE

California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Protection

Project Manager

The Board initiated a new statewide California Vegetation Treatment Program (CalVTP) to support fire fuel treatment of 250,000 acres per year in the State Responsibility Area in response to the growing wildfire crisis. The Program EIR (PEIR) can be used to substantially streamline implementation of later activities consistent with CalVTP strategies for fire fuel reduction, fuel break development, and ecosystem restoration. Treatment actions include fire breaks, fuel reduction through mechanical removal and controlled burns, and habitat restoration. Other CalVTP goals include control of unwanted vegetation, including invasive species, improvement of rangeland for livestock grazing, improvement of fish and wildlife habitat, enhancement and protection of riparian areas and wetlands, and improvement of water quality in priority watersheds. Ascent was the prime consultant for PEIR preparation, with Heather serving as the project manager.

California Vegetation Treatment Program Implementation, Statewide

California Board of Forestry and Fire Protection

Project Manager

The Board certified the CalVTP PEIR in December 2019 and retained Ascent to support its implementation. Under this contract Ascent is designing, preparing the curriculum for, and conducting a CalVTP training program. The primary objective of the training program will be to educate participants on how to complete a Project-specific Analysis (PSA) and how to use the PEIR as a source of environmental information and analysis to maximize CEQA streamlining and expedite delivery of wildfire risk reduction projects throughout California. The target training audience includes representatives of any of the 150+ state and local agencies that could use the CalVTP PEIR to streamline CEQA review of vegetation treatment projects. Other tasks related to implementation include coordination with the California Coastal Commission regarding streamlining under the Coastal Act, the State Water Quality Control Board regarding finalization

Heather Blair

of its General Order for vegetation treatment projects implemented under the CalVTP, and CDFW regarding analysis of impacts to Candidate species for listing under the California Endangered Species Act. Heather is serving as the project manager.

Grouse Ridge Vegetation Treatment Project PSA/Addendum, Nevada County

University of California Berkeley, Berkeley Forests

Project Director

The Regents of the University of California (UC Regents) propose vegetation treatments on 1,134 acres of land within the Grouse Ridge Research Forest in Nevada County to reduce wildfire risk and improve forest health; 405.8 acres of the treatment area extends outside of the CalVTP treatable landscape. Ascent prepared a PSA and Addendum to the CalVTP PEIR to evaluate if the proposed project is within the scope of the CalVTP PEIR, and whether the expansion of treatment areas outside of the treatable landscape would result in any new or substantially more severe significant impacts than were covered in the PEIR. Ascent also prepared the project-specific mitigation monitoring and reporting program (MMRP), which identified the specific Standard Project Requirements (SPRs) and Mitigation Measures from the CalVTP PEIR that apply to the Grouse Ridge Project. CalVTP treatment types include fuel break and ecological restoration treatments. Treatment activities include mechanical and manual treatments, herbicide application, and prescribed burning. Heather served as Project Director, developing the CEQA strategy for area extending outside the treatable landscape, guiding consistency with the CalVTP, and providing quality assurance.

Bear Creek Redwoods Vegetation Treatment Project PSA, Santa Clara County

California Department of Forestry and Fire Protection

Project Director

The Midpeninsula Regional Open Space District (Midpen) is proposing vegetation treatments on 214 acres within its Bear Creek Redwoods Open Space Preserve. The CalVTP treatment type that would be implemented is ecological restoration, with the objective to promote forest health and resiliency by removing trees heavily damaged by sudden oak death, removing heavy brush and invasive species, and to improve habitat for the special-status Hickman's popcornflower (*Plagiobothrys chorisianus* var. *hickmanii*). Ascent led consultation with CDFW pursuant to the streamlined requirements of the CalVTP. The final Project-Specific Analysis (PSA) is complete and is expected to be approved in April 2021. Heather served as Project Director, guiding consistency with the CalVTP, overseeing interagency coordination, and providing quality assurance.

Yuba Foothills Heathy Forest Project PSA/Addendum and MMRP Implementation, Yuba County

Yuba County Water Agency

Project Manager

Yuba County Water Agency (YWA) was awarded a Forest Health Grant for the Yuba Foothills Healthy Forest Project, which would entail conducting forest management actions within an approximately 6,787-acre area to reduce wildfire risk and achieve other forest health benefits. Ascent prepared a PSA/Addendum that analyzed the non-commercial treatments, which would be implemented on 4,055 acres, approximately 1,500 of which is outside of the treatable landscape. Treatment types include wildland-urban interface fuel reduction, fuel break, and ecological restoration treatments. Treatment activities include prescribed burning, mechanical and manual treatments, and use of herbicides. This complex project involved coordination with 8 public and private landowners. Coordination with CAL FIRE and the Board of Forestry and Fire Protection was necessary to develop the CEQA strategy for this first PSA/Addendum document, which was approved in October 2020, just 2 months after finalization of the treatment description. Heather served as the project manager for preparation of the CEQA document. Ascent has been retained to implement the MMRP under a multi-year contract with YWA.

Hill Campus Wildland Vegetative Fuel Management Plan EIR, Alameda/Contra Costa County

University of California, Berkeley

Project Manager

UC Berkeley's Hill Campus Wildland Vegetative Fuel Management Plan describes vegetation management activities it would implement to prevent and protect against wildfire and promote sustainable forest management on its 800-acre Hill Campus. The Hill Campus is located in a Very High Fire Hazard Severity Zone, as identified by CAL FIRE, and is located near residences and University assets at risk. Ascent prepared an EIR with a dual function as a Program EIR to streamline later activities and as a project-level EIR to support approval of specific vegetation treatment projects to meet the schedule requirements of a CAL FIRE grant. Heather served as the project manager.



Lily Bostrom

DEPUTY PROGRAM MANAGER/TASK ORDER MANAGER

YEARS OF EXPERIENCE

8

EDUCATION

MS, Environmental Science and Management, University of San Francisco

BS, Marine Biology, University of California, Santa Cruz

PROFESSIONAL AFFILIATIONS

Association of Environmental Professionals, San Francisco Bay – Chapter Treasurer

PUBLICATIONS

Gilbert, Eleanor. (2014). "What Role Can CEQA Play in Reaching GHG Emissions Reductions Goals Set Forth in AB 32 – An Analysis of CEQA, AB 32, and Recommendations for CEQA Reform." Master's Thesis. University of San Francisco.

Lily Bostrom is a senior environmental planner and project manager with 8 years of experience in environmental consulting. She has managed several programmatic and project-level environmental compliance documents for forest management plans, integrated pest management, open space land use plans, and park and trails planning projects, including the preparation of associated 'within the scope' checklist documents. In addition to managing projects, Lily has extensive experience in writing technical sections for all types of CEQA and NEPA environmental documents for a variety of projects, including park and open space development, forestry work including prescription burning, land use/urban development, and transportation infrastructure including highways, bike and pedestrian paths, bridges, bus rapid transit, and high-speed rail. She serves on the Board of Directors for the California Association of Environmental Professionals in the Bay Area; she has been the acting treasurer since early 2017.

PROJECT EXPERIENCE

California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Protection

Senior Environmental Planner

In response to the state's wildfire crisis, the Board of Forestry and Fire Protection and California Department of Forestry and Fire Protection developed the California Vegetation Treatment Program (CalVTP) to implement vegetation treatments to reduce wildfire risk and promote landscape resiliency within 20 million acres of the State Responsibility Area. The CalVTP will increase the pace and scale of vegetation treatment to a target of 250,000 acres per year pursuant to Executive Order B-52-19. Treatments include prescribed burning, manual and mechanical methods, herbicide application, and prescribed herbivory in various combinations to implement fuel breaks, wildland-urban interface treatments and ecosystem restoration in fire-adapted vegetation communities. Ascent led preparation of the Program EIR (PEIR), which is designed to streamline CEQA review of later vegetation treatment projects consistent with the CalVTP, including using "within the scope" findings according to CEQA Guidelines Section 15168 and speed project approval and implementation. Lily served as an environmental planner and prepared sections of the PEIR, including aesthetics and visual resources, hazards and hazardous materials, and wildfire. Lily also oversaw preparation of an herbicide toxicity technical report and incorporated pertinent information into the PEIR.

Bear Creek Redwoods Vegetation Treatment Project PSA, Santa Clara County

California Department of Forestry and Fire Protection

Project Manager

The Board is developing CalVTP training modules, including example Project-Specific Analysis (PSA) documents to help guide state and local agencies in preparing their own PSAs under the CalVTP PEIR. The Midpeninsula Regional Open Space District (Midpen) submitted information regarding proposed vegetation treatments at the Bear Creek Redwoods Open Space Preserve to the Board to be considered for use in the Board's statewide CalVTP training. The Board selected Midpen's proposed vegetation treatment project to be used to prepare a PSA. Lily managed the preparation of the PSA for Midpen's project and prepared the project description for the PSA. Lily also coordinated a consultation meeting with California Department of Fish and Wildlife (CDFW)

Lily Bostrom

to discuss protections for special-status species that were incorporated into the document. The final PSA is complete and is expected to be approved in April 2021.

Hill Campus Wildland Vegetative Fuel Management EIR, Alameda/Contra Costa County

University of California, Berkeley

Assistant Project Manager

UC Berkeley updated the university's Hill Campus Wildland Vegetative Fuel Management Plan, which describes vegetation management activities UC Berkeley would implement to prevent and protect against wildfire and promote sustainable forest management on its 800-acre Hill Campus. The Hill Campus is located in a Very High Fire Hazard Severity Zone, as identified by CAL FIRE, and is located near residences and University assets at risk. Ascent prepared a joint project-level and program-level EIR to expedite implementation of vegetation treatment projects, including several that will be analyzed to facilitate implementation after EIR certification to meet the schedule requirements of a CAL FIRE grant. Lily served as the assistant project manager and prepared the project description for use in the EIR, prepared the alternatives analysis, and oversaw the preparation of an herbicide toxicity report and the CEQA Findings and Statement of Overriding Considerations. Lily coordinated directly with the client, several subconsultants, and internal staff, and provided QA/QC of various work products and GIS/graphics to support preparation of the EIR.

CEQA/NEPA Environmental Consulting Services for Open Space and Recreation Projects, Santa Clara County

Santa Clara Valley Open Space Authority

Project Manager/Contract Manager

Ascent was added to the Authority's on-call list of consultants for CEQA and NEPA environmental services for projects across their many open space preserves. Lily is managing the contract, which has included five task orders to date, including CEQA strategy discussions for recreation improvements on lands within and adjacent to an open space preserve that is partially covered by a habitat conservation plan (HCP), cultural and biological surveys for a proposed pedestrian bridge over Llagas Creek and a new day-use area, and preparation of a PEIR for an integrated pest management (IPM) program for all of the Authority's open space preserves. Lily has prepared and reviewed scopes of work and budgets for each of these projects, coordinated with the Santa Clara Valley Habitat Agency on requirements related to its HCP, led CEQA strategy discussions with the Authority to determine the appropriate level of CEQA review and extent of biological surveys for various projects, and is leading the preparation of a PEIR for the IPM Program.

Castle Crags State Park Root Creek Drainage Forest Management Plan and Public Safety Improvement Project IS/MND, Shasta County

California State Parks

Project Manager

Lily is the project manager for the CEQA review process and permitting associated with the development of a forest management plan and implementation of public safety improvements at Castle Crags State Park. The Forest Plan will guide future fire risk reduction and habitat management of the forest, including activities such as prescription burning, ongoing vegetation management, and a developing a new emergency access route. Lily managed preparation of a wetland delineation and an IS/MND; the IS/MND was adopted in the summer of 2019. Lily will also manage preparation of permit packages, including Clean Water Act Sections 401 and 404 and Fish and Game Code Section 1602 streambed alteration.

Miller/Knox Regional Shoreline Land Use Plan Amendment Program EIR, Contra Costa County

East Bay Regional Park District

Project Manager

Miller/Knox Regional Shoreline is a shoreline park in the community of Point Richmond. Ascent assisted the East Bay Regional Park District with preparation of a PEIR to analyze the significant environmental effects associated with implementation of the Miller/Knox Regional Shoreline Land Use Plan Amendment (LUPA). Key areas of analysis included biological resources, cultural and historic resources, aesthetics, climate change adaptation/sea level rise resilience, and hydrology and water quality. As the project manager, Lily led the CEQA review process and preparation of the PEIR for the LUPA. She participated in the scoping process and organized interagency coordination with responsible agencies—including BCDC, State Lands Commission, San Francisco Bay RWQCB, U.S. Army Corps of Engineers, and CDFW—to identify key issues and expectations early in the CEQA process. The issues raised by the agencies were addressed in the EIR and no additional comments from the responsible agencies were received.



Adam Lewandowski, AICP

TASK ORDER MANAGER

YEARS OF EXPERIENCE 19

EDUCATION

MA, Environmental Planning,
Prescott College

BA, Wildlands Ecology and
Management, Sterling College

AA, Natural Resources Management,
Sterling College

CERTIFICATIONS

American Institute of Certified Planners
No. 28677

AFFILIATIONS

American Planning Association

Society of Outdoor Recreation
Professionals

Peer reviewer for the journal *Biologic
Conservation*

AWARDS

Lake Tahoe Shoreline Plan, AEP
Outstanding Environmental Analysis
Document

Placer County Tahoe Basin Area Plan
and Tahoe City Lodge EIR/EIS, AEP
Outstanding Environmental Analysis
Document

State Wildlife Action Plan 2015 Update,
AEP Outstanding Environmental
Resource Plan

Tahoe Regional Plan Update: Western
Planning Association, NV APA, and NV
Landscape Architects Assoc. Awards for
Environmental Planning

REPRESENTATIVE PUBLICATIONS AND PRESENTATIONS

Lewandowski A., and J. Hester. 2015.
"Integrating Regional and Local
Environmental Standards." *Nevada
Planner*. Fall 2015: 8–9.

Lewandowski, A., R. F. Noss, and D.
Parsons. 2010. "The Effectiveness of
Surrogate Taxa in Representing
Biodiversity." *Conservation Biology*. 24:
1367–1377.

Adam Lewandowski is a Senior Environmental Planner and Project Manager with 19 years of experience in California and Nevada. His practice includes natural resource management, CEQA and NEPA compliance, and environmental policy and regulation. Recently, Adam has focused much of his time on forest management issues, including developing CEQA compliance approaches that provide legal defensibility while streamlining the delivery of fuel reduction and forest restoration projects. In addition, Adam brings technical expertise in the areas of natural resources, recreation, and aesthetics.

PROJECT EXPERIENCE

California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Protection

Senior Environmental Planner

The Board initiated a new statewide California Vegetation Treatment Program (CalVTP) to support fire fuel treatment of 250,000 acres per year in the State Responsibility Area in response to the growing wildfire crisis. The Program EIR (PEIR) can be used to substantially streamline implementation of later activities consistent with CalVTP strategies for fire fuel reduction, fuel break development, and ecosystem restoration. Treatment actions include fire breaks, fuel reduction through mechanical removal and controlled burns, and habitat restoration. Other CalVTP goals include control of unwanted vegetation, including invasive species, improvement of rangeland for livestock grazing, improvement of fish and wildlife habitat, enhancement and protection of riparian areas and wetlands, and improvement of water quality in priority watersheds. Adam worked collaboratively with the Board and the environmental review team to develop the objectives for the CalVTP consistent with recent legislation, executive orders, and statewide wildfire strategies. He led the development and analysis of feasible alternatives to the CalVTP that could achieve the basic objectives while reducing potential environmental impacts. Adam also contributed to preparation of the Project Specific Analysis (PSA) checklist, which will be used to evaluate each future vegetation management activity consistent with the CalVTP.

Prather/Medusa Forest Resilience Project NEPA EA, Stanislaus National Forest

U.S. Forest Service/National Fish and Wildlife Foundation

Project Manager

The U.S. Forest Service Stanislaus National Forest, Calaveras Ranger District proposed to conduct forest landscape resilience treatments across the 7,136-acre project area. The objectives of the project are to reduce future fire intensity and severity, enhance the general health of forested stands, and maintain and enhance wildlife habitat and mature forest ecosystem values. Treatment activities include mechanical thinning, salvage, biomass removal, prescribed burning, mastication, and hand thinning. Ascent prepared an EA under NEPA and associated Specialist Reports. Adam managed all aspects of the project including developing an approach and strategy, creating treatment units and prescriptions, public scoping, overseeing preparation of specialist reports, managing preparation on of the EA and Decision Memo, and responding to public comments.

Adam Lewandowski, AICP

Sugar Loaf Mountain Fuel Reduction Project Notice of Exemption, Nevada County

Sierra Nevada Conservancy

Project Manager

Adam managed preparation of a Notice of Exemption (NOE) for site improvements and restoration activities involving brush and small diameter ladder fuels reduction on 31 acres of forestland. Ascent, in collaboration with the Sierra Nevada Conservancy, determined that the project was categorically exempt from the provisions of CEQA pursuant to CEQA Guidelines Section 15304, Class 4, which consists of minor public or private alterations in the condition of land, water, and/or vegetation. To support the exemption, Ascent provided substantial evidence to describe why the exceptions in CEQA Guidelines Section 15300.2 did not apply to the project.

Senate Bill 901 Exemption for the French Meadows Prescribed Fire Project, Tahoe National Forest

Sierra Nevada Conservancy

Project Manager

Adam managed preparation of a CEQA NOE for the French Meadows Prescribed Fire Project, pursuant to Senate Bill (SB) 901. Under SB 901, CEQA does not apply to prescribed fire, thinning, or fuel reduction projects undertaken on federal lands to reduce the risk of high-severity wildfire that have been reviewed under NEPA, if the primary role of a state or local agency is providing funding or staffing for those projects. For the French Meadows Prescribed Fire Project, the Sierra Nevada Conservancy was providing funding to conduct prescribed burning activities on 700 acres of federal lands within the Tahoe National Forest to reduce wildfire risk.

Lake Tahoe Program Timberland EIR Preparation and Implementation, Placer/El Dorado County

Lake Valley Fire Protection District/CAL FIRE

Project Manager

The Lake Tahoe Program Timberland EIR (PTEIR) evaluates the effects of vegetation management actions across private, local, and state lands throughout wildland-urban interface in the California side of the Lake Tahoe Basin consistent with CEQA and the Forest Practices Act. Covered activities include mechanical and hand thinning of forests, prescribed fire activities, and biomass extraction and utilization. Adam first led a strategy development effort to identify the most efficient and effective approaches to conduct the programmatic environmental review, comply with CEQA and Forest Practice Act requirements, and streamline the approval and delivery of vegetation management projects. Following development of the environmental review strategy, Adam led a team that worked cooperatively with CAL FIRE, local fire protection districts, the California Tahoe Conservancy, and the U.S. Forest Service Pacific Southwest Research Station to prepare a PTEIR that legally is defensible and streamlines subsequent project approvals through a tiered, checklist-based approach. The PTEIR incorporates applicable science and modelling prepared as part of the Lake Tahoe West initiative to provide a rigorous cumulative analysis that can inform long-term management decisions.

Sierra Nevada Conservancy Forest Management Grant Program CEQA Compliance, Sierra Nevada

California Department of General Services/Sierra Nevada Conservancy

Project Manager

Since 2015, Adam has managed CEQA compliance for the Sierra Nevada Conservancy's grant programs, which provide funding for forest management projects throughout the Sierra Nevada. Adam evaluates grant proposals and develops CEQA compliance strategies in consultation with Conservancy staff and legal counsel. He then oversees preparation of a variety of CEQA documents as necessary to support the Conservancy's award of grant funding for selected projects. CEQA compliance strategies under this program range from preparation of Initial Studies/Mitigated Negative Declarations, a variety of CEQA exemptions, and use of California Practice Act documents (e.g., Timber Harvest Plans) as CEQA equivalent documents. Adam has directed CEQA compliance for over 100 grant projects that each cover between a few hundred to several thousand acres. The projects include a variety of vegetation management treatments, such as hand and mechanical thinning, pile and broadcast burning, revegetation of burned areas, control of invasive plants, herbicide application, and forest erosion control.



Stephanie Rasmussen

TASK ORDER MANAGER

YEARS OF EXPERIENCE

17

EDUCATION

BS, Environmental Biology and Management, University of California, Davis

Stephanie Rasmussen has 17 years of experience as a project manager, assistant project manager, and environmental analyst. She prepares project- and program-level CEQA documents, environmental checklists, NEPA documents, habitat conservation plans, and resource management plans. Her project experience includes work on public and private sector projects, including fire fuel management, natural resources, water resources, and public facilities projects. Stephanie's responsibilities include project management and coordination as well as writing, editing, and compiling the various sections of environmental documents. She understands the regulatory guidelines and legal requirements, as well as the fundamentals of preparing and delivering all types of environmental documents.

PROJECT EXPERIENCE

California Vegetation Treatment Program PEIR, Statewide

California Department of Forestry and Fire Protection

Assistant Project Manager

Stephanie assisted with overall management and preparation of the Program EIR (PEIR) for the new statewide California Vegetation Treatment Program (CalVTP) to support fire fuel treatment of 250,000 acres per year in the State Responsibility Area in response to the growing wildfire crisis. The PEIR can be used to substantially streamline implementation of later activities consistent with CalVTP strategies for fire fuel reduction, fuel break development, and ecosystem restoration. Treatment actions include fire breaks, fuel reduction through mechanical removal and controlled burns, and habitat restoration. Other CalVTP goals include control of unwanted vegetation, including invasive species, improvement of rangeland for livestock grazing, improvement of fish and wildlife habitat, enhancement and protection of riparian areas and wetlands, and improvement of water quality in priority watersheds. Ascent was the prime consultant for PEIR preparation, with Stephanie serving as the assistant project manager.

Grouse Ridge Vegetation Treatment PSA/Addendum, Nevada County

Regents of University of California, Berkeley Forests

Project Manager

The Regents of the University of California (UC Regents) propose vegetation treatments on 1,134 acres of land within the Grouse Ridge Research Forest in Nevada County to reduce wildfire risk and improve forest health; 405.8 acres of the treatment area extends outside of the CalVTP treatable landscape. Ascent prepared a Project-Specific Analysis and CEQA Addendum (PSA/Addendum) to the CalVTP PEIR to evaluate if the proposed project is within the scope of the CalVTP PEIR, and whether the expansion of treatment areas outside of the treatable landscape would result in any new or substantially more severe significant impacts than were covered in the PEIR. Ascent also prepared the project-specific mitigation monitoring and reporting program (MMRP), which identified the specific Standard Project Requirements (SPRs) and Mitigation Measures from the CalVTP PEIR that apply to the Grouse Ridge Project. CalVTP treatment types include fuel break and ecological restoration treatments. Treatment activities include mechanical and manual treatments, herbicide application, and prescribed burning. Stephanie managed the project and led the overall preparation of the PSA/Addendum and MMRP.

Stephanie Rasmussen

Yuba Foothills Heathy Forest Project PSA/Addendum and MMRP Implementation, Yuba County

Yuba County Water Agency

Assistant Project Manager

Yuba County Water Agency (YWA) was awarded a Forest Health Grant for the Yuba Foothills Healthy Forest Project, which would entail conducting forest management actions within an approximately 6,787-acre area to reduce wildfire risk and achieve other forest health benefits. Ascent prepared a PSA/Addendum that analyzed the non-commercial treatments, which would be implemented on 4,055 acres, approximately 1,500 of which is outside of the treatable landscape. The CalVTP treatment types include wildland-urban interface fuel reduction, fuel break, and ecological restoration treatments. Treatment activities include prescribed burning, mechanical and manual treatments, and use of herbicides. This complex project involved coordination with 8 public and private landowners. Coordination with CAL FIRE and the Board of Forestry and Fire Protection was necessary to develop the CEQA strategy for this first PSA/Addendum document, which was approved in October 2020, just 2 months after finalization of the treatment description. Stephanie served as the assistant project manager for preparation of the CEQA document. Ascent has been retained to implement the MMRP under a multi-year contract with YWA.

Hill Campus Wildland Vegetative Fuel Management Plan EIR, Alameda/Contra Costa County

University of California, Berkeley

Environmental Planner

UC Berkeley's Hill Campus Wildland Vegetative Fuel Management Plan describes vegetation management activities it would implement to prevent and protect against wildfire and promote sustainable forest management on its 800-acre Hill Campus. The Hill Campus is located in a Very High Fire Hazard Severity Zone, as identified by CAL FIRE, and is located near residences and University assets at risk. Ascent prepared an EIR with a dual function as a Program EIR to streamline later activities and as a project-level EIR to support approval of specific vegetation treatment projects to meet the schedule requirements of a CAL FIRE grant. Stephanie prepared the archaeological, historic, and tribal cultural resources; wildfire; and recreation sections of the EIR.

Lake Tahoe Program Timberland EIR, Lake Tahoe Basin

Lake Valley Fire Protection District/CAL FIRE

Environmental Planner

The Lake Tahoe Program Timberland EIR (PTEIR) evaluates the effects of vegetation management actions across private, local, and state lands throughout the wildland-urban interface in the California side of the Lake Tahoe Basin consistent with CEQA and the Forest Practices Act. Covered activities include mechanical and hand thinning of forests, prescribed fire activities, and biomass extraction and utilization. The effort included strategy development to identify the most efficient and effective approaches to conduct the programmatic environmental review, comply with CEQA and Forest Practice Act requirements, and streamline the approval and delivery of vegetation management projects. Following development of the environmental review strategy, Ascent led a team that worked cooperatively with CAL FIRE, local fire protection districts, the California Tahoe Conservancy, and the U.S. Forest Service Pacific Southwest Research Station to prepare a PTEIR that legally defensible and streamlines subsequent project approvals through a tiered, checklist-based approach. The PTEIR incorporates applicable science and modelling prepared as part of the Lake Tahoe West initiative to provide a rigorous cumulative analysis that can inform long-term management decisions. Stephanie prepared the wildfire section for the PTEIR.

Bear Creek Redwoods Open Space Preserve Plan EIR, Santa Clara County

Midpeninsula Regional Open Space District

Assistant Project Manager

Stephanie served as the assistant project manager and assisted with preparation of an initial study, followed by an EIR. The project included preparation of a Preserve Plan for the Bear Creek Redwoods Open Space Preserve and associated CEQA compliance. The Preserve Plan expands access to the preserve and creates additional trails for public use, enhances native habitats and protects sensitive biotic resources, interprets and protects cultural resources, and maintains and operates preserve facilities over the long term. The Preserve Plan includes four elements: Public Use and Facilities, Natural Resources, Cultural Resources, and Maintenance and Operations.



Tiffany Lunday

TASK ORDER MANAGER

YEARS OF EXPERIENCE

12

EDUCATION

MPhil., Geography, University of Cambridge

BA, Geography, University of British Columbia

Tiffany Lunday is a seasoned NEPA manager with specifically analogous experience managing NFWF NEPA compliance contract projects. She is currently managing the NFWF Los Padres National Forest NEPA compliance contract, including for the Aquatic Organism Passage Project and Forest-wide invasive plant control program. In this role, she has conducted start-to-finish NEPA compliance support, including Project Work Plans, scoping processes, EA and categorical exclusion preparation, specialists' reports, and Decision Memos. She specializes in natural resources management, forest management, and mining environmental review projects. Tiffany has prepared documents in support of CEQA, NEPA, and Tahoe Regional Planning Agency (TRPA) regulatory compliance, including water quality baseline reports, EIR and EIS sections, and EAs. She has also prepared permit applications for a variety of federal and state-level permits, including Water Pollution Control Permits (WPCPs), National Pollutant Discharge Elimination System (NPDES) permits, Section 404(b) permit applications, and State storm water general permit applications.

PROJECT EXPERIENCE

Prather/Medusa Projects NEPA Compliance Support for Stanislaus National Forest

U.S. Forest Service/National Fish and Wildlife Foundation

Assistant Project Manager

The USDA Forest Service Stanislaus National Forest, Calaveras Ranger District proposed to conduct forest landscape resilience treatments across over 7,000 acres of National Forest System lands. The objectives of the project were to reduce future fire intensity and severity, enhance the general health of forested stands, and maintain and enhance wildlife habitat and mature forest ecosystem values. When implemented, treatment activities will include mechanical thinning, salvage, biomass removal, prescribed burning, mastication, and hand thinning. Ascent prepared an EA under NEPA and associated Specialist Reports. Tiffany prepared the EA and assisted in completion of the environmental review process alongside senior Ascent staff.

Forest-Wide Invasive Plant Treatment Program NEPA EA, Los Padres National Forest

U.S. Forest Service, Los Padres National Forest/National Fish and Wildlife Foundation

Project Manager

Ascent prepared an EA to evaluate the environmental consequences of invasive plant treatments in the Los Padres National Forest. The Invasive Plant Treatment Program EA covered the entirety of National Forest System lands within LPNF and evaluated a wide variety of treatment techniques that aim to be site-specific, and conditions based. Adaptive management practices for application of treatment types were a central tenet of the approach to controlling invasive species under this program. Tiffany managed the environmental review under an EA, which involved multiple rounds of coordination among resource staff at LPNF, oversight of specialist reports, and guidance and input regarding the proposed action.

Tiffany Lunday

Sugar Loaf Mountain Fuel Reduction Project Notice of Exemption, Nevada County

Sierra Nevada Conservancy

Environmental Planner

Ascent prepared a Notice of Exemption (NOE) for site improvements and restoration activities involving brush and small diameter ladder fuels reduction on 31 acres of forest land. Ascent, in collaboration with the Sierra Nevada Conservancy, determined that the project was categorically exempt from the provisions of CEQA pursuant to CEQA Guidelines Section 15304, Class 4, which consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of mature, scenic trees except for forestry and agricultural purposes. As a part of the NOE, Ascent identified the exceptions from CEQA Guidelines Section 15300.2 and included a discussion of why each exception did not apply to the project. The discussion included an evaluation of the project location; cumulative impacts; and potential significant effects related to aesthetics, agriculture/forestry, air quality/greenhouse gas emissions, biological resources, cultural and historical resources, geology/soils, hazards/hazardous materials, hydrology/water quality, noise, transportation, land use, mineral resources, population and housing, public services, recreation, and utilities and service systems. Tiffany provided review of the CEQA categories of exemption and their applicability to the project and prepared the NOE on behalf of the Conservancy.

Senate Bill 901 Exemption for the French Meadows Prescribed Fire Project, Tahoe National Forest

Sierra Nevada Conservancy

Environmental Planner

Working closely with the Sierra Nevada Conservancy, Ascent prepared an NOE under CEQA for the French Meadows Prescribed Fire Project, pursuant to Senate Bill (SB) 901. Under SB 901, CEQA did not apply to prescribed fire, thinning, or fuel reduction projects undertaken on federal lands to reduce the risk of high-severity wildfire that have been reviewed under NEPA through the expiration of SB 901, if the primary role of a state or local agency was providing funding or staffing for those projects. For the French Meadows Prescribed Fire Project, the Sierra Nevada Conservancy was providing funding to conduct prescribed burning activities on 700 acres of federal lands within the Tahoe National Forest to reduce wildfire risk. The actions to be undertaken by this project were reviewed in their entirety pursuant to NEPA through an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI). Accordingly, Ascent and the Sierra Nevada Conservancy determined that the project was statutorily exempt from CEQA and prepared the necessary documentation. Tiffany provided review for applicability of SB 901 to the project and prepared the NOE following review of the environmental analysis conducted under NEPA.

Sierra Nevada Conservancy Forest Management Grant Program CEQA Compliance, Sierra Nevada

California Department of General Services/Sierra Nevada Conservancy

Assignment Project Manager

Ascent is managing CEQA compliance for the Sierra Nevada Conservancy's Proposition 1 Grant Program, which provides grant funding for watershed restoration and forest management projects throughout the Sierra Nevada. Ascent staff work closely with Sierra Nevada Conservancy staff and legal counsel to evaluate the regulatory feasibility of proposed projects and develop CEQA compliance strategies for projects that will be funded by the Conservancy. Ascent works cooperatively with DGS, the Conservancy, and partner agencies to develop CEQA compliance strategies that minimize time and cost while fully complying with CEQA. Through this contract, Ascent has evaluated and developed CEQA compliance strategies for over 60 projects and has prepared six Initial Studies/Negative Declarations and numerous Categorical Exemptions, Statutory Exemptions, and Notices of Determination. Cost: Tiffany assists in reviewing Conservancy-funded projects and preparing environmental documents for them.

Environmental Services Retainer for Lake Tahoe Basin and Truckee River Watershed Region Lake Tahoe, California

California Tahoe Conservancy, DGS RESD

Project Manager

Since 2014, Ascent has assisted the California Tahoe Conservancy (Conservancy) and California Department of General Services, Real Estate Services Division, with preparation of environmental, biological, and cultural studies and documents for projects in the Lake Tahoe Basin and the California portion of the Truckee River watershed under two retainer contracts. Thirteen task orders have been executed. Tasks under this contract include preparation of CEQA documents, targeted biological or cultural studies, and environmental strategy development. Tiffany led the environmental review for the Conservancy's biomass hauling project in the Tahoe Basin, and is currently leading the effort between the Forest Service and the Conservancy to conduct a review of vegetation management activities on urban parcels of land within the Tahoe Basin under a new categorical exemption provided specifically for LTBMU.



Lara Rachowicz, PhD

SENIOR ECOLOGIST

YEARS OF EXPERIENCE 23

EDUCATION

PhD, Ecology, Department of Integrative Biology, University of California, Berkeley, 2005

MPH, Biostatistics/Epidemiology, University of California, Berkeley, 1999

BS, Geography, University of Wisconsin, Madison, 1994

SELECTED PUBLICATIONS

Fuller, A., L. Rachowicz, and H. Blair, 2020, "The California Vegetation Treatment Program: integrating biological resource protection into wildfire risk reduction." *California Fish and Wildlife Journal*, Fire Special Issue.

Adams, M. J., N. Chelgren, D. Reinitz, R. Cole, L. Rachowicz, S. Galvan, B. McCreary, C. Pearl, L. Bailey, J. Bettaso, E. Bull, and M. Leu, 2010, "Using Occupancy Models to Understand the Distribution of an Amphibian Pathogen, *Batrachochytrium dendrobatidis*." *Ecological Applications* 20:289–302.

Rachowicz, L. J., S. Beissinger, and A. Hubbard, 2006, "Evaluating At-Sea Sampling Designs for Marbled Murrelets using a Spatially Explicit Model." *Ecological Modelling* 196:329–344.

Rachowicz, L. J., J. Hero, R. Alford, J. Morgan, V. Vredenburg, J. Collins, J. Taylor, and C. Briggs, 2005, "The Novel and Endemic Pathogen Hypotheses: Competing Explanations for the Origin of Emerging Diseases of Wildlife." *Conservation Biology* 19:1441–1448.

Rachowicz, L. J., R. Knapp, J. Parker, M. Stice, J. Morgan, V. Vredenburg, and C. Briggs, 2006, "Emerging Infectious Disease as a Proximate Cause of Amphibian Mass Mortality in California's Sierra Nevada." *Ecology* 87:1671–1683.

SELECTED PRESENTATIONS

CEQA Streamlining to Reduce Wildfire Risk: California Vegetation Treatment Program, a presentation at The Western Section of The Wildlife Society annual meeting (February 7, 2020)

Lara Rachowicz, PhD, is an ecologist with 23 years of technical and project management experience in wildlife ecology throughout California. She supports environmental review by providing senior technical expertise and quality assurance of environmental documents required under CEQA and NEPA. She has recently focused on CEQA and regulatory streamlining strategies for landscape resilience and wildfire risk reduction projects. She also has experience preparing CEQA documents for highly controversial energy and infrastructure projects (e.g., electrical transmission systems, pipeline facilities, renewable energy facilities, rail facilities). Lara evaluates environmental impacts and plans mitigation and monitoring programs; supports project permitting and the negotiation of mitigation agreements; and manages construction, compliance, and mitigation activities. Lara's research experience has focused on investigating threats to wildlife populations in California.

PROJECT EXPERIENCE

California Statewide Vegetation Treatment Program PEIR, Statewide Board of Forestry and Fire Protection

Senior Biologist/Task Manager

In response to the state's wildfire crisis, the Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection (CAL FIRE) developed the California Vegetation Treatment Program (CalVTP) to implement vegetation treatments to reduce wildfire risk and promote landscape resiliency within 20 million acres of the State Responsibility Area. Treatments include prescribed burning, manual and mechanical methods, herbicide application, and prescribed herbivory in various combinations to implement fuel breaks, wildland-urban interface treatments and ecological restoration in fire-adapted vegetation communities. Ascent led preparation of the Program EIR (PEIR), which is designed to streamline CEQA review of later vegetation treatment projects consistent with the CalVTP. Lara co-led the biological resources CEQA analysis for the PEIR. She prepared or provided senior review for the biological resources section. Lara coordinated with the Board, CAL FIRE, and California Department of Fish and Wildlife (CDFW) to help draft and finalize the biological impact analysis, CEQA compliance strategies, and mitigation measures for the PEIR.

California Vegetation Treatment Program Implementation, Statewide California Board of Forestry and Fire Protection

Senior Biologist/Task Manager

The Board certified the CalVTP PEIR in December 2019 and retained Ascent to support its implementation. Under this contract Ascent is designing, preparing the curriculum for, and conducting a CalVTP training program. The primary objective of the training program will be to educate participants on how to complete a Project-specific Analysis (PSA) and how to use the PEIR as a source of environmental information and analysis. Other tasks related to implementation include coordination with the California Coastal Commission regarding streamlining under the Coastal Act, the State Water Quality Control Board regarding finalization of its General Order for vegetation treatment projects implemented under the CalVTP, and CDFW regarding analysis of impacts to Candidate species for listing under the California Endangered Species Act. The target training audience includes representatives of any of the 150+ state and

Lara Rachowicz, PhD

local agencies that could use the CalVTP PEIR to streamline CEQA review of vegetation treatment projects. Lara is serving as the lead biologist of the training and implementation.

Yuba Foothills Healthy Forest PSA/Addendum and MMRP Implementation, Yuba County

Yuba Water Agency

Project Manager/Senior Biologist

The Yuba Water Agency (YWA) was awarded a Forest Health Grant for the Yuba Foothills Healthy Forest Project, which entails conducting forest management actions in an approximately 6,787-acre area to reduce wildfire risk and achieve other forest health benefits. Ascent prepared a PSA/Addendum document that analyzed the non-commercial treatments, which would be implemented on 4,055 acres, approximately 1,500 of which is outside of the CalVTP treatable landscape. Treatment activities include wildland-urban interface fuel reduction, fuel break, and ecological restoration treatments. Treatment activities include prescribed burning, mechanical and manual treatments, and use of herbicides. This complex project involved coordination with eight public and private landowners. Ascent is also assisting YWA and project partners with implementation of the project-specific Mitigation Monitoring and Reporting Program (MMRP) by providing partner-specific implementation guidance for each landowner. Lara led preparation of the biological resources section of the PSA/Addendum and serves as the project manager for the MMRP implementation phase of the project.

Bear Creek Redwoods Vegetation Treatment Project PSA, Santa Clara County

Midpeninsula Regional OpenSpace District

Senior Biologist

The Midpeninsula Regional Open Space District (Midpen) is proposing vegetation treatments on 214 acres within its Bear Creek Redwoods Open Space Preserve. The CalVTP treatment type that would be implemented is ecological restoration, with the objective to promote forest health and resiliency by removing trees heavily damaged by sudden oak death, removing heavy brush and invasive species, and to improve habitat for the special-status Hickman's popcornflower (*Plagiobothrys chorisianus* var. *hickmanii*). Ascent led consultation with CDFW pursuant to the streamlined requirements of the CalVTP. Ascent prepared a PSA to evaluate whether the proposed project is within the scope of the CalVTP PEIR. The final PSA is expected to be completed by spring 2021. Lara led preparation of the biological resources section of the PSA and the required consultation with CDFW to discuss protections for special-status species.

Hill Campus Wildland Vegetative Fuel Management Plan EIR, Alameda/Contra Costa County

University of California, Berkeley

Senior Biologist

UC Berkeley's Hill Campus Wildland Vegetative Fuel Management Plan describes vegetation management activities it would implement to prevent and protect against wildfire and promote sustainable forest management on its 800-acre Hill Campus. The Hill Campus is located in a Very High Fire Hazard Severity Zone, as identified by CAL FIRE, and is located near residences and University assets at risk. Much of the Hill Campus is habitat for the Alameda whipsnake (*Masticophis lateralis euryxanthus*), which is listed as threatened under both the California and federal endangered species acts. Ascent prepared an EIR with a dual function as a Program EIR to streamline later activities and as a project-level EIR to support approval of specific vegetation treatment projects to meet the schedule requirements of a CAL FIRE grant. Lara led the biological resources section of the EIR and drafted robust mitigation measures to protect Alameda whipsnake during project implementation.

Prather/Medusa Forest Resilience Project NEPA EA, Stanislaus National Forest

U.S. Forest Service/National Fish and Wildlife Foundation

Senior Biologist/Task Manager

The U.S. Forest Service Stanislaus National Forest, Calaveras Ranger District proposed to conduct forest landscape resilience treatments across the 7,136-acre project area. The objectives of the project are to reduce future fire intensity and severity, enhance the general health of forested stands, and maintain and enhance wildlife habitat and mature forest ecosystem values. Treatment activities include mechanical thinning, salvage, biomass removal, prescribed burning, mastication, and hand thinning. Ascent prepared an Ecological Assessment under NEPA and the associated Specialist Reports. Lara oversaw preparation of the biological resource assessments for the Forest Service specialist reports (e.g., biological evaluation, biological assessment) and for the NEPA document.



Tammie Beyerl

SENIOR BOTANIST AND WETLAND ECOLOGIST

YEARS OF EXPERIENCE

19

EDUCATION

MS, Plant Biology (Ecology), Southern Illinois University, Carbondale

BS, Plant Biology, Southern Illinois University, Carbondale

PROFESSIONAL AFFILIATIONS

Sacramento Valley Chapter California Native Plant Society Board Member (2021)

Northern California Botanists

SPECIALIZED TRAINING

NRCS California Tiger Salamander Workshop, Livermore (2010)

California Rapid Assessment Method Training, Sacramento (2008)

Basic Wetland Delineation Training, Houston (2004)

AEP CEQA Basics, Sacramento (2004)

Assessing Proper Functioning Condition of Lotic Riparian-Wetland Areas, Santa Rosa (2003)

Introduction to CEQA/NEPA for Botanists, Chico (2002)

Tammie Beyerl is a senior botanist and wetland ecologist specializing in biological analyses for compliance with CEQA/NEPA, Clean Water Act, and federal and state Endangered Species Act requirements. She is particularly skilled at preparing environmental compliance documents for large-scale projects with complex biological resource issues including specific plans, general plans, and management plans. She has also conducted environmental review and impact analysis of parks and recreational facilities, residential and mixed-use development projects, redevelopment plans, public infrastructure improvements, and other projects. She collaborates with ecologists, engineers, landscape designers, land use planners and resource agencies to develop appropriate mitigation and design solutions. She is experienced in leading and coordinating, as well as conducting biological resources investigations including special-status plant surveys, noxious weed risk assessments, wetland delineations, California Rapid Assessment Method for wetlands; and plant community mapping and classification. Tammie has designed and conducted ecological studies of invasive plant species, old-field succession, and wetland restoration; participated in assessment of riparian communities along flow augmented and bypass stream reaches in the Sierra Nevada, developed detailed mitigation and monitoring plans for federally listed plant species, and developed adaptive management plans for noxious weeds. She has a firm understanding of CWA Sections 404 and 401 and Fish and Game Code Section 1602 requirements and has developed permitting strategies in coordination with the relevant regulatory agencies.

PROJECT EXPERIENCE

California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Protection

Senior Botanist

The Board initiated a new statewide California Vegetation Treatment Program (CalVTP) to support fire fuel treatment of 250,000 acres per year in the State Responsibility Area in response to the growing wildfire crisis. Ascent prepared a Program EIR (PEIR) for the CalVTP; the PEIR will substantially streamline implementation of later activities consistent with CalVTP strategies for fire fuel reduction, fuel break development, and ecosystem restoration. Tammie prepared the botanical and wetland resources sections of the draft CalVTP PEIR, which included intensive database and literature review for resources that have potential to occur within the 20.3-million-acre treatable landscape. She provided technical analysis and CEQA compliance strategies for the biological resources section of the PEIR, specifically related to effects on vegetation, sensitive natural communities, and special-status plant species. In developing compliance strategies, Tammie and the Ascent biological resources team consulted regularly with CDFW and the California Coastal Commission. Tammie led the development of Standard Project Requirements to protect sensitive species and habitats and responded to over 100 public comments submitted on botanical, wetland, and vegetation resources evaluated in the Draft PEIR. Tammie is also part of a team of Ascent biologists that have been conducting project specific analyses for projects tiering off the CalVTP PEIR. The PSA involves completing a checklist to determine consistency with the PEIR, and implementing the PEIR's Standard Project Requirements, which include identification of biological resources, including special-status plants and wildlife and sensitive natural communities, through reconnaissance-level surveys and review of existing data sources, focused or protocol-level surveys, and impact avoidance through physical no-disturbance buffers or seasonal limited operating periods.

Tammie Beyerl

Yuba Foothills Healthy Forest PSA/Addendum and MMRP Implementation, Yuba County

Yuba Water Agency

Senior Botanist

The Yuba Water Agency (YWA) was awarded a Forest Health Grant for the Yuba Foothills Healthy Forest Project, which would entail conducting forest management actions in an approximately 6,787-acre area to reduce wildfire risk and achieve other forest health benefits. Ascent prepared a Project-Specific Analysis and CEQA Addendum (PSA/Addendum) to evaluate whether the proposed other work on private and YWA lands is within the scope of the CalVTP PEIR, consider revisions or changes to the PEIR that would expand its coverage to include all project areas, and provide environmental information to YWA. Treatment activities include wildland-urban interface fuel reduction, fuel break, and ecological restoration treatments. Treatment activities include prescribed burning, mechanical and manual treatments, and use of herbicides. Ascent is also assisting YWA and project partners with implementation of the project-specific Mitigation Monitoring and Reporting Program (MMRP), in compliance with the CalVTP. Tammie oversaw preparation of the botanical resources (special-status plants, vegetation, sensitive natural communities, and wetlands) sections of the PSA/Addendum and assisted with preparation of botanical survey training materials.

NV Energy Resilience Corridors Project, State of Nevada

NV Energy

Lead Botanist

On behalf of NV Energy, Ascent is supporting the U.S. Forest Service, Lake Tahoe Basin Management Unit and the Humboldt-Toiyabe National Forest, Carson Ranger District, with NEPA documentation, associated technical reports, and biological and cultural surveys in support of the NV Energy Resilience Corridors Projects. The proposed projects are intended to reduce the risk of catastrophic wildfire on commercial, private, and public infrastructure, and to improve forest health and resiliency. Tammie is currently working on two of these resilience corridor projects. One involves treating vegetation on approximately 5,309 acres along about 44 miles of power lines within the two National Forests from the eastern shore of Lake Tahoe into Carson and Washoe valleys. Tammie prepared botanical resources specialist reports in support of NEPA for this project. The second project involves treating vegetation on 626 acres of power line corridor in the Spring Mountains National Recreation Area in southern Nevada. Tammie is coordinating and conducting botanical surveys to document Forest Service Sensitive and threatened and endangered plant occurrences, invasive plant infestations, and host and nectar plants for endangered and sensitive butterfly species. Treatments would include but are not limited to forest thinning, removal of hazard and disease or insect-infected trees, removal of forest biomass, pile burning, prescribed burning, and development of defensible space protection zones.

Forest-Wide Invasive Plant Treatment Program NEPA EA, Los Padres National Forest

U.S. Forest Service

Lead Botanist

Tammie led preparation of the botanical resource assessments for the Forest Service specialist reports (e.g., biological evaluation, biological assessment) and the environmental assessment in support of NEPA. Tasks included analyzing potential impacts on plant species listed as threatened or endangered under the Endangered Species Act and Forest Service Sensitive species from implementing any of the treatment options, which include manual and mechanical treatments, herbicide application, livestock grazing, and fire wilting. Tammie assisted in preparing resource protection measures to ensure the program could be implemented without substantial impacts to non-target vegetation and special-status species.

Marin Headlands and Fort Baker Transportation Infrastructure and Management Plan EIS, Marin County

U.S. National Park Service

Botanist

The Marin Headlands and Fort Baker Transportation Infrastructure and Management Plan (TIMP) was proposed to provide improved access to and within the Marin Headlands and Fort Baker for a variety of users, and to initiate these improvements in a way that minimizes impacts to the abundant cultural and natural resources of the area. The TIMP addresses current weakness in transit access to the area, pedestrian and bicycle safety concerns, and the lack of directional signage inside and outside the recreation areas. Tammie provided technical assistance related to natural resource protection and prepared the botanical resources section of the EIS.



Alta Cunningham

CULTURAL RESOURCES SPECIALIST

YEARS OF EXPERIENCE 21

EDUCATION

MA, Historic Preservation, Savannah College of Art and Design

BS, History, University of California, Davis

PROFESSIONAL AFFILIATIONS

California Preservation Foundation

AWARDS

Midpeninsula Regional Open Space District Bear Creek Redwoods Preserve Plan and EIR (2017 Award for Outstanding Planning Document from AEP)

Plan Bay Area: Regional Transportation Plan/Sustainable Communities Strategies EIR (2018 Award of Merit for Environmental Analysis Document from AEP)

Alta Cunningham has 21 years of experience in the environmental consulting field. Her experience as an architectural historian includes archival research, historic building and structure surveys and evaluations, and cultural resources documentation for NEPA and CEQA projects ranging from single building evaluations to district-wide surveys for CEQA, PRC 5024, and Section 106 compliance documents. She has completed evaluations for higher education facilities, pre- and post-World War II residential and commercial buildings, agricultural properties, and water conveyance systems. Alta meets the Secretary of the Interior's Professional Qualification Standards for architectural history and history. She also serves as a skilled deputy project manager for EIRs and has coordinated multiple environmental projects. Alta provides technical expertise for CEQA documents and has prepared numerous technical sections, covering aesthetics, agricultural resources, cultural resources, geology and soils, land use and planning, and public services.

PROJECT EXPERIENCE

Yuba Foothills Healthy Forest PSA/Addendum and MMRP Implementation, Yuba County

Yuba County Water Agency

Environmental Planner

Yuba County Water Agency (YWA) was awarded a Forest Health Grant for the Yuba Foothills Healthy Forest Project, which would entail conducting forest management actions within an approximately 6,787-acre area to reduce wildfire risk and achieve other forest health benefits. Ascent prepared a Project-Specific Analysis and CEQA Addendum (PSA/Addendum) to evaluate if the proposed other work on private and YWA lands is within the scope of the California Vegetation Treatment Program (CalVTP) Program EIR (PEIR), consider revisions or changes to the PEIR that would expand its coverage to include all project areas, and provide environmental information to the YWA. Treatment activities include wildland-urban interface fuel reduction, fuel break, and ecological restoration treatments. Treatment activities include prescribed burning, mechanical and manual treatments, and use of herbicides. Alta prepared the cultural resources analysis for the PSA/Addendum and is assisting with implementation of cultural resources Standard Project Requirements and Mitigation Measures.

North Tahoe Interagency Forest Health and Biomass Reduction Project IS/MND, Tahoe Basin

California Tahoe Conservancy

Environmental Planner

The North Tahoe Interagency Forest Health and Biomass Project involves preparation of an IS/MND for forest treatment activities at multiple sites and biomass processing and utilization in the Cabin Creek biomass energy generation facility. The project involves treatment of approximately 273 acres of forest in a wildland-urban interface area in the Placer County portion of north Lake Tahoe, as well as transport and utilization of the generated biomass. The project area includes six separate treatment sites that would be treated by the California Tahoe Conservancy, the California Department of Parks and Recreation, the U.S. Forest Service–Lake

Tahoe Basin Management Unit, and the North Tahoe Fire Protection District. Alta prepared the cultural resources and public services sections of the IS/MND.

Forest-Wide Invasive Plant Treatment Program NEPA EA, Los Padres National Forest

National Fish and Wildlife Foundation/U.S. Forest Service, Los Padres National Forest

Environmental Planner

The EA was prepared to evaluate the environmental consequences of invasive plant treatment in the Los Padres National Forest. The Proposed Action would address areas and species not previously covered by the Tamarisk Removal Project EIS, which addressed evaluation of invasive weed treatments on Forest Service lands in the Piru Creek, Lockwood Creek, Cuyama River, Santa Ynez River, Sespe Creek, Sisquoc River, and Arroyo Seco River watersheds. The Forest-Wide Invasive Plant Treatment Program EA covers the entire National Forest and evaluates treatment techniques not previously evaluated. Alta prepared the cultural resources analysis for the EA.

Yolo Habitat Conservation Plan/Natural Community Conservation Plan EIS/EIR, Yolo County

Yolo County Joint Powers Agency/U.S. Fish and Wildlife Service

Environmental Planner

Ascent assisted the Yolo County Joint Powers Agency (JPA) and USFWS prepare an EIS/EIR for the Yolo Natural Heritage Program Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP). This is a comprehensive, countywide plan designed to provide long-term conservation and management of natural communities, sensitive species, and the habitats upon which those species depend, while accommodating other important uses of the land. The plan serves as an HCP pursuant to the Endangered Species Act and as an NCCP under the California Natural Community Conservation Planning Act. The JPA is composed of members representing Yolo County; the Cities of Davis, West Sacramento, Winters, and Woodland; and the University of California at Davis (Local Partners). Alta prepared the cultural resources and public services sections of the EIS/EIR.

Integrated Pest Management Plan Program EIR, San Mateo/Santa Clara County

Midpeninsula Regional Open Space District

Environmental Planner

Ascent prepared an EIR to address a broad range of invasive plant and pest management treatments in open space lands of the Midpeninsula Regional Open Space District. A primary goal of the plan is to conduct a comprehensive assessment of environmental impacts of the vegetation management and other pest control actions on tens of thousands of acres of District lands to facilitate CEQA streamlining and rapid approval of individual actions in the future. Extensive community involvement was implemented along with a coordination strategy with regulatory and other affected agencies. Key issues include wildlife habitat effects, sensitive species, fire hazard management, watershed effects, and water quality. Alta prepared the cultural resources section of the EIR.

Bear Creek/Alma College EIR, Santa Clara/Santa Cruz County

Midpeninsula Regional Open Space District

Environmental Planner

The Midpeninsula Regional Open Space District is the lead agency for the Bear Creek Redwoods Preserve Plan. The preserve is located in the south-central portion of Santa Clara County (and one parcel in Santa Cruz County), just west of Lexington Reservoir and 9 miles south of Monte Sereno/Los Gatos. The preserve is currently open for use by permit only for stable riders and hikers. Existing facilities located on-site include trails, a small informal parking area, the former Alma College Site, and Bear Creek Stables. The Preserve Plan would include expanded access to the preserve and construction of additional trails and parking areas for public use, enhancement of native habitats and protection of sensitive biotic resources, interpreting and protecting cultural resources, and maintaining and operating Preserve facilities over the long term. The Preserve Plan also includes renovations to Bear Creek Stables and rehabilitation and interpretation of the Alma College historic landscape. Expansion of preserve public access facilities and implementation of resource protection and enhancement projects will be phased over the course of 15 years. Ascent prepared the EIR. Primary environmental issues included cultural resources (including impacts to a California Register-eligible cultural landscape), biological resources, and water supply. Ascent provided peer review of other consultants' technical evaluations of the potential impacts related to the cultural landscape and archaeological resources. Alta assisted in the peer review and prepared the cultural resources section of the EIR.



Christopher Lovett, PhD

AIR QUALITY/GHG SPECIALIST

YEARS OF EXPERIENCE

13

EDUCATION

PhD, Environmental Engineering,
University of Southern California

MS, Environmental Engineering,
California State University, Fullerton

BS, Biochemistry and Molecular Biology,
University of California, Santa Cruz

Environmental Management Certificate,
UC Extension, Irvine

CEQA Practice Certificate, UC Extension,
San Diego

CERTIFICATIONS

Engineer in Training (EIT), No. 18-114-29

South Coast AQMD Certified Permitting
Professional (CPP), No. CPP151

Qualified Source Test Individual (QSTI),
Groups I, II, III, IV, No. 2010-470

SOFTWARE CAPABILITIES

Google Earth, CalEEMod, ArcGIS Pro,
EMFAC, OFFROAD, AERMOD, HARP2

AFFILIATIONS

American Association for Aerosol
Research (AAAR)

Air & Waste Management Association
(AWMA)

Society for Neuroscience (SFN)

Source Evaluation Society (SES)

AWARDS AND HONORS

USC Viterbi Dean's PhD Fellowship,
2016–2017

Chris Lovett, PhD, is an experienced air quality engineer who has worked at the California Air Resources Board as well as various consulting firms in Southern California and the Pacific Northwest. He also spent two years at the University of Southern California as a Viterbi research fellow investigating the health impacts of particulate matter in urban areas, including Los Angeles, Beirut, and Milan. This research formed the basis of his PhD dissertation and resulted in several publications in peer-reviewed journals. Through his extensive consulting experience, Chris has gained a detailed knowledge of the rules, regulations, and test methods of the U.S. Environmental Protection Agency, California Air Resources Board, Bay Area Air Quality Management District, and the South Coast Air Quality Management District. He is also experienced in performing environmental impact analyses and preparing environmental documents (e.g., EIRs, EISs, EAs, and IS/MNDs) as part of CEQA/NEPA processes.

REPRESENTATIVE PROJECTS

Lake Tahoe Program Timberland EIR Preparation and Implementation, Placer/EI Dorado County

Lake Valley Fire Protection District/CAL FIRE

Air Quality, GHG, and Energy Analyst

The Lake Tahoe Program Timberland EIR (PTEIR) evaluates the effects of vegetation management actions across private, local, and state lands throughout the wildland-urban interface on the California side of the Tahoe Basin consistent with CEQA and the Forest Practices Act. Covered activities include mechanical and hand thinning of forests, prescribed fire activities, and biomass extraction and utilization. The PTEIR will be a legally defensible document that streamlines subsequent vegetation management project approvals through a tiered, checklist-based approach. The PTEIR incorporates applicable science and modelling prepared as part of the Lake Tahoe West initiative to provide a rigorous cumulative analysis that can inform long-term management decisions. Christopher performed analyses of the air quality, GHG, and energy impacts associated with the Program and wrote the corresponding sections of the PTEIR in compliance with CEQA and the Forest Practice Act.

Hill Campus Wildland Vegetative Fuel Management Plan EIR, Alameda/Contra Costa County

University of California, Berkeley

Air Quality and GHG Analyst

UC Berkeley's Hill Campus Wildland Vegetative Fuel Management Plan describes vegetation management activities it would implement to prevent and protect against wildfire and promote sustainable forest management on its 800-acre Hill Campus. The Hill Campus is located in a Very High Fire Hazard Severity Zone, as identified by CAL FIRE, and is located near residences and University assets at risk. Ascent prepared an EIR with a dual function as a Program EIR to streamline later activities and as a project-level EIR to support approval of specific vegetation treatment projects to meet the schedule requirements of a CAL FIRE grant. Christopher performed analyses of the air quality and GHG impacts associated with implementation of the Plan and wrote the corresponding sections of the EIR.

Christopher Lovett, PhD

Prather/Medusa Forest Resilience Project NEPA EA, Stanislaus National Forest

U.S. Forest Service/National Fish and Wildlife Foundation

Air Quality and GHG Analyst

The U.S. Forest Service Stanislaus National Forest, Calaveras Ranger District proposed to conduct forest landscape resilience treatments across the 7,136-acre project area. The objectives of the project are to reduce future fire intensity and severity, enhance the general health of forested stands, and maintain and enhance wildlife habitat and mature forest ecosystem values. Treatment activities include mechanical thinning, salvage, biomass removal, prescribed burning, mastication, and hand thinning. Ascent prepared an EA under NEPA and associated Specialist Reports. Christopher prepared the air quality and GHG analyses for the EA. The analysis evaluates whether emissions of criteria air pollutants and precursors generated by prescribed burns, mechanical treatments, or hand treatments would result in exceedances of applicable national ambient air quality standards. It also assesses whether emissions of hazardous air pollutants from these activities could expose off-site receptors to excessive health risk. In addition, the analysis evaluates whether treatment activities would result in a net increase in GHG emissions that would be a cumulatively considerable contribution to climate change.

Transport and Utilization of Biomass for the South Tahoe Fuels Treatment and Meeks Creek Meadow Ecosystem Restoration Projects, Tahoe Basin

California Tahoe Conservancy/California Department of General Services

Air Quality, GHG, and Energy Analyst

Ascent is contracted with the California Tahoe Conservancy and the California Department of General Services to prepare environmental review documents under CEQA for the proposed removal and utilization of approximately 16,000 tons of forest material from 900 acres of National Forest Service lands in the Tahoe Basin. The accumulated biomass was the result of two forest treatment projects: the Meeks Creek Meadow Restoration Project (Mayala Wata Restoration Project) and the South Tahoe Fuels Treatment Project. Both projects were previously evaluated by the U.S. Forest Service under NEPA; however, neither included documentation regarding biomass transportation, which is the focus of the current effort. Christopher performed analyses of the air quality, GHG, and energy impacts associated with the project and wrote the corresponding sections of an Initial Study.

Bay Area Air Quality Management District CEQA Guidelines Update

Bay Area Air Quality Management District

Air Quality/Toxics Analyst

Ascent is continuing to provide CEQA expertise to assist BAAQMD staff in updating the District's current CEQA Air Quality Guidelines. These guidelines serve as a tool by which local jurisdictions will evaluate impact analysis methodologies, significance thresholds, and mitigation strategies. Ascent staff are providing technical support in the revision of these guidelines based on current scientific knowledge, local and regional air quality standards, and federal and state law since the last release of the guidelines. Tasks have included formulation of new thresholds of significance for emissions of criteria air pollutants and GHGs associated with the construction and operation of proposed land use development. Christopher assisted with the update of the CEQA Air Quality Guidelines and the development of new air quality significance thresholds.

UC Santa Cruz Long Range Development Plan EIR, Santa Cruz County

University of California, Santa Cruz

Air Quality, GHG, and Energy Analyst

The proposed University of California (UC), Santa Cruz Long Range Development Plan (LRDP) would replace the 2005 LRDP for the campus and identifies land uses to support the academic mission of UC Santa Cruz through 2040. The LRDP campus population forecast is 28,000 Full-Time Equivalent (FTE) students and 5,000 FTE faculty and staff. To accommodate the projected increase in campus population, the LRDP proposes to add 8,500 student housing beds, up to 550 employee housing units, and approximately 2,800,000 assignable square feet of academic and administrative building space. The LRDP land use plan supports potential growth on the UC Santa Cruz main residential campus and the Westside Research Park located at 2300 Delaware Avenue in the City of Santa Cruz. Christopher performed the analyses of air quality, GHG, and energy impacts associated with the project and wrote the corresponding sections of the LRDP EIR.



Kelley Kelso, CPESC, QSD/QSP, QISP

ENVIRONMENTAL SCIENTIST

YEARS OF EXPERIENCE 20

EDUCATION

MS, Geology, University of California, Davis

BS, Geology, University of California, Los Angeles

CERTIFICATIONS

Certified Professional in Erosion and Sediment Control (No. 7288)

California Qualified Stormwater Pollution Prevention Plan Developer and Practitioner (No. 24878)

California Qualified Industrial Stormwater Practitioner (No. 00247)

Certified Wetland Delineator

Kelley Kelso, CPESC, QSD/QSP, QISP, is an experienced environmental scientist who has worked in the natural resource, water quality, and stormwater field since 1999. Her professional experience includes working for nonprofit organizations, private companies, educational institutions, and local and state resource agencies. Kelley has successfully worked in the complex regulatory environment of the Lake Tahoe Basin in both Nevada and California on a variety of natural resource, erosion control, and stormwater compliance programs and projects. Her experience includes working closely with clients in developing and delivering stormwater and environmental compliance, construction site BMP programs, erosion control and stormwater retrofit programs, environmental permits, and CEQA and NEPA documents. Kelley has project management experience as well as performs technical field work such as wetland delineations and biological resource surveys. She is also adept at assisting clients with outreach and education efforts associated with their stormwater and erosion control programs.

PROJECT EXPERIENCE

California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Prevention

Environmental Scientist

Kelley reviewed the geology and soils and water quality sections of a previous draft PEIR of the vegetation treatment program to help assess the adequacy of the document and determine whether significant revisions and recirculation were advisable. She prepared a memorandum documenting the results of her review which contributed to the decision to revise and recirculate the draft PEIR, which became the California Vegetation Treatment Program (CalVTP) Program EIR (PEIR). Kelley prepared the geology and soils section and the hydrology and water quality section of the CalVTP PEIR and helped develop environmental protective yet flexible standard project requirements (SPRs) to be incorporated into future vegetation treatment projects.

Yuba Foothills Healthy Forest Project PSA/Addendum and MMRP Implementation, Yuba County

Yuba County Water Agency

Environmental Scientist

Yuba County Water Agency (YWA) was awarded a Forest Health Grant for the Yuba Foothills Healthy Forest Project, which would entail conducting forest management actions within an approximately 6,787-acre area to reduce wildfire risk and achieve other forest health benefits. Ascent prepared a PSA/Addendum that analyzed the non-commercial treatments, which would be implemented on 4,055 acres, approximately 1,500 of which is outside of the treatable landscape that was analyzed in the CalVTP PEIR. Treatment types include wildland-urban interface fuel reduction, fuel break, and ecological restoration treatments. Treatment activities include prescribed burning, mechanical and manual treatments, and use of herbicides. Coordination with CAL FIRE and the Board of Forestry and Fire Protection was necessary to develop the CEQA strategy for this first PSA/Addendum document, which was approved in October 2020, just 2 months after finalization of the treatment description. Kelley helped write the SPRs for geology and soils, which were incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.

Kelley Kelso, CPESC, QSD/QSP, QISP

Hill Campus Wildland Vegetative Fuel Management EIR, Alameda/Contra Costa County

University of California, Berkeley

Environmental Scientist

UC Berkeley's Hill Campus Wildland Vegetative Fuel Management Plan describes vegetation management activities it would implement to prevent and protect against wildfire and promote sustainable forest management on its 800-acre Hill Campus. The Hill Campus is located in a Very High Fire Hazard Severity Zone, as identified by CAL FIRE, and is located near residences and University assets at risk. Ascent prepared an EIR with a dual function as a Program EIR to streamline later activities and as a project-level EIR to support approval of specific vegetation treatment projects to meet the schedule requirements of a CAL FIRE grant. Kelley wrote the geology and soils section of the EIR and provided input into the development of Environmental Protection Measures (EPMs) that were incorporated into treatment design and implementation.

Forest-Wide Invasive Plant Treatment Program NEPA EA, Los Padres National Forest

National Fish and Wildlife Foundation/U.S. Forest Service, Los Padres National Forest

Project Manager

The Los Padres National Forest proposed a program to implement invasive and nonnative plant control on the forest. The project involved an integrated management approach with mechanical and chemical treatments for nonnative plants and biocontrol for the management of the invasive tamarisk plant throughout the forest. The Proposed Action addressed areas and species not previously covered by a previously prepared EIS, which addressed invasive weed treatments on Forest Service lands in the Piru Creek, Lockwood Creek, Cuyama River, Santa Ynez River, Sespe Creek, Sisquoc River, and Arroyo Seco River watersheds. Ascent prepared an EA covering the entire National Forest, spanning Ventura, Santa Barbara, Kern, San Luis Obispo, and Monterey Counties. In addition to preparing the EA, Ascent prepared all Forest Service Specialist Reports, and responses to public comments for the program. Kelley took over as project manager when the original project manager was out of the office on extended leave. Kelley wrote many sections of the EA, coordinated with the Forest Service and specialists to ensure the project was on schedule, and prepared the responses to public comments.

North Tahoe Interagency Forest Health and Biomass Reduction Project IS/MND, Placer County

California Department of General Services, Real Estate Services Division

Environmental Scientist

The North Tahoe Interagency Forest Health and Biomass Project involved preparation of an IS/MND for forest treatment activities at multiple sites and biomass processing and utilization in the Cabin Creek biomass energy generation facility. The project included treatment of approximately 273 acres of forest in a wildland-urban interface area in the Placer County portion of north Lake Tahoe, as well as transport and utilization of the generated biomass. The project area included six separate treatment sites that would be treated by the California Tahoe Conservancy, California Department of Parks and Recreation, US Forest Service–Lake Tahoe Basin Management Unit, and North Tahoe Fire Protection District. Kelley prepared section of the draft IS/MND, responded to comments on the draft document, and led the public noticing effort required by CEQA.

Routine and Accelerated Vegetation Management Program, El Dorado and Placer Counties

Liberty Utilities

Project Manager

Kelley is serving as the project manager for the Liberty Utilities Routine and Accelerated Vegetation Management Programs. Liberty Utilities is facing pressure from CPUC, CAL FIRE, and others to address hazardous vegetation above and adjacent to their overhead electric facilities in order to minimize fire danger and power outages. Liberty Utilities is mandated to conform to rules and regulations as adopted by CPUC as well as to comply with all applicable federal, state, and local environmental laws. In the past, Liberty relied on USFS to perform the research and the surveys necessary to comply with environmental laws; however, due to the extreme wildfire risk, Ascent is performing the research and surveys necessary to comply with environmental laws. In addition to overall management of the project, Kelley is performing the required biological surveys and documenting the results.



Matthew Alan Greene

MATT GREENE FORESTRY & BIOLOGICAL CONSULTING TREATMENT DESIGN AND IMPLEMENTATION

YEARS OF EXPERIENCE 22

EDUCATION

BS in Forestry and Wildlife Management,
UC Berkeley

CERTIFICATIONS

Registered Professional Forester #2747

PROFESSIONAL AFFILIATIONS

California Licensed Foresters Association
(Board Director, 2010-2015; President,
2012-2013)

Sonoma Resource Conservation District
(Associate Director, 2008-2016)

Cal Poly San Luis Obispo Forestry
School Instructor (2009-present)

Association of Consulting Foresters
(Board Treasurer, 2020-present)

Forest Landowners of California (Board
Director, 2017-present)

Sonoma County Farm Bureau
(Committee Representative, 2014-2018)

Timber Cove Volunteer Firefighter
(2002-2017)

University of California, Berkeley SAF
Accreditation (2015)

The Pacific Seabird Group

Society of American Foresters

Matt Greene, RPF, has spent over 21 years performing fire fuel assessments and reduction projects near structures and on a larger landscape level, conducting biological surveys, preparing erosion control plans, preparing and implementing Timber Harvest Plans and Non-Industrial Timber Management Plans for clients to manage their forests, preparing California Cooperative Forest Management Plans, and conducting timber inventories and timber valuations. Matt continues to help land trusts, open space districts, and small landowners manage their lands and keep those lands productive, while helping to improve the health of the forests.

Matt served on the California Licensed Forester Association Board of Directors from 2009 through 2015, and became president of the Association in 2012. Matt has also served on the Board of Directors of Forest Landowners of California since 2018. He has the background and expertise to assist MWPA with a variety of needs, ranging from designing and implementing vegetation treatments to conducting biological and cultural surveys.

PROJECT EXPERIENCE

Salt Point State Park - Bishop Pine Management Plan and Forest Treatments California State Parks

Forester

This project involves the development of a Forest Management Plan, strategies for obtaining necessary regulatory permits (it's within the Coastal Zone), and supervision of the operations to remove dead and dying Bishop Pine within Salt Point State Park. The Forest Management Plan is being designed as a long-term planning document that comprehensively addresses a large array of insects and diseases which are currently impacting the coastal pines. It includes a summary of all the available literature which is specific to this species of tree to help guide other landowners who are experiencing similar issues. Matt helped with preparing the Forest Management Plan, assisted with forming an advisory committee, and worked with tribal representatives and state park employees to treat high use campground areas with large mortality events. The project has been underway for 5 years and the Forest Management Plan is expected to be completed by June 2021.

Sutro Forest (UCSF) Eucalyptus Management

University of California, San Francisco

Forester

In 2015, the University of California, San Francisco (UCSF) began a process to develop a management plan to ensure the long-term health and sustainability of the Mount Sutro Open Space Reserve and its trees. This project involved the preparation of a Vegetation Management Plan and EIR to evaluate the removal of dead and dying trees in the Reserve, and a restoration program to restore the long-term health of the 79 acre Reserve. To develop the proposed vegetation management plan for the Reserve, UCSF led an extensive public process involving expert, community, and environmental review and revisions. The public process included a Technical Advisory Committee (TAC) comprised of local experts in forestry, hazard reduction,



Matthew Alan Greene

biology, and habitat restoration to provide guidance on best practices in forest management. UCSF held four TAC meetings, which were open to the public, followed by two community meetings and public tours of the Reserve, giving the public many opportunities to help shape the final plan, discuss their concerns and provide feedback. Matt helped with stakeholder outreach and in developing the Mount Sutro Vegetation Management Plan and EIR in collaboration with multiple stakeholders and advisors. The Vegetation Management Plan identifies three phases of forest treatment over the next 20 years to address the declining health of the forest. The Mount Sutro Vegetation Management Plan was approved in 2018 and Matt has helped UCSF successfully implement three projects within the first three years of project approval.

Stewarts Point Rancheria – Kashia Coast Reserve

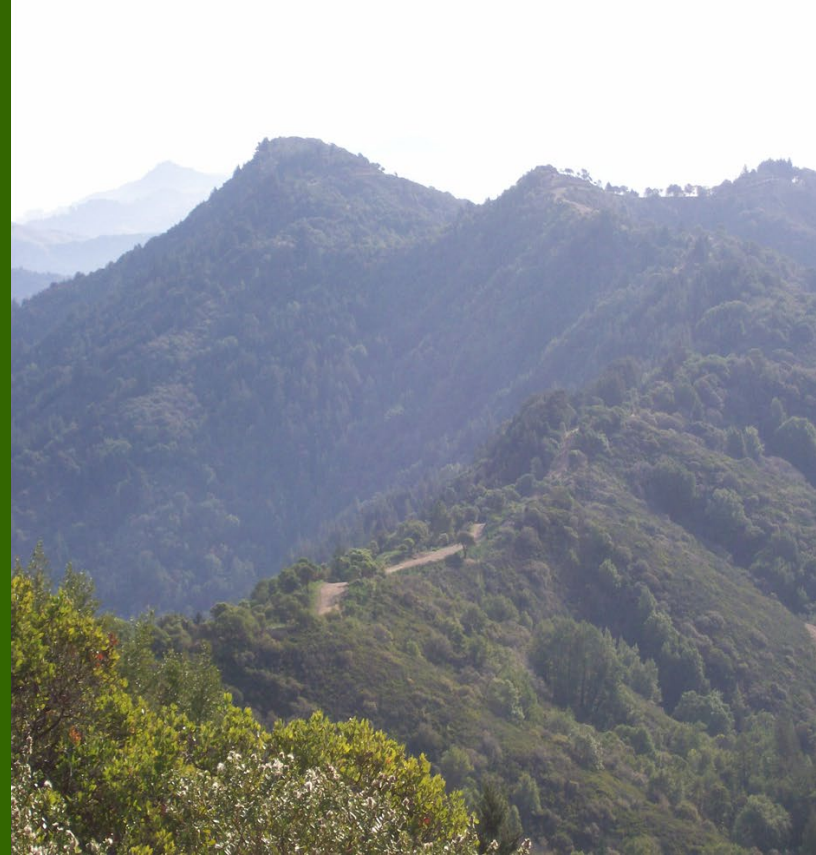
Kashia Band of Pomo Indians

Forester

The Kashia Coast Reserve (KCR) falls under tribal and state jurisdiction and is adjacent to Salt Point State Park on State Route 1 on the California coast. The Kashia Band of Pomo Indians intend to use the land for natural and cultural resource mechanisms and recreation. Matt worked with the Trust for Public Lands and the Sonoma County Agricultural Preservation & Open Space District to help develop a conservation easement for the KCR. Matt also worked in collaboration with Kashia Band of Pomo Indians staff and members to develop a long-term plan for the property, which will serve as part of an Integrated Resource Management Plan (IRMP). The IRMP describes the type of management activities to be undertaken by the Bureau of Indian Affairs and tribal resource management personnel, and serve as an umbrella plan under which all resource planning and management activities are conducted. In the long-term, this project has the potential to develop many different avenues and educational possibilities for both the tribal members as well as the public interested in learning more about Kashia cultural practices. Over the course of the project, Matt also helped with acquisitions, forest management plan development, timber harvest plan implementation, biological surveys, and on the ground training program development for staff and members of the Tribe.

Summary of Relevant Skills

- Prepare and implement all activities associated with Timber Harvest Plans and Non-Industrial Timber Management Plans. This includes accounting and tax preparations, contract preparations and negotiations, hiring and supervising contractors, check scaling, and working with landowners and state agencies
- Develop Forest Management Plans and Fire Fuel management Plans
- Conduct inventories and forest valuations
- Prepare road inventory assessments and Erosion Control Plans
- Conduct biological surveys (Northern spotted owls, marbled murrelets, California red-legged frogs, foothill yellow-legged frogs, California tiger salamanders, Northwest pond turtles, various raptors, anadromous fish, Point Arena Mt. beaver, botanical species, as well as various other habitat and biological surveys/assessments/restoration activities)
- Experience with CAL FIRE California Forest Improvement Program (CFIP), NRCS EQUIP Program, Forest Certification (FSC), and various other forest landowner assistance programs to secure funding for projects, implement goals and objectives in the form of various projects, and monitor outcomes
- Tree hazard and fire hazard evaluations for homes, forestlands, sub divisions, HOA's, and summer camps
- Manage and supervise planting, logging, lopping, fire prevention projects and other forest activity crews
- Prepare grants for various forest and road improvements projects under Cal Fire's GGRF and SRA Programs
- Work with conservation groups to prepare conservation easements
- Arborists reports for home owners and landscape level projects
- Design, prepare, and obtain permits for watershed enhancement projects and in-stream projects



Panorama Environmental, Inc.

Proposal to Provide Environmental Compliance Consulting Services for Wildfire Prevention/Hazard Mitigation Projects

March 31, 2021

717 Market Street, Suite 650
San Francisco, CA 94103
650-373-1200
www.panoramaenv.com



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LIST OF APPENDICES

Appendix A	Resumes
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1. TRANSMITTAL LETTER

March 31, 2021

Mark Brown, Executive Officer
Marin Wildfire Prevention Authority (MWPA)
28 Liberty Ship Way, Suite 2800
Sausalito, CA 94965
E-mail: mbrown@marinwildfire.org

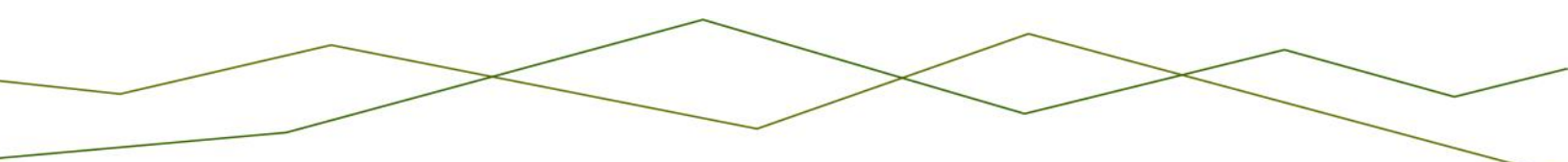
Subject: RFP for Environmental Compliance Consulting Services for Wildfire Prevention/Hazard Mitigation Projects

Dear Mr. Brown:

Panorama Environmental, Inc. (Panorama) is excited to present our proposal to provide environmental compliance consulting services for wildfire prevention and hazard mitigation projects for the Marin Wildfire Prevention Authority (MWPA). We have developed a comprehensive approach based on our team's extensive collective knowledge and our broad and diverse experience that spans from the earliest planning phases for fuel treatment, all the way through oversight and monitoring of field implementation, and the lessons learned during the entire process. Our experience includes a nine-year history of providing wildfire hazard mitigation and vegetation management planning and implementation, as well as California Environmental Quality Act (CEQA) review for the Marin Municipal Water District (MMWD), while our primary teaming partner, Sequoia Ecological Consulting, Inc. (Sequoia), augments our expertise through their extensive, on-the-ground planning and implementation experience for some of the most important fuel management projects in the Bay Area, from multi-county programmatic efforts to emergency response projects.

To create a well-organized and concise (but robust) proposal, we have combined some sections from the Request for Proposals Respondent Submittal Review Requirements in our proposal. Our team's unique and desirable qualifications, which are illuminated throughout our proposal, can be summarized as follows:

- **Highly relevant local experience.** Our team has an in-depth understanding of Marin County's unique physical and social, as well as biological and cultural landscape and resources. Panorama has prepared many CEQA documents in Marin County, including for MMWD's fuel and vegetation management program, covering over 22,000 acres of undeveloped land. We understand the diversity of biological resources in the County and how to effectively conduct fuel treatments with regard for the resources. We also understand tribal concerns and worked directly with the Graton Tribe to develop acceptable mitigation for vegetation management projects. We are experienced in addressing the regulatory agencies' regional and local concerns, having held site visits with agency staff representing the California Department of Fish and Wildlife and the US Fish and Wildlife Service.
- **Fuel management implementation experience.** We know what does and does not work in the field, and how to negotiate feasible projects that are cost effective. Our primary teaming partner, Sequoia, has provided biological services to the California Department of Forestry and Fire Prevention (CAL FIRE), County Resource Conservation Districts, along with many other clients; and has provided biological services for the implementation of 3,000 acres of vegetation management to date under the East Bay Regional Park District's Wildland Hazardous Fuels Management Program. Our team has the depth and

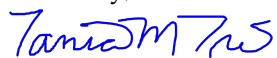


specific experience to work seamlessly with the fire protection professionals and CAL FIRE staff in the region and speak their language. In fall 2020, Panorama oversaw field implementation of fuel treatments for a Stanford University project, to ensure compliance with and conformance to the Request for Proposals and the contract specifications, which we authored. Our team includes forest ecologists and Registered Professional Foresters (RPFs) from Spatial Informatics Group, as well as our prescribed fire experts, Phil Dye and Brad Gallup, who have experience fighting fires as well as designing and implementing treatments, including prescribed fire treatments.

- **Knowledge of the community and their interests and concerns.** We bring experience with local interest groups including the Marin Chapter of the California Native Plant Society, Marin Group Sierra Club, Watershed Alliance of Marin, Friends of Corte Madera Creek, Marin Conservation League, and Marin Audubon Society, and we can anticipate their concerns and how to address and fold them into the process as advocates of your projects, rather than adversaries.
- **Technology forward.** We bring Spatial Informatics Group (SIG) to MWPA through our team. SIG is a think tank that supports cutting-edge research and development into technological tools for fire detection and management. They are a partner of Zonehaven, providing the evacuation route mapping for the region, and even provided real-time heat mapping using their technology during the CZU fire to help San Lorenzo Valley Water District shut off water infrastructure on time to avoid what could have been months of contamination of their water supply system. Panorama is also currently working with Stanford University, including faculty leading research on wildfire behavior and fuel management, and we are incorporating the use of new research and technology into their campus-wide wildfire plan. Panorama has also created innovative implementation platforms for projects that consolidate and create consistency and transparency for project reporting.
- **Wide-ranging CEQA and NEPA experience.** A key component of our approach is to devise a strategy and protocol for determining the appropriate CEQA review for each project. Our team has prepared everything from CEQA and NEPA exemptions to full Program Environmental Impact Reports and Environmental Impact Statements. We have prepared both CEQA and NEPA reviews for vegetation management programs across the state. We have worked with projects receiving Federal Emergency Management Agency funding and have provided support for projects needing all types of permitting, including through the Coastal Commission and the Bay Conservation and Development Commission. Our team is also very familiar with the CALFIRE Vegetation Treatment Plan and Program Environmental Impact Report (VTPEIR) and the process for implementing projects under the program. We have assisted other clients in assessing the possibility for covering work under this program, and have used the document to prepare environmental reviews. We even reached out to a few agencies who recently implemented Project Specific Analyses (PSAs) under the VTPEIR, to obtain their advice on how the process worked and considerations, and used the feedback to frame our approach presented in this proposal.

We are excited for the opportunity to work with the MWPA and to help you achieve your goals in the most efficient and cost-effective way possible. We have included on the following page how our team meets and exceeds all selection criteria. Please feel free to contact me if you have any questions regarding this proposal.

Sincerely,



Tania Treis, Principal

tania.treis@panoramaenv.com

650.340.4829

Attachments

Our Team Meets All Selection Criteria!

- ✓ **Have dedicated staffing (including peer review ability of CEQA related studies provided by the MWPA), and equipment, technical and financial resources for performance and experience providing contract CEQA services to a public agency.**

Panorama has dedicated staff that will be assigned to this project with the availability to make the work for MWPA their highest priority, especially given the recent, successful completion of several of our large wildfire and hazard mitigation fuel management projects! We have highly experienced staff at the ready. Panorama has a three-decade-long history providing CEQA services to public agencies, including Marin Municipal Water District, (MMWD), San Francisco Public Utilities District (SFPUC), Midpeninsula Regional Open Space District (Midpen), East Bay Municipal Utilities District, San Lorenzo Valley Water District, and Santa Clara Valley Water District, to name a few.

- ✓ **Have adequate equipment, technical and financial resources for performance, or demonstrate the ability to obtain such resources as required during performance.**

Panorama is a well-established company that has been profitable since our formation as Panorama in 2011. We have 25 in-house staff plus numerous sole proprietors and small businesses at our disposal. We have the established financial and operational procedures of a large firm, while offering the flexibility and responsiveness of a small firm. Our model allows us to bring the best and most experienced team members to a project under a cohesive and well managed structure. As an example, we are providing in-house on-call services to the SFPUC, where we have produced over 100 environmental clearances in the last six months! Our team is experienced, fast, and efficient.

- ✓ **Have the ability to cooperatively interface and have timely responsiveness with MWPA staff, and Board Committees.**

Communication is the cornerstone of our approach. We have proposed close communication with MWPA staff, as well as suggested ways to ensure close communication with the regulatory agencies and the public interest groups in Marin County, to ensure the smoothest process possible, with reduced risks. On our project preparing Midpen's Wildland Fire Resiliency Program and Environmental Impact Report, we have made frequent presentations at committee and Board of Director meetings and feel very comfortable in these settings.

- ✓ **Have experience with environmental analysis for vegetation management and other wildfire prevention methods.**

Our team has extensive experience with environmental analysis for vegetation management and other wildfire prevention methods, particularly in Marin County for MMWD. We have or are currently providing wildfire mitigation plans and vegetation management plans and the associated CEQA review for MMWD, Midpen, University of California, Stanford University, City of Redwood City, San Lorenzo Valley Water District, and Alpine County. This list is greatly expanded when considering our key teaming partners for forestry, biological resources, and cultural review.

- ✓ **Have experience and expertise to prepare all necessary documentation for project specific analyses (PSAs) to tier from the CalVTP PEIR.**

Our team has the expertise to prepare all necessary documentation for the PSAs to tier from the CalVTP PEIR. We have evaluated projects for coverage under the VTP EIR for clients, we have attended trainings on the program, and we even created a version of a PSA for MMWD for their Program EIR. We also discussed the experiences of preparing PSAs with the Feather River RCD and the State Coastal Conservancy in preparing this proposal and in understanding some of the benefits and difficulties they experienced, we have created an approach to address key issues with CAL FIRE early in the process. We have already reached out to Shannon Johnson at CAL FIRE to further discuss implantation of the VTP EIR. Our air, biology, cultural resources, and other technical specialists also understand the requirements for coverage under the VTP EIR and we are confident that our team can implement the program as well as it creators can, perhaps even with a fresher perspective given our local experience!

- ✓ **Be otherwise qualified and eligible to receive a contract award under applicable laws and regulations.**

Our company is qualified and will negotiate a contract in good faith. As a small business, we can quickly review and sign contracts to expedite the process.

- ✓ **Having previous experience working with agencies in Marin County is highly desired.**

*YES! Panorama has been assisting MMWD, one of the largest land managers in the County, with their vegetation management and CEQA review for **nine years**. Through this experience we thoroughly understand both the physical and the social environment around wildfire hazard mitigation and vegetation management projects. We will bring this unique experience to the MWPA.*

2., 4., & 5. OUR COMPANY AND TEAM

Panorama Environmental, Inc.

Our Firm

Panorama Environmental, Inc. (Panorama) offers government agencies and private entities expertise in multi-disciplinary environmental services and planning. While California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) compliance is our primary service, we also excel in strategic project definition and program planning, permitting, and environmental compliance during project implementation. As a small and nimble firm, we bring customized solutions, attention, and quality to each client.

For over a decade, we have been offering a suite of services that build off of our unique understanding of and approach to long-term fire and fuel management in wildlands. Our methods are rooted in connecting a focused, efficient, and experienced team to our clients. We use our expertise to integrate technical analyses into comprehensive, cohesive, and well-written environmental documents and reports. Our team is particularly adept at describing complex technical information to stakeholders, the public, agency staff, and decision makers.

Panorama is excited about this opportunity because we are confident that we can provide the Marin Wildfire Prevention Authority (MWPA) with the support and service needed to implement wildfire protection projects within their jurisdiction to meet and exceed their goals. We bring the necessary local knowledge, responsiveness, creativity, sound science, and high quality services, as well as a track record of success on similar projects. We also bring the MWPA a team with direct planning, CEQA, permitting, and fuel management implementation experience in Marin County, including for the wildfire mitigation program for the Marin Municipal Water District's (MMWD) 22,000 acres of land. We know the Marin County physical and social landscape well, particularly as it pertains to vegetation management.

KEY FIRM FACTS

Ownership: Private, S-Corporation

Year Founded: 2011 but formed from acquisitions dating back to 1983.

Locations: 717 Market Street, Suite 650, San Francisco, CA & 1722 J Street, Suite 218, Sacramento, CA

Certifications: Small business enterprise (SBE), woman-owned and minority-owned business enterprise (WBE/MBE), disadvantaged business enterprise (DBE), and woman-owned small business (WOSB)

Size: 25 staff

Wildfire Planning and Implementation

Panorama has been providing expert environmental and planning services related to vegetation management and fire and fuel reduction projects continuously for nearly a decade, with a focus in the San Francisco Bay Area, but with experience across the state of California. Panorama has prepared wildland fire, fuel, and vegetation programs and the associated environmental review for: the following:

- **22,000 acres in Marin County for MMWD's Biodiversity, Fire, and Fuels Integrated Plan (BFFIP)**
- **60,000+ acres on the San Francisco peninsula for the Midpeninsula Regional Open Space District (Midpen)**
- **8,100 acres of land owned by Stanford University**
- **2,000 acres of lands managed by the San Lorenzo Valley Water District (SLVWD)**

We, additionally, prepared the Environmental Impact Report (EIR) for the University of California, San Francisco's (UCSF) Vegetation Management Plan for the Mount Sutro Reserve and provided the revisions to the plan based on the EIR outcome. We provided the biological surveys and technical expertise for a vegetation management plan for the City of Redwood City and we prepared a fire

behavior model and vegetation management plan for a large property owned by Stanford in the Town of Portola Valley to support Stanford's housing application and the Town's EIR.

Our extensive vegetation management and wildland fire planning experience is complemented by our over 20 years of experience as an on-call environmental consultant to the California Public Utilities Commission (CPUC), where we have conducted environmental review under CEQA for over 25 transmission projects across the State. Many of these projects have involved a vegetation management and wildfire analysis and planning component.

Panorama's Suite of Services

CEQA and NEPA Services

CEQA and NEPA services are the bread and butter of our firm's work. We have prepared documents addressing a plethora of complex issues across a wide variety of projects ranging from urban infill to fire and fuels management. Our services and experience are on par with much larger firms.

We excel at providing technically compliant, legally defensible documents with clear and concise language. Our firm and project managers have led the preparation of hundreds of documents ranging in size from Categorical Exemptions (Cat Exs) to EIRs and Environmental Impact Statements (EISs). Part of our approach includes talking strategy at the start of the project to determine the appropriate CEQA or NEPA level of review. For example, we have been able to find effective and defensible approaches that include using Cat Exs and other exemptions from CEQA to save time and money. Our approach is also framed by identifying the key concerns early, to address the issues directly and clearly. Integration of public and agency feedback into the design also makes for a project more readily accepted by the community.

Technical Studies

Panorama leads technical expert analyses for all topics covered under CEQA and NEPA, including biological studies, cultural resource studies,

Panorama's Core Service

- Implementing CEQA and NEPA
- Leading technical studies, modeling, and surveys
- Providing comprehensive environmental permitting services
- Preparing and implementing public outreach plans and facilitating public meetings
- Developing mitigation plans and monitoring during construction

paleontological studies, visual studies, noise studies, air quality analyses and modeling, traffic studies, geologic and hydrologic studies and modeling, hazards studies, and economic analyses. Our team also provides wildfire modeling expertise, including utilizing the Interagency Fuel Treatment Decision Support System (IFTDSS), FlamMap, and BehavePlus. We also bring excellent graphic design specialists, geographic information systems (GIS) database specialists, and cartographers to ensure our work products are clear and concise, utilizing maps and images to tell the story. We perform many of these studies using in-house staff, but we also successfully utilize key partners to complete studies. For this contract, we have included several partners, including a key teaming relationship with Sequoia Ecological Consulting (Sequoia).

Permitting Services/Regulatory Assistance

Panorama provides a wide array of permitting services, including State and federal Endangered Species Act (ESA) permitting; permitting through the California Coastal Commission (CCC) and Bay Conservation and Development Commission (BCDC); and Clean Water Act (CWA) and Porter Cologne Act permitting. We strive to continuously work with the regulatory agencies, supporting them as they need, to provide timely permits with appropriate conditions.

Public Outreach and Facilitation

Panorama assists our clients with public engagement and encourages the practice from the earliest phases of a project. We maintain on-staff a professional public facilitator with over 40 years of experience, but each of our project managers also has experience

through the CEQA process. Because we participate in large-scale local projects, we understand that an informed public with diverse interests is common in the Bay Area. We strive to integrate science and planning in our approach to addressing the public, while framing the approach as open and collaborative.

We have designed outreach efforts from start to finish, facilitated contentious meetings, led interagency meetings, developed workshops both in person and on-line using video-conference tools, and presented findings to boards and councils (decision-making bodies). Whatever the MWPA and partner agencies needs, we can provide the support.

Implementation and Compliance Services

Panorama has extensive experience assisting clients with development of mitigation monitoring plans and programs and implementing those programs. We integrate permit requirements with environmental commitments to identify the appropriate level of compliance tracking during field monitoring. We have considerable experience interfacing with the regulatory agencies during implementation if issues arise, in order to proactively address them. Panorama's compliance approach includes developing detailed programs for all phases of implementation, performing pre-construction surveys and developing plans, providing training programs, tracking compliance in the field using our proprietary system (PanoFACTS), and, perhaps most importantly, **integrating lessons learned into future efforts**. Our team has also prepared compensatory mitigation planning for projects. We prepared a novel web portal for a recent monitoring project that centralized all project training, data, maps, and information into a user friendly interface that includes real-time viewing of data to support decision making.

One of our unique offerings to MWPA is our experience during the implementation of fuel and vegetation management projects. Panorama has been involved with the implementation of fuel

MMWD Ross Reservoir Landslide Repair Project — Outreach to Support an Exemption

Panorama was hired by MMWD to prepare a CEQA IS/MND for the Ross Reservoir Landslide Repair Project. The district had been aware of the landslide for several decades; however, it was finally getting close enough to the Ross Reservoir that it was threatening the structure. Panorama made the case that the work to repair the large landslide should qualify for an emergency exemption and convinced both the Board and the district's attorneys that the approach was sound. As part of the approach, we proposed reaching out to key neighborhood groups and Ross Elementary School to make sure that they would support the process and to incorporate and address their concerns. We met with these groups and got their support to provide the district with an added layer of confidence in the approach. The approach was effective and Panorama completed the permitting a year ahead of schedule and approximately \$50,000 under budget.

management for MMWD since completion of the Program EIR in 2019. We prepared a detailed compliance tracking tool and system for MMWD, assisted in compiling their annual report, and are continuing to provide support with botanical field surveys. For another project in Portola Valley, the Panorama team developed the vegetation treatment specifications and Request for Proposals (RFP) for the contractor, and oversaw the work during implementation, including leading pre-construction surveys, identifying trees for removal and that must stay, and providing oversight of contractor work to ensure compliance with prescriptions and environmental measures. Our team members, described later in this proposal, also bring unique, applicable, and important implementation experience.

On-Call Services

Panorama, as a firm, maintains several key on-call contracts where we provide on-going CEQA, NEPA, and resource permitting support, as well as expertise to local, regional, special district, and State agencies. We have clients who continue to rehire us to provide our services on new projects. Our ability to maintain on-call contracts and sustain repeat business demonstrates that we have the structure and systems in place to support our clients and that

we provide quality, cost-effective, and responsive services.

On-call contracts are our favorite contracts. They allow us to provide continuous service, to learn and apply forward lessons from earlier projects, and to develop a close relationship with the agency and their staff and to understand their preferences and styles of management to provide the best service.

Panorama currently holds a \$5M on-call contract with the San Francisco Public Utilities Commission (SFPUC) that we have had for eight years, providing CEQA, technical studies, and permitting. We hold a current \$3M contract providing CEQA, NEPA, and technical studies and regulatory assistance to the Santa Clara Valley Water District. We recently won a renewal of our on-call contract for \$740,000 with the San Francisco Public Works Department and our on-call contract for \$150,000 a year with the City of Alameda Public Works was just extended. We were also recently awarded one of three on-call contracts for up to \$240,000 a year for the Vallejo Flood and Sanitary District for CEQA services. We hold one of six on-call contracts to provide CEQA services for the CPUC. We have held this contract for over 20 years with numerous renewals, during which time we have provided over \$25M in environmental services for projects ranging from technical support to large-scale EIRs.

Subconsultants

Subconsultant Model and Oversight

Our company's business model is based on the building of highly qualified, responsive, and high-performing in-house and subconsultant teams. We are careful when we staff projects to ensure that the client receives the combination of the most qualified and most dedicated staff with the ability and availability to perform. We use our previous experience as learning opportunities to optimize our management processes for both in-house and subconsultant staff. We stay abreast of the latest management technology and integrate it where it improves efficiencies and our ability to perform technical work. As a small firm, we are nimble and

Panorama's On-Call Environmental Services Contracts or Lists

- California Public Utilities Commission
- San Francisco Public Utilities Commission
- San Francisco Public Works
- San Francisco Planning Department
- Port of San Francisco
- City of Alameda Public Works
- City of Burlingame
- City of Millbrae
- City of Susanville Airport
- City of Vacaville Public Works
- City of Vallejo Flood and Sanitary District
- Colusa County
- County of San Benito
- City of San Mateo
- County of San Mateo
- East Bay Municipal Utility District
- Imperial County Planning Department
- Inyo County Public Works
- Mid-Peninsula Regional Open Space District
- Mono County Planning Department
- Pacific Gas & Electric
- Redwood City Public Works
- San Bernardino County Public Works
- Santa Clara County Planning
- Santa Clara Valley Water District
- Sonoma County Water Agency
- Sonoma County Public Works

flexible and therefore, able to constantly improve our management systems without much administrative hassle.

While we have over 25 in-house staff, we have at our disposal over 100 contractors and specialty firms to bring to our team, depending on the type of project, location of the project, and particular resource concerns. Most of our subconsultant experts are sole practitioner or part or owners of a small firm, including minority and women-owned firms. We are able to bring their often advanced expertise (usually having over 20 years of experience), and commitment as small business owners, to our clients. Our model includes establishing Master Services Agreements and well defined task orders; and clearly outlining roles, deliverables, budgets, and

schedules in each task order. Given the technological tools available, working with subconsultants is often no different from working with staff from within our firm. For example, some of our subconsultant staff share a Slack channel with us so that we can instant message as needed! We are assured the highest level of service and responsiveness, particularly because we bring these specialists in on many projects.

Recently, a client let us know one of her frustrations was having to manage so many different contractors and all the associated administrative tasks with that oversight. Our model allows the MWPA to have one point of contact, while we are able to bring the best experts to the project and manage them seamlessly. The client sees the overall benefits in the quality of work and effectiveness of the focused experience of each key team member, often at a similar price-point to that of a firm that handles all the work in-house with whichever staff are available.

Panorama has chosen to include a few subconsultants to augment our team's experience, capabilities, and capacity. We have an existing and on-going relationship with all of these firms. While we are from different firms, this is a cohesive team that has extensive experience together.

Our key partner in this effort will be **Sequoia Ecological Consulting**. Based on our extensive experience in Marin County, the key issues to address during the CEQA review will be biological. The treatment methods as well as critical timing are often driven by the biological resource considerations (such as rare plant survey timing or how to time work around northern spotted owl activity periods). The Sequoia team brings ecological and biological planning and, importantly, the implementation experience on fuel and vegetation management projects. They are exceptionally knowledgeable of the most practical, feasible, and cost effective approaches to address ecological conditions and constraints during implementation of vegetation management projects. They have been performing the

implementation for East Bay Regional Parks District (EBRPD) fuel management project (one of the longest standing programmatic efforts for fuel management in the Bay Area) for several years. Sequoia is a critical team member because they augment our planning experience with on-the-ground practical experience, bringing the field lessons learned back to the planning of future projects, to constantly improve processes.

Key Subconsultant Partner



Founded in 2011, Sequoia is a Bay Area-based small, woman-owned, disadvantaged

business that provides environmental consulting services. As a focused ecological specialty firm, Sequoia has consulted extensively with local and State agencies to plan and implement their vegetation management programs while protecting natural resources. Sequoia's knowledge of fuel treatment methods, as they pertain to natural resource protection, is unmatched. The firm has also supported fuelbreak and vegetation management projects for the Moraga-Orinda Fire District, EBRPD, California Department of Forestry and Fire Prevention (CAL FIRE), San Mateo County Parks Department, and Pacific Gas & Electric (PG&E). They employ 35 technical staff, many of whom are Bay Area-based. They have a history of proven experience working with government agencies to develop environmental documents, Habitat Conservation Plans (HCPs), and mitigation measures that minimize compliance issues, meet regulatory requirements across the board, and minimize impacts to sensitive resources. Sequoia has worked alongside agencies including the US Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), US Army Corps of Engineers (USACE), National Marine Fisheries Service and the Bureau of Land Management (BLM) to develop program requirements. They fold their extensive implementation experience into high quality CEQA and NEPA documents including natural environment studies, biological assessments, Mitigated Negative Declarations (MND), Negative Declarations (ND),

EIRs, and EISs.

Other Subconsultant Qualifications



We have built a successful and unique model with Spatial Informatics Group (SIG) that started with the preparation of the Alpine County Fire Hazard

Mitigation Plan and Midpen's Wildland Fire Resiliency Program (WFRP). SIG is a group of scientists with expertise in environmental fields ranging from ecology and forestry to natural resource economics. SIG provides a wide range of geospatial services and products integrated with professional consulting services in areas such as ecology, forestry, soils science, risk and hazard management, environmental economics, and urban and regional planning. Their people are experts in using tools such as GIS, remote sensing (including LiDAR analyses and data collection using unmanned aerial vehicle [UAV]), spatial data mining, and dynamic spatial modeling. Their analysts are also specialists in relevant fields such as landscape ecology and forestry. With experience in closely integrating spatial analysis with substantive research, SIG's team offers an integrative analytical approach, combining spatial analysis with scientific, ecological, and economic knowledge to understand the cumulative effects of management choices on the short and long-term stability of natural resources and ecosystem functions.

SIG has completed several projects directly related to the proposed project, including preparation of **over 22 Community Wildfire Protection Plans (CWPPs)**, on the ground planning and implementation of hazardous fuels reduction projects, and detailed assessments of fire risk and hazards for multiple projects across California. Regional experience includes vegetation management planning for fuel reduction projects for the University of California (UC) at Berkeley and for development of Midpen's comprehensive

WFRP, covering over 60,000 acres of open space. SIG is part of the Panorama team for the fuel management work with Stanford University, the SLVWD, and Alpine County.

Members of their team work extensively with Fire Safe Councils as well as federal and local government landowners to develop and seek funding for collaborative fuels reduction projects. Team members who would work with MWPA have both led and been co-authors on several peer reviewed publications related to fuel treatments, wildfire emissions, and fire hazard and risk mitigation.

SIG brings two Registered Professional Foresters (RPFs), Rangeland Specialists, UAV expertise, and emerging technologies in fire warning and tracking



PROMETHEUS
Fire Consulting Services

Prometheus Fire Consulting is owned and operated by Phil

Dye, who is also an active volunteer firefighter. Prometheus assists a variety of landowners and managers in recommending pre-wildfire mitigation measures as well as the use of prescribed fire as a resource management tool. Prometheus provides suggestions such as fire control line placement and design, infrastructure defense strategies, and proposed locations of fuels reduction work. Prometheus also has an established working relationship with Panorama and SIG, including on the Midpen WFRP, SLVWD Vegetation Management Plan, and Stanford University's Wildfire Management Plan. Prometheus' experience includes helping the Moraga-Orinda Fire Department design prescribed fire projects to complement and reinforce the shaded fuelbreak, having provided the S-212 Wildland Power Saws class to train Santa Clara County Parks staff, and having implemented prescribed fire projects for many private landowners.

Prometheus brings on-the-ground experience, firefighting experience, strong relationships with fire personnel, including with CAL FIRE, and prescribed burning planning and implementation experience

Far Western is a cultural resources management firm specializing in archaeological and geoarchaeological studies throughout California and the Great Basin. Founded in 1979, Far Western is led by its executive management team of seven archaeologists and one GIS specialist, each renowned in their respective fields and who take an active participation in all company projects. Far Western works with a variety of federal, State, and local agencies and private entities providing the full range of cultural resources management services, ranging from simple records searches/constraints assessments, inventory of small- and large-scale projects, and more extensive site eligibility evaluations, to data recovery/mitigation excavations. Far Western provides the expertise of 38 PhD- and MA-level archaeologists; a five-person Geoarchaeological Department, which has modeled buried site sensitivity for 80 percent of California; a GIS Department with 10 dedicated GIS analysts for all forms of project mapping; and a production team that focuses on quality control and staying on schedule.

Far Western has completed numerous archaeological projects for public and private clients throughout the state of California. Over the last six years, Far Western has had an increasing number of projects dedicated to assisting federal, State, and local agencies and private entities in fuels reduction/ management and post-wildfire response as these activities relate to cultural resources management. For instance, after the October 30, 2015 Governor's Proclamation for the removal of dead/dying trees in high-hazard zones that threatened critical infrastructure, Far Western, under various on-call contracts with the California Department of Transportation (Caltrans), conducted over 1,400 miles of survey along the Caltrans right-of-way ahead of tree cutters to ensure no cultural resources were impacted by tree felling activities. Services included pedestrian inventory, establishment of Environmentally Sensitive Areas,

archaeological monitoring, post-tree cutting archaeological site conditions assessments, and technical reporting. During the course of this work, Far Western identified 3,111 cultural resources that required review and updated the records and/or newly recorded 1,273 archaeological sites. Far Western also has extensive experience in Marin County.

Far Western brings the cultural resources expertise to perform surveys, coordinate with tribes, and provide reporting needs for projects.



RCH Group (RCH) focuses on

environmental

consulting and land planning in California. RCH can build upon their extensive environmental experience to help prepare high-quality technical reports and CEQA/NEPA documents in a timely and cost-effective manner. RCH staff specialize in technical reports for air quality, greenhouse gas emissions, climate change, health risk assessments, and noise. RCH recently worked with Panorama to complete the air quality and greenhouse gas emissions analysis for the MMWD's BFFIP EIR and the Midpen WFRP EIR as well as the Gemini Solar Project EIS. Other project experience includes preparing the air quality analysis for the Inglewood Transit Connector EIR, and preparing the air quality permit application for an Anaerobic Digestion Facility. RCH is also currently working on CEQA documentation and air quality analysis for a mining operation in Marin County.

RCH brings additional expertise in air quality and greenhouse gas emissions modeling and analyses to the team.



Clearwater Hydrology

(Clearwater) is a

small firm that was created by William Vandivere, P.E., in 1996 with a vision of integrating expertise in watershed hydrology, water resource engineering

and fluvial geomorphology in the service of multi-faceted resource and environmental planning. Clearwater's experienced staff of ground and surface water hydrologists and engineers assist public and private clients with a broad range of environmental assessments, feasibility analyses, and engineering hydrologic/hydraulic analyses and design services, as well as field construction supervision. Clearwater offers consulting hydrology and water resources engineering services to natural resource, parks, water management and flood control districts, municipalities, private developers, engineering, ecological and planning firms, and public interest groups. The firm's engineering and earth sciences staff specializing in engineering hydrology, hydrogeology, estuarine and riverine hydraulics, fluvial geomorphology, and stream and habitat restoration science provide expert technical services and environmental assessments, CEQA analysis and EIR support. Based in Berkeley, they have extensive local experience, including for several projects in Marin County, and for the Marin County-wide Plan EIR. Clearwater provided the flow modeling and hydrologic analysis for Panorama for the UCSF Mount Sutro Vegetation Management Plan.

Clearwater provides hydrology, water resource, and fluvial geomorphology support, as needed.



CHS Consulting Group (CHS) is a California-based multimodal transportation planning

and traffic engineering firm, founded in 1998, with a reputation for problem solving, creative solutions, and consensus building. CHS has prepared several hundred transportation documents throughout California, including transportation sections for CEQA and NEPA documents, from concise transportation reports for Initial Studies (ISs), NDs, and MNDs, to comprehensive transportation analysis reports involving all transportation modes for EIRs and EISs. This vast experience helps ensure that the

transportation section of an environmental document is thorough and well-written and the analyses are comprehensive, objective, and defensible. CHS is headquartered in Oakland and its Marin County experience includes the SMART South Segment Corridor Project, Downtown Novato Grant Avenue Improvements, and exploring sustainable backup power supply options for the Novato Transit Center. CHS also assisted Panorama in conducting a traffic safety and turning radius analysis for the UCSF Mount Sutro Vegetation Management Plan EIR.

CHS provides the traffic analysis, if needed to address issues.



Catalyst is a small public relations and communications firm led by

Charles Gardiner. Catalyst fosters intelligent and perceptive solutions to complex economic, environmental, and infrastructure challenges through strategic communication, collaboration, and solutions-oriented advocacy. Charles Gardiner has more than 30 years of experience. He designs and manages stakeholder and public engagement strategies for environmental and infrastructure programs in water resources, environmental restoration, wastewater, energy, hazardous waste, rail, transportation, climate change, and emergency preparedness throughout the US. In support of these programs he has developed and coordinated public information and education programs, community outreach and promotional projects, and social marketing and behavior change programs. Mr. Gardiner is also trained in conflict mediation, facilitation, and public decision-making techniques.

Catalyst brings expertise in public outreach and facilitation as well as multi-agency meeting, as needed.

Panorama can bring in other subconsultants, as needed, to address topics as they arise, such as site hazards.

Team Experience and Project Examples

Overview of Experience

The Panorama team brings the MWPA a unique combination of highly localized experience with the environmental considerations relevant to **planning and implementing** vegetation management projects in Marin County, the experience with the community and public interests related to vegetation management to ensure a collaborative and thoughtful process, and the experience in fire hazard risk assessment and forestry to be able to assist in the development of the most cost effective and permissible project treatments and prescriptions based on previous on-the-ground implementation experience.

Our team's most relevant experience is our preparing the BFFIP and Program EIR for MMWD. Because of the program's geographic and contextual similarities to the MWPA's expected project work, we have included a more in-depth description of our team's work on that project. We have provided references for several of the projects where work is completed or mostly completed and most relevant, in Section 9.

We believe that our unique team has become the premier consortium of experts for fuel and vegetation management projects in the region. We bring together a diversity of experience and expertise that complement each other to provide local entities with all the skills needed to create an

effective approach to planning, environmental review, and implementation for vegetation management projects. Panorama also brings unmatched experience preparing local Program EIRs for vegetation management projects, should the MWPA decide to take that approach in a year or so. The CAL FIRE Vegetation Treatment Plan (VTP) is a new process; however, our team is very familiar with it and its implementation, having attended webinars on the program, and performed evaluations for Alpine County and SLVWD to recommend where the VTPEIR be used to cover their work. One of the pilot Project Specific Analyses (PSAs) under the CAL FIRE VTPEIR is at Bear Creek Redwoods for use of manual and mechanical removal methods, an area we also covered in the Midpen WFRP and EIR.

Our team has become the knowledge managers for regional fuel management planning and analysis. Our position allows our clients to gain from each other's knowledge on these truly landscape level issues associated with wildland fire mitigation and development of ecological resiliency. We are confident that the MWPA will benefit highly from our services and experience, as does the greater region from our continued building of fuel management approaches across jurisdictions.

Panorama's Project Experience

Panorama's and our key subconsultant project experience is summarized on the following pages, including our fuel management projects, Marin County projects, permitting projects, NEPA projects, and our on-call services experience.



Panorama's Wildfire Mitigation Project Experience—CEQA and Planning

PROJECT HIGHLIGHT

Marin Municipal Water District Biodiversity, Fire, and Fuels Integrated Plan and EIR



Panorama prepared the BFFIP in close collaboration with MMWD staff and prepared the associated Program EIR to address vegetation management activities on 22,000 acres of watershed lands at the wildland urban interface (WUI) in Marin County. The Final EIR was certified and the plan approved in

November 2019. The BFFIP included definitions of fuel management zones both for fire infrastructure (fuelbreaks) and for natural resources and resiliency. The plan addressed areas of increased threat due to invasion of French and scotch broom, among other weeds, and of sudden oak death. Panorama, with MMWD staff, identified 27 management actions, their locations, and their prioritization. A detailed five-year implementation plan was included in the BFFIP, which included a costs analysis, total acreages to treat by mapped zone, and performance criteria to measure the success of treatments. Extensive mapping was performed to understand biological, cultural, soil and slope, noise, visual and other constraints that we addressed in detail in the Program EIR.

The plan development commenced in 2012 and included a limited herbicide program. Panorama worked with Pesticide Research Institute to develop an over 900-page Herbicide Risk Assessment. Due to the best management practices incorporated, and the limited proposed use (e.g., backpack sprayer only), impacts to human health and safety were found to be minimal. We also assessed impacts to water quality and special status species. Herbicide use was extremely controversial in Marin County, however. Once the International Agency for Research on Cancer made a finding that glyphosate is likely carcinogenic, the MMWD Board of Directors voted to remove all herbicides from the program, and Panorama rewrote the program.

Panorama prepared a comprehensive CEQA Program EIR, developed a project-specific analysis framework to address future projects under the program, and is assisting with the implementation phase of the plan. Our team created an innovative Excel tool for identifying and tracking mitigation requirements as individual projects are undertaken under the plan. Panorama also provided the template for annual reporting after the first year, and is providing on-going botanical survey support for the plan.

Through this project, Panorama understands the environments in Marin County and the mitigation needed to address biological, social, and physical impacts from fuel management projects. While many members of the public were glad to see herbicides removed from the plan, other entities felt the plan would be less effective without them. Panorama clarified that the plan does not ban herbicide use. Our team identified specific performance criteria for the plan, and an adaptive management approach to be taken. If the current plan can not meet goals, the plan can be revisited to include herbicides, after additional environmental review. This approach satisfied the interest groups. Interest groups included the Marin Chapter of the California Native Plant Society, Marin Group Sierra Club, Watershed Alliance of Marin, Friends of Corte Madera Creek, Marin Conservation League, and Marin Audubon Society.

- ✓ Defined fuel treatments over a large area, prioritizing work in Marin County
- ✓ Coordinated input of multiple parties including fire districts, CAL FIRE, Golden Gate National Recreation Area, and Marin County Parks
- ✓ Defined and lead stakeholder and public outreach meetings
- ✓ Became familiar with the interest groups and their concerns regarding fuel management projects in Marin County
- ✓ Gained a deep understanding of herbicide issues in Marin County
- ✓ Developed implementation framework and participated in implementation phase.

PROJECT HIGHLIGHT

Midpeninsula Regional Open Space District Wildland Fire Resiliency Program



"I have been very impressed with Panorama and especially you on this project. Thank you for going above and beyond on the project thus far."—Coty Sifuentes-Winter, Midpen

This comprehensive program covers over 60,000 acres of preserve wildlands managed by Midpen, including all 26 of the District's open space preserves. SIG and Panorama were each selected for a three-year contract. The program prepared by our team consists of several components, including a Vegetation Management Plan with the prescriptions for fuelbreaks and fuel reduction areas constructed to protect infrastructure and assets; a Prescribed Fire Plan that defines prescribed fire units and methods; a Resource Advisory Map and Wildland Fire Pre-Plan; and a Monitoring Plan.

The program identifies ingress/egress, emergency access, constraints, sensitive natural and cultural resources, infrastructure, and important considerations for firefighters during a fire. The program includes the habitat types, the fuel treatment methods in each habitat type, the implementation tools (including manual, mechanical, grazing, prescribed fire, and herbicides), an implementation plan and methodology to prioritize projects, and an estimated costing.

SIG and Panorama are working with Midpen's staff through all phases of development of the program, including consultations with partner agencies, tribal entities to understand and integrate Native American cultural burning practices, CAL FIRE, and fire protection agencies. Work to date has included developing a policy gap analysis and recommendations for revised policies that were presented to the Board of Directors; developing the Vegetation Management Plan through coordination with Midpen's facilities teams for the open space preserves, and presenting the plan to the Planning and Natural Resources Committee; developing the Monitoring Plan; developing the program-level Prescribed Burn Plan; developing the Monitoring and Adaptive Management Plan as well as designing and organizing three public outreach workshops with Midpen and numerous partner agencies to present the overall program and goals to the public and receive feedback; defining the appropriate CEQA review and identifying the schedule that will drive the project; and preparation and distribution of the Draft EIR, including performing key technical analyses. Key technical studies included visual impacts, modeling of air quality and greenhouse gas emissions, a comprehensive biological resources analysis based on conditions and treatments, a cultural resources review with follow-on site specific surveys needed, and an analysis and detailed mitigation to address geology and slope stability concerns based on the recommendation in the Forest Practice Rules. The public comment period for the Draft Program EIR closed on March 1st, and Panorama is preparing the Final EIR.

The EIR addresses manual and mechanical vegetation management actions in enough detail that work can be carried out immediately upon completion of the EIR. A Tiered EIR will be prepared to address specific prescribed burn actions that have a longer planning horizon. Completion of the program and EIR will allow Midpen to apply for grants to perform the work, potentially in collaboration with neighboring jurisdictions. Panorama also looked at the potential to use the **CAL FIRE VTP EIR** for the program; however, Midpen preferred the control afforded by their own Program EIR. Midpen is conducting a PSA for manual and mechanical work at the Bear Creek Redwood Preserve.

- ✓ Defining fuel treatments over a large area and prioritizing work
- ✓ Coordinating input of multiple parties including fire districts, CAL FIRE, and other jurisdictions with over 25 meetings scoped
- ✓ Defining and leading stakeholder and public outreach meetings and workshops
- ✓ Incorporating environmental considerations when defining and prioritizing fuel treatments
- ✓ Integration without overlapping Midpen's IPM and Grazing Management Plans
- ✓ Understanding Midpen's existing defensible space permit program for adjacent neighbors



Year: 2020—present

Relevancy: Fuel prescription design and mapping, extensive agency coordination

Stanford University Wildfire Management Plan

Panorama was selected to prepare a Wildfire Management Plan to protect 8,100 acres of lands at the WUI for Stanford University. The university prepared a preliminary plan in September 2019. Panorama was brought on to expand that plan through fire behavior modeling, identification of the important resources and assets to protect (risk assessment) to prioritize the work, and definition of detailed vegetation management prescriptions by mapped land units, including manual and mechanical methods, prescribed herbivory, and prescribed burning. A wide range of conditions is being addressed, considering the uses of the properties ranging from rangeland to equestrian, to grassland, to an academic

ecological preserve, to the linear accelerator lands at SLAC. SIG is a subconsultant to Panorama providing GIS mapping. While the work is not likely subject to CEQA, Stanford maintains an HCP and Panorama is building environmental protection measures into the program to minimize effects, based on best management practices.

Highlights! Panorama planned and led multiple stakeholder meetings with the six municipalities within which the campus falls. The intent of the meetings was to identify ways to communicate and build off of the work being performed by those entities and to develop support for Stanford's efforts. Attendees ranged from General Managers, to emergency and fire personnel and from local fire departments to CAL FIRE staff to public works leads. Emergency access and collaborative planning were major points of discussion.

San Lorenzo Valley Water District Wildfire Plan

Panorama and our team of specialists were selected to provide services to address wildfire concerns in the San Lorenzo River Watershed for the SLVWD. Our team is accounting and mapping the SLVWD resources and assets in order to understand exposure to potential wildfire during critical fire weather. During the CZU August Lightning Complex fires, significant areas of the watershed burned. Panorama's teaming partner, SIG, was able to provide real time mapping as soon as the fire started, which essentially allowed the District to shut off critical infrastructure that prevented contamination that could have harmed the water system for months. Panorama prepared an application for a California Forest Improvement Program (CFIP) grant and is preparing a mitigation plan to reduce exposure and prioritize treatments for remaining high-risk areas, with a focus on defensible space and hardening treatments around the most vulnerable infrastructure. Our team is working with the SLVWD to build implementation grant proposals while also canvassing other funding opportunities to expand the scope of the project to include more in-depth analysis and implementation across all landowners in northern Santa Cruz County. Panorama also performed a review to identify the process by which projects could be processed under the **CAL FIRE VTP EIR**, and alternative CEQA scenarios.

Highlights! Panorama coordinated and talked with numerous agencies and entities ranging across the San Mateo and Santa Cruz Resource Conservation District, the Santa Cruz Mountains Stewardship Network, Santa Cruz Fire Safe Council, CAL FIRE staff, the Natural Resources Conservation Service, Santa Cruz County, and the Watershed Emergency Response Team to ensure that SLVWD was at the table and involved in all potential opportunities for collaborative efforts and grant funding.



Year: 2020—present

Relevancy: Definition of fuel treatments and mapping, CEQA review, extensive agency coordination



Years: 2019—present

Relevancy: Development of fuel treatments on 860 acres of private lands and CEQA Review

Alpine County Wildfire Hazards Mitigation Plan

Vegetation management projects to reduce the risk of wildland fire are a high priority in Alpine County. The County received a grant to prepare a more detailed hazard mitigation plan to understand areas at risk and to implement methods to reduce risks. Panorama prepared the Wildfire Hazards Mitigation Plan for Alpine County. The plan includes an evaluation of fire hazards through fire behavior modeling, identification and ranking of high value resources and assets through a collaborative process with a steering committee, identification of several priority projects including defining the specific fuel treatments such as new fuelbreaks, and defining the costs associated with those treatments. The program included an

element of community outreach to further inform the focus and to articulate the benefits of the program to the community. The plan includes the modeling results and fire hazard risks, the important infrastructure and resources to be protected, and the detailed implementation plan for the priority projects.

Highlights! The three top priority vegetation management projects identified through the process encompassed 860 acres, all on private lands. The prescriptions included manual and mechanical methods of vegetation management for fuel reduction on these properties. Panorama and the County had to work with the numerous landowners to obtain their buy-in, starting with conducting biological and cultural surveys on their land. Our team included prescriptions designed by our RPF from SIG. Panorama prepared a CEQA IS/MND. The IS/MND was unanimously certified and the plan adopted on February 16th. Panorama also performed a detailed analysis of the projects that could potentially be addressed through the **CAL FIRE VTP EIR**, for projects beyond the top three “shovel ready” projects.

Vegetation Management Plan for Portola Valley Cluster Subdivision Project

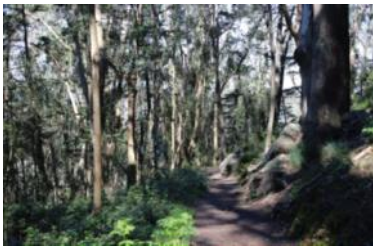
Panorama worked with Stanford University to prepare a Vegetation Management Plan for a for a 75-acre parcel in the Town of Portola Valley to support an EIR process for a cluster subdivision on six acres of the property. Our team includes Phil Dye of Prometheus. The project is comprised of heavily vegetated steep slopes of mostly overgrown oak woodland with dense understory of poison oak. Panorama’s team conducted a detailed fire behavior modeling effort using the IFTDSS (with FlamMap 6.0) and Behave, met with the Woodside Fire Protection District, and prepared a detailed vegetation management plan that included initial treatments for the property based on cover type, an estimate of costs for the work, and an on-going maintenance plan.



Year: 2020

Relevancy: Development of fuel treatments and mapping into units.

Highlights! Our team conducted fieldwork to modify the fire behavior model, and also modeled post-treatment to demonstrate the substantial decrease in fire hazard once the treatments are implemented. Our team also built into the plan provisions to minimize effects to species such as San Francisco dusky-footed woodrat, California red-legged frog, significant trees, geologic stability concerns, and nesting birds. Our team also prepared the implementation plan, including the contractor specifications, resource protection measures and best management practices, and contractor Request for Proposals, and we performed contractor oversight during the work, including conducting nesting bird surveys, identification of woodrat nests, and identification of trees to protect.



Year: 2016 to 2018

Relevancy: Definition of fuel treatments and mapping, CEQA review, extensive agency coordination

UC San Francisco Mount Sutro Vegetation Management Plan and EIR

Panorama prepared the EIR for UCSF's vegetation management plan for the Mount Sutro Reserve. The reserve is a 61-acre open space in the middle of San Francisco. The eucalyptus forest was generally unhealthy and had never been maintained. The tree densities were too high to sustain a healthy stock and trees had been heavily affected by drought and disease. Panorama prepared a technical analysis that included a detailed scenario of tree removal, based on the plan's fuel treatments, necessary to assess various types of impacts including fire hazards and carbon sequestration. Panorama provided revisions and updates to the Vegetation Management Plan prepared by the RPF, and performed detailed

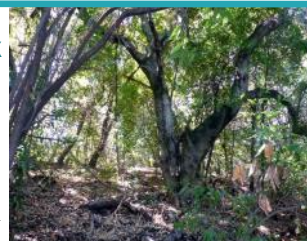
fire behavior modeling using FlamMap. CHS provided the traffic analysis, which included assessing feasibility of moving skippers through San Francisco streets. Clearwater provided a hydrologic analysis of changes in stormwater flow and erosion from tree thinning. Panorama also addressed issues related to slope stability and landslides.

Highlights! Panorama prepared a comprehensive CEQA EIR and worked with the project's RPF to refine, revise, and improve the vegetation management plan treatments, under the guidance of a Technical Advisory Committee. The project was highly contentious with most concern from immediate neighbors. Panorama prepared a 2,000 page Final EIR, addressing all comments from the public and community using facts and citing scientific studies. Plan implementation started in 2018 and for the first time in its history, the reserve's vegetation is being maintained.

Link to the Program Documents and EIR: <https://www.ucsf.edu/about/locations/mount-sutro-open-space-reserve#tabs-3>

Redwood City Fire Hazard Reduction Plan—Stulsaft Park

Panorama prepared the biological habitat assessment for the Redwood City Fire Hazard Reduction plan for Stulsaft Park. The project site is an approximately 2.9-acre portion of Stulsaft Park, an open space preserve. The proposed project involves thinning and removing both live and dead woody materials within the site in order to reduce the risk of wildfire. Panorama's role was to document existing habitat conditions, identify sensitive habitats, and assess the project site's potential to support special-status plants and animals that could be impacted by project activities.



Years: 2019

Relevancy: Understanding of operational procedures for fuel management and integration of protection measures for biological resources in open space.

Panorama's Other CEQA Experience on Recent Projects in Marin County



Year: 2020

Relevancy: Work in Marin County. Evaluation of project work and made recommendation for a Cat Ex vs. an IS/MND. Worked with relevant agencies for expediting permitting, and worked with community to support the a Cat Ex.

Marin Municipal Water District Ross Slide Repair Project Permitting and CEQA

MMWD hired Panorama in August 2019 to prepare biological and cultural studies, CEQA compliance documentation, and permit applications for a proposed landslide repair. The landslide, which is adjacent to the Ross Reservoir, caused erosion of the hill slope to within a few feet of the reservoir foundation in 2017. The landslide also caused a crack in the wall of the reservoir causing water to leak into the surrounding area. In response to the crack in the reservoir and the landslide, MMWD reduced the elevation of the reservoir to operate at 75 percent capacity. The landslide was present and periodically active since around 1960. MMWD had a goal of starting construction of a full landslide repair by August 2020, with Panorama preparing an IS/MND to address the approximately two-acre site work. Within three weeks of being under contract, Panorama had

completed the biological survey report and determined there were wetlands on the site and that the project would remove trees in critical habitat for northern spotted owl. Panorama evaluated MMWDs construction schedule and site circumstances and determined that it was not feasible to complete construction before the rainy season if construction started after the northern spotted owl nesting season in August 2020, as MMWD planned. Because of the critical nature of the project, Panorama prepared a much more aggressive schedule for MMWD. Panorama prepared justification for the project to be treated as an emergency (even though the landslide had been in place for over 50 years), and was successful in obtaining USFWS and USACE approval for an emergency consultation. Due to our team's ability to find the most appropriate scope, we saved the client considerable work and time.

Corte Madera Creek Flood Risk Management Project, Phase 1, EIR

The proposed project includes improvements to the concrete Corte Madera Creek flood-control channel constructed by the USACE in the 1960s and 1970s. The proposed improvements would improve fish passage and provide 25-year flood-risk reduction to residents and businesses within the Town of Ross and Kentfield in Marin County. The project includes installation of a stormwater pumping plant, protection of the sewer pipeline under the creek, modifying flood walls, and restoring natural channel. The Army Corps of Engineers had spent decades trying to develop and permit this project without success. Marin County Flood Control District took over the project and hired Panorama in 2020.

Panorama is currently preparing the Final EIR. Panorama assisted the Marin County Flood Control District with preparing a detailed Project Description in close coordination with their contract engineers. The approach included coordination with local stakeholders and agencies to redesign the project and address previously raised community concerns, including Friends of Corte Madera Creek and the Town of Ross. Panorama is leading early coordination with permitting agencies during EIR development. The EIR addressed various issues related to the project, including visual impacts of the proposed flood walls on views from Corte Madera Creek Pathway. Adequate passage and habitat for anadromous fish species is a primary biological concern as Corte Madera Creek is a natural watercourse that provides spawning and rearing habitat, including for steelhead and potentially Coho salmon. Despite the size, history of controversy, and complexity of this project, Panorama completed the Administrative Draft EIR within five months of commencement of work.



Year: 2020—2021

Relevancy: Work in Marin County. Controversial project that required upfront coordination with communities in Marin and permitting agencies.

Panorama's Project Permitting Experience with BCDC and CCC



Southeast Outfall Replacements in Islais Creek CEQA and Permitting

This project example involved extensive permitting and coordination, including **with the BCDC**. The project involves replacing the portion of the Southeast Outfall ("SEO") Force Main under Islais Creek in San Francisco. The project includes constructing a steel, watertight cofferdam, and excavating the alignment for the new pipes. The coffer dam will need to be nearly 50 feet tall. Panorama prepared the CEQA

analysis in an IS/MND as well as coordinated and is currently obtaining the permits including the Clean Water Act Section 404 and Harbors Act Section 10 for in-channel work; a combined Clean Water Act Section 401 Water Quality Certification/Waste Discharge Requirements permit; three different permits from the National Marine Fisheries Service including a Section 7 consultation, an Essential Fish Habitat consultation and impacts to listed fish species, and a Marine Mammal Protection Act consultation and Incidental Harassment Authorization or Letter of Authorization; and a **BCDC General Permit**. Panorama is also determining the general mitigation strategy. While the activities differ from MWPA's work, this project demonstrates Panorama's ability to understand and integrate multiple permitting needs with the CEQA review and to coordinate with agencies and complete permit applications, including BCDC permits.

Alameda to North Bay Farm Island Pipeline Crossings CEQA and Permitting

The project involved construction of three Bay Estuary pipeline crossings from the City of Oakland to the City of Alameda. Panorama prepared the EIR, participated in scoping, and led the technical studies, including noise, traffic, and air quality, for the project. Panorama's work was completed approximately **\$120,000 under budget**, allowing

Panorama to assist with the permitting of the geotechnical work and the permitting for the first crossing. Panorama created a detailed permitting flowchart and plan that was integrated into the CEQA review timeline, and coordinated with the agencies to obtain the permit requirements and discuss conditions. Permits included Section 404 and 401 permits and an application for a **BCDC Regionwide Permit No. 2**.



TL 695 & 6971 Reconductor Project for the CPUC

Panorama prepared an IS/MND for the reconductoring of two transmission lines on Marine Corps Base Camp Pendleton. The proposed project involved reconductoring approximately 8.4 miles of 69-kilovolt (kV) power line conductor on TL 695 and TL 6971, replacing existing wood pole structures with new steel pole structures, and installing a new underground 69-kV power line. The project included

the removal and maintenance of vegetation around the lines. The project required permits from the San Diego Regional Water Quality Control Board, as well as the CDFW. The **California Coastal Commission** was also a trustee agency for the portion of the proposed project that would be located within the coastal zone and required a **Coastal Development Permit**. Panorama provided the coordination with these agencies to ensure that the CEQA document met their needs and that the permitting process was adequately described in the CEQA document.

Panorama's NEPA Experience

While much of our experience with fuel reduction projects has been CEQA-related, Panorama has extensive experience analyzing environmental effects for projects under NEPA. We have performed NEPA reviews for many different lead federal agencies under their unique implementation guidelines and we understand how to adapt analyses to meet each federal lead agency's own way of completing NEPA. Our experience has included NEPA Categorical Exclusions (CEs), Environmental Assessments (EAs), and EISs. A few highlights are described below, ranging from CEs, to EAs, to EISs.



MurraySmith Engineering Various Highway Bridge Program NEPA Support

Panorama, as a subconsultant to MurraySmith, has completed the environmental review pursuant to NEPA (to issue Federal Highway Administration Funding or **Federal Emergency Management Agency [FEMA] funding**) for numerous bridge maintenance and replacement projects across California. Panorama prepares all the technical studies needed to support the NEPA CEs. For example, for the Sonoma County Freestone Flat Bridge Replacement (pictured here), Panorama prepared

the Natural Environment Study, the Traffic Technical Memorandum, Noise Technical Memorandum, Hazardous Waste Technical Memorandum, Floodplain Study, Right-of-Way Technical Memorandum, Farmlands Technical Memorandum, Cultural Resource studies, and the Equipment Staging Technical Memorandum. Panorama has also prepared the environmental review for projects receiving FEMA Hazard Mitigation Grant funding, as well as all permitting for these projects, including Section 1600, 401, and 404 permitting and Section 7 of the ESA.

Geothermal Energy Project EAs

Panorama has prepared NEPA EAs for multiple geothermal energy projects in California, Nevada, and Oregon. Projects have included the Patua Geothermal Project Phase I and Phase II Developments near Fernley, NV; the Carson Lake Geothermal Development Project near Fallon, NV; the Calpine-Geysers Enhanced Geothermal Systems Project in Sonoma County, CA; the Oregon State University Geothermal Well project; and the Town of Lakeview Geothermal Project in Oregon. Our team was able to adapt the EA approach for each project and lead agency to meet their needs.



Gemini Solar Project EIS



Panorama prepared the EIS for the Gemini Solar Project, a 690-megawatt solar plus battery storage project located outside of Las Vegas, NV. Panorama worked closely with the BLM, the NEPA lead agency. The EIS was one of the first EISs in the nation to be prepared under Executive Order 13807 for NEPA streamlining. Panorama had to adapt quickly to provide an adequate NEPA EIS, concurrent with

BLM's issuance of memorandums on how to comply with the new NEPA requirements. Panorama was able to define the approach and essentially create the template for all future EISs for energy projects led by the BLM under the new requirements. Panorama's Administrative Draft EIS and 26 supporting technical studies were reviewed by over 40 reviewers, including BLM staff from the District Office, the State Office, and Washington, D.C., and numerous cooperating agencies. Panorama addressed over 1,100 comments and prepared the Final EIS in approximately 30 days.

Examples of Panorama's On-Call Contract Experience

Panorama has extensive on-call contract experience and an aspect of many of these types of contracts is acting as an extension of the agency's staff. One of our most relevant work examples in terms of an analogous process, is current and on-going with the SFPUC, acting as in-house support staff. Under this contract, in just six months, our team has reviewed and processed over 100 environmental clearances for SFPUC projects. The SFPUC was looking to hire new staff; however, given the success of our team's work, and the speed and efficiency with which we have delivered, they have delayed the hiring process and kept us on to do the work.

On the following page, we have included several descriptions demonstrating the types of work and range of services that Panorama has provided on a few of our on-going on-call services contracts. For each of these on-call contracts, we are one of two to five on-call contractors. The budgets for the on-call contracts are identified. We generally are assigned projects under these on-calls as they arise. We have also included a summary of our work with repeat clients, such as EBMUD.

Much of our on-call work has been for water utilities and cities and counties for a variety of project types. No matter the project type, we have mastered the process from identifying the key concerns to conducting the technical studies, strategizing on the type of environmental document needed, and executing. Key to our approach is developing systems and standards for streamlining on-call work. From establishing task order scope and budget templates to defining environmental document templates and compliance processes, we have fine-tuned our standard processes and systems to ensure quality and cost-effective service.

Panorama is providing the SFPUC with in-house staff support to assist with CEQA environmental clearances

- Provide daily monitoring of SFPUC intake mailbox
- Coordinate with SFPUC Project Managers and/or engineers to gather necessary project information
- Review project information to determine required level of environmental review
- Prepare appropriate Categorical/Statutory Exemption documentation or Minor Project Modification
- Prepare construction compliance documentation
- Coordinate review of the project materials with the San Francisco Environmental Planning Department
- Maintain detailed tracking system of all projects

Processed/
Processing 100+
environmental
clearances for
SFPUC Project
Managers

Summaries of Panorama's On-Call CEQA Services and Repeat Client Work

Client	Services Provided	Example Projects and On-Call Budget
San Francisco Public Utilities Commission 	Panorama, in a joint venture with ICF International, is providing environmental analyses, studies, reports and permitting support, and construction monitoring and compliance for the Sewer System Improvement Program and the Hetchy System Improvement Program.	Projects to-date have included construction monitoring for a massive sewer main replacement project along the Bay Corridor, an IS/MND and permitting services for the Islais Creek Southeast Outfall, daylighting of an urban stream, and biological studies and monitoring. Panorama is also providing in-house staff support on multiple projects. On-Call Budget: \$4.85M over 5 years
California Public Utilities Commission 	Panorama has been an on-call consultant to the CPUC for over 20 years. Panorama assists the CPUC with analysis of utility projects across the State. Projects are mostly linear through both rural and urban areas. Panorama has reviewed technical studies, advised on CEQA compliance, performed scoping and outreach, peer reviewed EIRs and prepared all types of CEQA and NEPA documents.	Panorama has provided our services on over 25 projects across the state under our numerous renewals of this contract, including numerous projects in the North Bay area and projects along the Bay Shoreline. On-Call Budget: up to \$2M per project
San Francisco Public Works Department 	Panorama provides environmental planning services to the Public Works department, including CEQA support and technical studies, particularly to address historic resources for facility work. A renewal of this three year contract just occurred and Panorama, again, secured one of the three contracts.	Panorama has provided services on many project including CEQA for moving and rehabilitating the City's Animal Care and Control Facility, construction of a new Emergency Medical Facility and Parking Structure, for numerous remodels and work to the City's fire stations, and preliminary planning for a future modernization of Public Works large operations yard in the Bayview. On-Call Budget: \$740,000 over 3 years
Santa Clara Valley Water District (SCVWD) 	Panorama has provided CEQA/NEPA, biological surveys, permitting, monitoring, and planning services to the SCVWD over a period of 10 years, and most recently, won one of two on-call services contracts for CEQA and other technical support for their watershed and infrastructure divisions.	Projects have included preparation of maintenance programs and CEQA review for SCVWD's entire pipeline system and dam system, compensatory mitigation review, and environmental review for a photovoltaic solar project at the Rinconada Water Treatment Plant. Upcoming work could include review for pipeline and pumping plant maintenance and upgrades. On-Call Budget: \$3M for 3 years with option to renew
Inyo County Public Works 	Panorama has provided Inyo County with environmental services from advice to complete CEQA and NEPA documentation, technical studies, agency coordination, restoration, mitigation monitoring, public outreach, Native American consultation, and permitting. Biological and cultural resources surveys have been a key component of most projects in Inyo County.	Projects have included road and bridge repair or replacement, culvert replacements, park and trail improvements, bike paths, and a major sewage facility repair. Many of these projects resulted in a CE with preparation of support studies. On-Call Budget: \$2.5M for 15 projects
East Bay Municipal Utility District 	While not an on-call contract, Panorama has provided repeat services on seven projects over the last five years. Panorama has provided CEQA; permitting, including for work in the San Francisco Bay; technical studies; and environmental planning and siting support to EBMUD since first winning a project in 2015.	Panorama has provided our services on seven different projects, including new and replacement pipelines in the urban environments of Alameda and Oakland, environmental services for rebuilding or upgrades to three different pumping plants, and environmental review and permitting of a solar facility. Budget: \$5.6M for 6 projects over the last 5 years

Sequoia Ecological Consulting's Experience

North Orinda Shaded Fuelbreak Project

Sequoia provided environmental consulting services for the first project to be completed under the Governor's Declared Emergency for Fuel Treatment Projects in 2019. The shaded fuel break was divided into 55 units to facilitate a sustainable management program. Although CEQA was waived for this project, the Moraga-Orinda Fire District (MOFD) and EBMUD and Diablo Fire Safe Council, were still subject to permit restrictions by State and federal ESAs, the Migratory Bird Treaty Act, and other existing species protections regulated by the USFWS, CDFW, and local agencies. Sequoia assisted the MOFD with permit interpretation, biological surveys, environmental crew training, environmental compliance monitoring, agency coordination, communication with the public and nongovernmental organizations (Audubon Society, Sierra Club, California Native Plant Society, and local interest groups), vegetation mapping, GIS services, and contractor coordination. Sequoia's involvement began during the planning phase with consultation meetings with the MOFD, other agencies, and members of the public. Sequoia reviewed the related measures and permits for nearby projects to ensure that best practices were implemented to reduce risk to sensitive resources and species, and to satisfy the requirements of existing habitat conservation plans, incidental take permits, and biological opinions that had undergone the CEQA process. Sequoia biologists conducted preliminary surveys of proposed work areas focusing on the presence of nesting birds, sensitive species and their habitats, existing erosion, or signs of other work completed, as well as hazards such as wasp nests or access issues. They provided environmental training to all crew members. Biological monitors worked with the crews to verify that all measures were being followed. After work was completed in each unit, Sequoia biologists conducted post-work surveys of the treated areas, documenting changes to habitat.



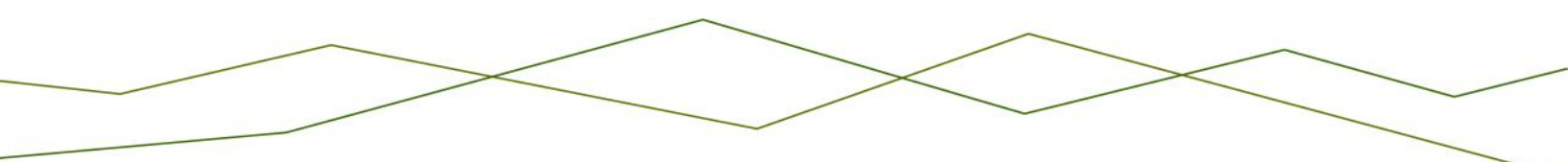
"The team at Sequoia Ecological Consulting was critical to effective hazardous fuel reduction for the North Orinda Shaded Fuel Break. By having their biologists evaluate sites before work began we could avoid potential environmental impacts and accelerate the project. Their staff's expertise continued to guide field crews throughout the work, giving the whole project team confidence that we could adjust the project to meet the best management practices and comply with the myriad of environmental requirements, while reducing the potential of wildfire." — Cheryl Miller, Executive Coordinator at Diablo FireSafe Council

East Bay Regional Park District Fuels Reduction Program Support



Since 2014, Sequoia has been assisting EBRPD with system-wide implementation of the Wildfire Hazard Reduction and Resource Management Plan, as well as interpretation of a Biological Opinion, Incidental Take Permit, and EIR for the District's fuels reduction program. This work extends throughout EBRPD properties in Alameda and Contra Costa Counties. Sequoia coordinates communication and attends weekly update meetings with the District, the contractors, and the District Fire Department chief and crews, and manages performance of the biomonitoring effort. Sequoia's biologists and technical specialists perform field tasks that include pre-and post-construction surveys, pre-activity surveys, botanical surveys, wetland delineations, Best Management Practice storm water inspections, biological monitoring, and long-term monitoring. A large group of Sequoia staff have been

approved by both the USFWS and CDFW to work with sensitive species on-site. Sequoia staff members also perform habitat assessments for Alameda whipsnake and protocol surveys and monitoring for California red



-legged frog, identify signs of infection by Sudden Oak Death, facilitate decontamination protocols to prevent the spread of Sudden Oak Death and invasive weeds, and implement Avoidance and Minimization Measures during fuels treatment activities. Crews used various treatment methods, including controlled burns, hand tools, chainsaws, and masticators. Sequoia also conducted environmental trainings for special-status species, including California red-legged frog, western pond turtle, San Francisco dusky-footed woodrat, California tiger salamander, Alameda whipsnake, pallid manzanita, and western leatherwood.

“...largely due to (Sequoia’s) guidance, we rarely see compliance issues. They are experts on the species we work with, and leverage their expertise to ensure the least possible risk... Their project manager provides prompt weekly updates, and monitoring reports arrive complete and clearly organized. Any questions and issues that come up with project compliance are communicated promptly and resolved easily. One of the most impressive things about Sequoia is that the staff are not there merely to provide a service; staff actively engage in collaborative problem-solving with the client, which has saved my agency money and time. Their staff are highly qualified scientists, but the best kind of scientists – with a keen eye toward communication and customer service. I know that my project manager has my project’s best interests at heart, and I trust her completely. I would recommend Sequoia for any biological compliance project without hesitation.”
— Kristen Van Dam, Resource Analyst, Ecologist with East Bay Regional Park District

Additional Subconsultant Experience

Overview

We have included additional experience for other key subconsultants. SIG’s role will include assisting in the design of permittable, feasible, implementable, and cost effective treatments. SIG brings a great deal of experience and understanding of fuel mitigation, fire hazards and risks in the WUI, knowledge of on-the-ground fire behavior, and how to ensure effective treatments. They have experience in data collection using UAVs needed to quickly assess an area and understand what may need to be performed. Their key experience demonstrating their deep understanding of the wildfire mitigation field is shown through the examples below. Far Western will provide the cultural resources review needed for CEQA and implementation. They bring experience in Marin County with the tribes, State Historic Preservation Office (SHPO), and the cultural resources found in the region.

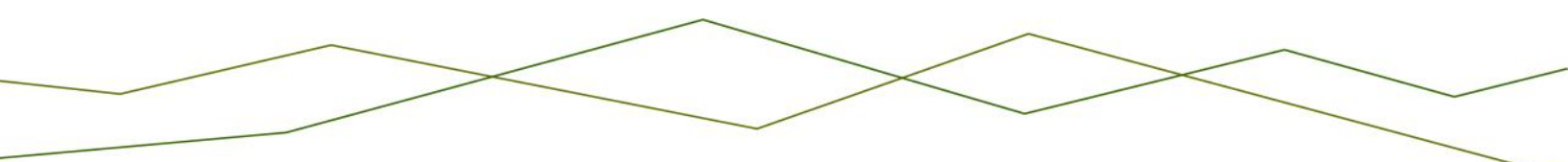
Spatial Informatics Group

UC Berkeley Hill Campus Vegetation Management Plan and EIR

SIG provided plan review for UC Berkeley’s Hill Management Plan and EIR. This plan was focused on reducing fire risk on UC Berkeley owned lands by removing eucalyptus.

El Dorado County CWPP

SIG, working with the El Dorado Fire Safe Council, developed a comprehensive CWPP for the west slope of El Dorado County, California. The plan was based on the results of a landscape-scale community risk assessment and treatment prioritization strategy, with emphasis on establishing local fuel management areas that are integrated with the existing treatment network. SIG established “logical” fuel management areas given the large area considered. Analytical tools were developed, similar to those proposed for this project, to prioritize projects. The goal was to provide maximum community protection at the lowest potential costs. CAL FIRE Fire Hazard Severity zone maps were assessed to identify the communities at risk, which included over 17 communities. All known, existing, and planned fuel treatments were mapped and a fire risk assessment was performed to identify and prioritize new fuel treatments. The fuel prescriptions were defined based on the team’s extensive on-the-ground experience and knowledge of proven-effective methodologies. Once projects



were identified, SIG identified the CEQA/NEPA and permitting considerations for the projects. SIG identified a stakeholder “map” to understand all of the participants and define what information was needed from each. Methods to capture feedback were also developed.

American Forest Foundation: Western Wildfire Assessment

SIG worked with American Forest Foundation to assess existing data and information resources on high wildfire hazard risks on non-industrial private forest lands. They then modeled the potential impacts of those hazards on public goods, such as key water supplies, areas of high carbon sequestration value, and areas of high wildlife habitat importance. The assessment was performed across 11 western states: Washington, Oregon, California, Idaho, Nevada, Montana, Wyoming, Utah, Colorado, New Mexico, and Arizona. Key findings of the assessment can be found here <https://www.forestfoundation.org/western-water-forests-report>.

An Assessment of Fire Risk for Nevada City and Grass Valley, CA

SIG is working with CAL FIRE on an assessment of wildfire risk to the communities of Nevada City and Grass Valley. The project includes developing potential fuel treatment locations for risk mitigation as well as an assessment of factors affecting structure loss during the 2018 Camp Fire.

California’s 4th Climate Assessment: Fuel Treatments for Forest Resilience and Wildfire Mitigation

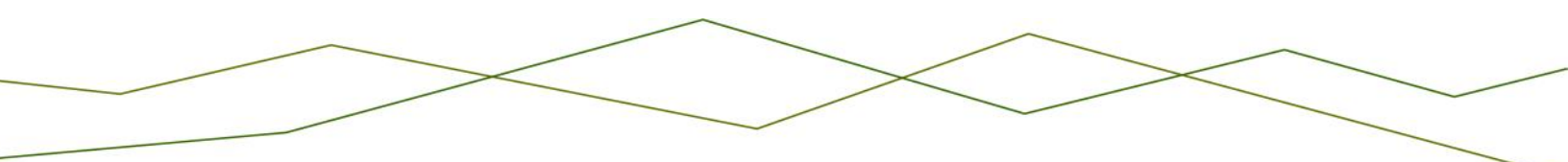
SIG has prepared reports for California’s 4th Climate Assessment, published in 2018. For this report, SIG reviewed what is known about the effects of fuel treatments on stored forest carbon as well as wildfire risk and wildfire emissions in California’s forests and summarized geo-spatial data gaps that need to be filled to make good fuel treatment decisions that increase both forest resilience and carbon sequestration. In addition to supporting the assessment, the report provides a scientific basis for developing carbon offset methodologies that could generate revenue to implement beneficial climate projects in California. The full report is available here: <http://www.climateassessment.ca.gov/techreports/forests-wildfire.html>.

Assessing Extreme Fire Risk in California for the California Public Utilities Commission

SIG scientists worked with CAL FIRE to assess the top two percent worst fire weather conditions for the entire State of California. These conditions were then used to perform 1,000 unique, high-resolution wildfire simulations per cell; simulations were based on the U.S. Geological Survey-supported Landscape Fire and Resource Management Planning Tools (LANDFIRE) 1.3 dataset. In total, SIG scientists simulated over 100 million ignition events around the state of California under extreme historical weather conditions. The results were aggregated to create numerous 2 km-resolution fire risk and fire behavior distribution maps, which are now helping planners understand the areas of greatest fire risk across the state. In particular, these maps are being used by planners at the CPUC to determine what utilities are most at risk. Once risks are known, the necessary preparatory actions can be planned and implemented, helping to protect the utility infrastructure and to reduce the potential of impacts caused by utility fires. The maps and other information are available here: <https://www.cpuc.ca.gov/firethreatmaps/>.

Assessment of Fire Hazard/Risk in the Wildland Urban Interface (WUI) and Stream Environment Zones of the Lake Tahoe Basin

SIG completed a fire hazard and risk assessment for the entire Lake Tahoe Basin, with an analysis focused on potential fire behavior in Stream Environment Zones and the WUI. The project covered all lands within the Lake Tahoe Basin Management Unit, which included a 231,285-acre LiDAR sample area. The general approach was to develop fire behavior and probability inputs within the Lake Tahoe Basin using LiDAR,



WorldView-2 imagery and existing GIS layers. The full report is available here https://www.fs.fed.us/psw/partnerships/tahoescience/p078_saah.shtml.

Community Wildfire Risk Pilot Project for Paradise, Auburn, Nevada City, and Grass Valley, CA

SIG is working for CAL FIRE's Forest Health Program on a Community Wildfire Risk Pilot Project for multiple cities in California. This project is currently on-going and seeks to reduce wildfire risk by providing better analytical methods and information for planning fuel treatments and implementing defensible space in the WUI and intermix. The study involves developing an analytical framework that can be implemented to provide improved information for prioritizing fuel treatments in the WUI and defensible space within the community context. The study is also exploring options for evaluating carbon co-benefits of fuels reduction treatments within the project area.

California Climate Initiative GHG Calculations and Implementation Support—Hat Creek Watershed

Spatial Informatics Group completed the GHG calculations required for CAL FIRE's Forest Health Program in partnership with the Fall River Resource Conservation District. This funded application covers an 8,000-acre fuel reduction and reforestation program in the Hat Creek Watershed, which is being planned and implemented in collaboration with the Burney-Hat Creek Community Forest and Watershed Group. As part of this effort, Scott Conway of Vibrant Planet is working with Spatial Informatics Group (SIG) and 34 North to help this designated Collaborative Forest Landscape Restoration Program project prioritize treatments across ownership boundaries. Using recent high density LiDAR, satellite imagery, and plot data in a robust modeling framework, important forest metrics such as stand density index were used in combination with fire intensity and probability outputs to focus the project's finite resources on areas that were at most risk to insect, disease, and high severity fire.

A Guide for Prioritizing Fuel Treatments at the Landscape Scale, and Its Application at Yosemite National Park—(SIG & Panorama)

SIG developed a landscape level fuel treatment prioritization guide for prescribed fire treatments at Yosemite National Park. The project utilized a collaborative fire modeling and resource prioritization approach that allowed local specialists to focus prescribed fire projects where there would be most benefit to various HVRAs. The project provided the park information needed to develop a spatially explicit, prioritized five year program of work for prescribed fire projects. Panorama provided peer review and technical editing of the report.

California Climate Initiative Greenhouse Gas Calculations for the Marin Municipal Water District

SIG completed the greenhouse gas calculations required for a CAL FIRE's Forest Health Program in support of the Marin Municipal Water District's application for a range of vegetation management projects.

California Climate Initiative GHG Calculations and Implementation Support—Pit Watershed and Modoc County Region

SIG is working in partnership with the Pit Resource Conservation District to assess fire risk and identify potential fuel treatments for the Pit watershed in Modoc County, CA. As part of this effort, Scott Conway of Vibrant Planet is working with SIG to help prioritize treatments across ownership boundaries.

Forest Inventory at Dead Mans Gulch Near Santa Cruz, CA

SIG worked in the Santa Cruz flying aerial imagery and installing permanent research plots for the beginning of a long-term project with Save the Redwoods, Sempervirens Fund, and Hamey Woods Forestry.

One project goal is to restore old-growth redwood characteristics. Due to topography, proximity to the ocean, elevation and plant communities, the micro-climate in this 120-acre parcel might allow redwoods to persist despite climate change. The SIG UAV team created a 360 degree aerial image of the site showing ecological characteristics that will help understand and manage the area.

Far Western Anthropological Group

PG&E Whiskeytown National Recreation Area (NRA) Carr Fire Archaeological Review for Power Restoration Work

Far Western conducted site assessments and site record updates within the PG&E asset corridor in the Whiskeytown NRA after the 2018 Carr Fire. This study was completed to identify any archaeological sites that could be impacted as a result of PG&E power restoration work. Far Western implemented records searches; monitoring, site visits, and identification of Environmentally Sensitive Areas; and archaeological resource impact assessments. In all, 50 previously recorded sites were revisited in proximity to PG&E assets or access routes. No previously unidentified sites were documented during PG&E's restoration work. Site visits identified impacts to 13 archaeological sites within the Whiskeytown NRA. These impacts were a product of PG&E restoration activities, which included hazard tree removal, road improvements, and utility pole replacement. A Cultural Resources Site Assessment and Monitoring Report was produced to document the findings and recommendations.



Cultural Resources On-Call Contracts in Marin County

Far Western's expertise and qualifications are highlighted by the various Cultural Resources On-Call contracts they have completed for Caltrans. Far Western serves as Caltrans' cultural resources consultant in District 4 (**which includes Marin County**), and has held this comprehensive contract for 17 years, since 2004. Far Western has completed **over 70 projects within Marin County** for Caltrans as well as other regional/local agencies and private entities including the Bay Area Toll Authority; Bolinas Community Trust; California Department of Parks and Recreation; Cities of Belvedere, Fairfax, and Sausalito; College of Marin; County of Marin; Golden Gate National Parks Conservancy; Marin County Open Space District; Mount Tamalpais State Park; PG&E; and Transportation Authority of Marin. Through this experience, Far Western understands the types of resources, where they may be found, the concerns of the tribes in the region, and the requirements of the SHPO. They also understand NEPA requirements as it pertains to cultural resources review as well as CEQA requirements.

Proposed Team Members

Contract Management and Project Managers

The contract will be led by Panorama Principal, **Tania Treis**. Tania has nearly 20 years of experience and co-founded Panorama in 2011. Tania has led or participated in the CEQA and NEPA analysis and plan development and implementation for all of Panorama's wildfire mitigation and vegetation management projects. Tania is highly experienced at managing multiple contracts and awards. She is also the lead for Panorama's on-call contract for the SCVWD providing CEQA and regulatory services, and she provides directorship and quality control on most projects throughout the firm. In her tenure as owner, she has overseen over \$30M of revenues on hundreds of projects. She ensures all project systems are in place and quality protocols are implemented. Tania excels at defining projects, streamlining processes, providing quality and technical reviews, and delegating to complete work efficiently, on schedule, and within budget.

We have also identified a set of project managers, each with at least 10 years of experience leading CEQA and permitting studies, with NEPA experience, and with wildfire mitigation impact assessment experience. The Project Management Team includes Senior Planner, **Caitlin Gilleran**; Senior Project Manager, **Rita Wilke**; and Senior Manager, **Emily Capello**. We can assure the MWPA that our project managers will effectively lead any assignment under the contract. Panorama's approach allows us to work on multiple task orders concurrently. As previously stated, we have completed over 100 projects and exemptions for the SFPUC in around six months time.

Our team has the availability to provide highest priority service to the MWPA, having just completed several wildfire and fuel management projects. We completed the Alpine County Fire Hazard Mitigation Plan and CEQA review this month (March 2021). We are also completing the Final Program EIR for Midpen Wildland Fire Resiliency Program in April, we are completing the

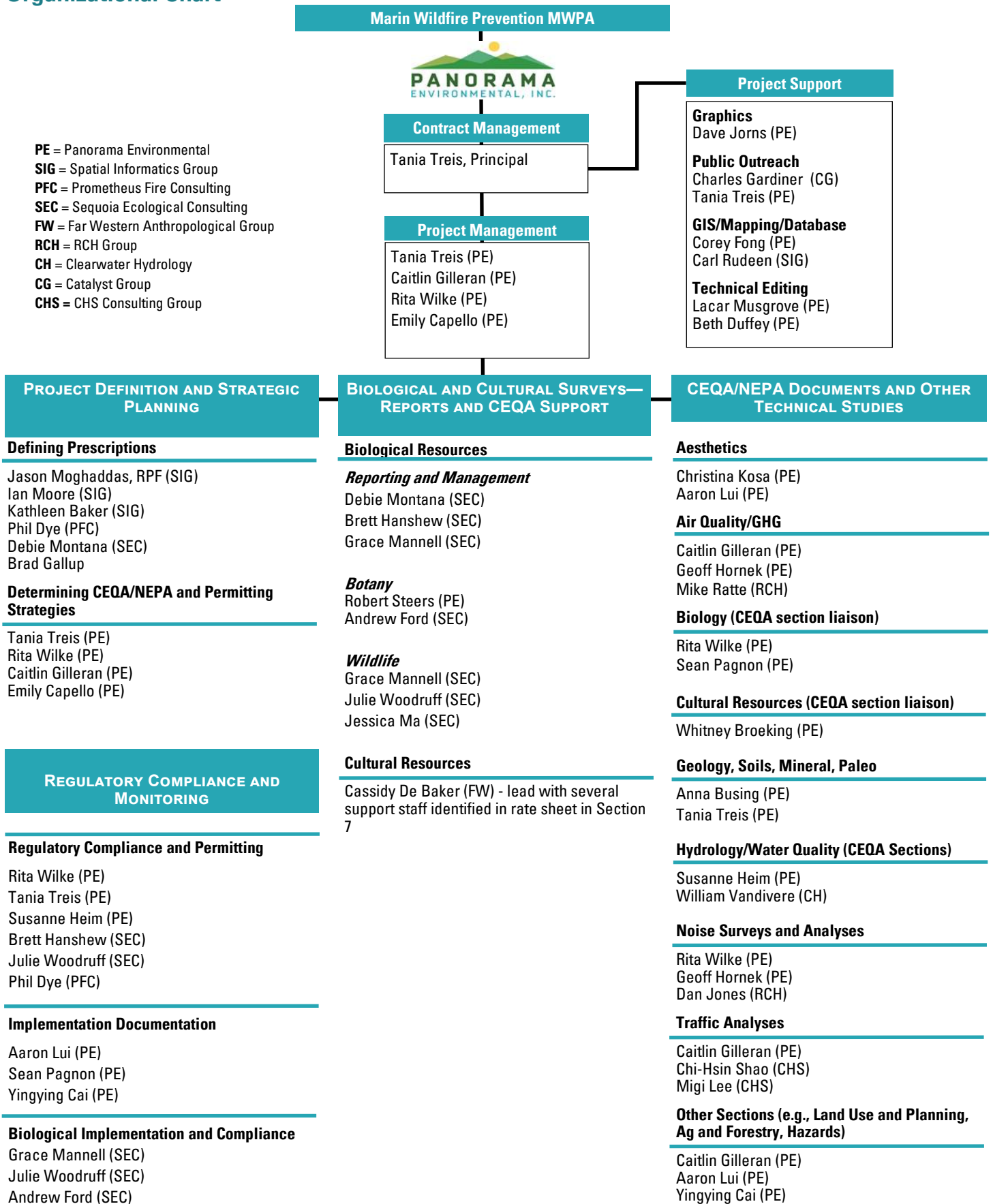
Vegetation Management Plan for SLVWD in April and the Wildland Fire Management Plan for Stanford in June.

Organizational Chart

We are offering largely the same in-house team as we have in place for our recent and similar projects, including for MMWD, for Midpen, the Town of Portola Valley project, for SLVWD, and for Stanford University. Our structure is proven effective, with our Project Manager as the key point of contact, and technical specialists working concurrently under her. Each technical team member is responsible for certain components of the project, based on their area of expertise and experience. The assigned Panorama Project Manager will be the central intelligence of the project, ensuring that all team members receive the information that they need to complete their component. They will be supported by in-house technical and planning staff. Sequoia's **Debie Montana** and **Grace Mannell** will lead biological survey, analysis, reporting, and regulatory compliance work, providing the feedback needed to address biological concerns in design and during CEQA review, and implementation. SIGs Forest Ecologist and RPF, **Jason Moghaddas**, and Senior Scientist, **Kim Carr** will work with Panorama on the early phases of projects to review proposals, help write prescriptions where an RPF is needed, and evaluate sites on the ground, as needed. **Cassidy de Baker** of Far Western will oversee cultural surveys, as needed, and **Mike Ratte** of RCH will assist Panorama's team with any air quality modeling. **Migi Lee** of CHS will assist if any projects require a more complex traffic assessment, and **William Vandivere** of Clearwater can provide hydrology modeling capacity, should it be necessary. **Anna Busing, PhD**, can address paleontological and geologic concerns.

A brief description of each key team members is provided after the organizational chart on the following page. Project-based resumes for each key team member and other team members that may assist on various projects under this contract are included in Appendix A.

Organizational Chart



Key Team Member Experience and Expertise

Tania Treis, MA, MS, Principal – Contract Manager



Tania has nearly 20 years of experience managing the CEQA/NEPA and permitting process for a wide range of projects across California. She is a Principal and owner of Panorama. She has particular expertise in leading the plan definition, policy analysis, and environmental review for wildland fuels reduction projects, such as for UCSF's Mount Sutro Reserve, Midpen's WFRP, and MMWD's BFFIP. Tania's strength is in solidifying and motivating teams, leading the team through project definition, presenting complex ideas and analyses in a way that is concise and understandable to the reader and decision-maker, and leading outreach and agency consultation and coordination. Tania is the Project Manager for Panorama for the Midpen WFRP and is leading the documentation of the program, including the policy analysis and the four individual plans that comprise the program. Tania also led the preparation of the Biodiversity, Fire, and Fuels Integrated Plan for MMWD, and the associated Program EIR. Tania is also the Project Director for the Alpine County Fire Hazards Mitigation Plan and authored the plan, helped define the CEQA strategy and provided technical review of the IS/MND. She is the Project Manager for the Stanford University Wildfire Management Plan and prepared the Vegetation Management Plan for a project in the Town of Portola Valley. Tania has been working at the intersection of CEQA and wildland fire planning since 2012.

Caitlin Gilleran, Senior Environmental Planner – Project Manager



Caitlin has 11 years of experience and leads projects through the CEQA and NEPA process with technical expertise in addition to a keen understanding of environmental regulations and resources. She has prepared or managed numerous environmental documents and supporting technical reports, ranging from small addendums to large programmatic EIRs and EISs. In her work, Caitlin has analyzed the effects of a wide array of development, resource management, transportation, wetland mitigation, and infrastructure projects. Caitlin is especially effective at coordination with and assisting a client to define the technical project elements and performing technical analyses. She has managed project deliverables and technical subconsultants to meet tight deadlines and budgets. Caitlin has taken on project management for several projects that involved review of the designs for environmental constraints, coordination of multiple technical studies and deliverables, preparation of the CEQA and NEPA documents, direct coordination with the client and agencies, and performance of all administrative tasks associated with managing the schedule and budget. Caitlin is the Project Manager for the Vegetation Management Plan and grant funding research for San Lorenzo Valley Water District. Caitlin served as the Deputy Project Manager and led the Program EIR preparation for the WFRP for Midpen. She also participated in the analysis and preparation of the Final EIR for the Mount Sutro Reserve Vegetation Management Plan for UCSF and the Biodiversity, Fire and Fuels Integrated Plan Program EIR for MMWD.

Rita Wilke, Senior Environmental Planner – Project Manager



Rita Wilke has over 12 years of experience in the environmental fields. She is a NEPA and CEQA project manager, and has managed environmental compliance for wildfire and fuels management projects. One of Rita's primary strengths is her ability to bring multiple parties and agencies together to come to a consensus on project direction, including federal, State, and local agencies. She has experience on projects all over California. Rita managed the Alpine County Fire Hazard Mitigation Plan and prepared the IS/MND in close coordination with SIG. Rita has also led preparation of multiple Cat Exs, CEAs, EAs, IS/MNDs, and EIRs. As a biologist by training,

Rita also has extensive experience with completing resource permitting under the ESA and CWA. She has coordinated with State agencies, including the CDFW and the regional water quality control boards, and federal agencies such as the US Forest Service, USACE, and USFWS.

Emily Capello, Senior Manager—Role: Project Manager



Emily has 14 years of experience permitting a wide range of projects, including projects with federal components. She has worked with project proponents and agencies to facilitate projects that can be permitted and constructed, understanding both the engineering and the environmental constraints. Emily is a recognized expert in NEPA compliance. She has worked on dozens of complex projects and understands the need for creativity and perseverance to reach a successful completion of a project. She is able to keep track of the numerous details that feed into the technical reports and NEPA or CEQA documents and that will matter to the reviewing agencies. Emily has often been praised for her responsiveness, her depth of knowledge, and for the quality of work that is prepared under her watch. Emily's relevant experience includes serving as the Project Manager for CDFW's on-call contract for PG&E projects including preparing an IS/MND for the PG&E Gas Pipeline-300A/B Vegetation Management Project in San Benito County. She was also the Project Manager for two NEPA EAs for vegetation management and fire safety on BLM-administered land, the Border Fuels EA running along the border of San Diego and Mexico and the San Felipe Creek Vegetation Management in Imperial County. She worked closely with the BLM California Desert District Fire Specialist when drafting the project descriptions to provide a clear understanding for the public regarding the types of fuel management activities that could occur and to leave the BLM the flexibility to use the most appropriate tools as dictated by conditions on the ground when fuels management was going to occur.

Corey Fong, GIS Specialist—Role: GIS and Mapping



Corey is a GIS Specialist with expertise in cartographic design, environmental science, and analysis using GIS models and programs. Corey has experience with an array of project types. He has conducted such work for project proponents and for agencies undertaking planning and environmental review processes. Corey has used ArcMap, ArcInfo, and ArcEditor from Esri to create and maintain GIS data and geodatabases and has experience with the Spatial Analyst and 3D Analyst extensions. Adobe Illustrator, Photoshop, and Acrobat are used to edit published maps and figures for environmental documents. TerraSync and Pathfinder Office software are used to integrate GPS data into project specific GIS. Corey has exported GIS project specific data to Google Earth Pro for environmental analysis and map production. He was the GIS analyst and cartographer for Panorama's work on the Alpine County Fire Hazard Mitigation Plan, the Portola Valley property Vegetation Management Plan, Stanford University's Wildfire Management Plan, and the San Lorenzo Valley Water District's Vegetation Management Plan.

Yingying Cai, Environmental Planner—Role: Technical Analyses and Support



Yingying has four years of experience as an environmental planner. Her experience with CEQA includes public comment responses, public outreach, and document production and formatting. Yingying also has experience preparing permit applications. Additionally, Yingying conducts field inspections and reviews compliance documentation in support of project mitigation monitoring efforts. Yingying has provided support for the Midpen WFRP, the Alpine County Wildfire Hazard Mitigation Plan, and was a key author of CEQA sections on the Corte Madera Creek Flood Control Project. Yingying has supported preparation of CEs for highway bridge replacement projects, and for the Ross Reservoir Landslide Repair project for MMWD.

Debie Montana, Principal—Role: Biological Resources Lead



Debie Montana is a Certified Project Management Professional and President of Sequoia Ecological Consulting, Inc. With more than 20 years of experience in the environmental industry, Mrs. Montana has developed a resume with extensive program management experience in both the private and public sectors. She oversees complex environmental compliance efforts that combine her conservation and organismal biology and fisheries background with her strong understanding of all aspects of environmental analysis, and her extensive knowledge of environmental permitting through federal, State, and local agency processes. Debie oversees large-scale fuels treatment, and vegetation management projects spanning large regions of California and a variety of habitats. She has provided strategic guidance to a variety of fire districts and resource agencies to support successful planning and implementation of programmatic wildfire mitigation efforts. Her project experience includes the North Orinda Shaded Fuelbreak, EBRPD fuel reduction projects, the El Dorado Resource Conservation District Fire Adapted 50 Phase 1B Project, the California State Parks – Sugarloaf Ridge State Park Post-Wildfire Northern Spotted Owl Surveys, the CAL FIRE Kings Mountain Road and Quarry Park fuel reduction projects, and the San Mateo County Parks Department botanical surveys for high priority fuels reduction projects.

Grace Mannell, Project Biologist—Role: Biological Lead for Field Work



Grace Mannell has eight years of experience in terrestrial field biology and environmental consulting. She regularly writes biological constraints reports, monitors for environmental compliance, provides environmental training, conducts protocol-level surveys and habitat assessments, analyzes complex data sets, and coordinates fieldwork. She is a USFWS/CDFW and wildlife-approved biologist for California red-legged frog, pallid manzanita, burrowing owl, and California tiger salamander. She also has experience handling wild birds. She has extensive experience writing reports in compliance with CEQA and also has strong ArcGIS mapping skills. She brings a deep understanding of environmental compliance measures for fuels treatment programs, having served in a pivotal role on two of Sequoia's most recent fuels management efforts. She coordinated efforts for 44 sites with EBRPD under their Wildfire Hazard Reduction and Resource Management Plan. Her work also includes participation in a multi-stakeholder environment to develop Applicant Mitigation Measures during planning stages of the Moraga-Orinda Fire District's North Orinda Fuel Break project, which included 55 separate treatment units. Ms. Mannell is a strong writer, who has authored numerous reports and environmental documents for CEQA compliance that synthesize complex data sets.

Julie Woodruff, Project Biologist—Role: Special Status Species Analyses



Ms. Woodruff is a biologist, herpetologist, and avian ecologist with experience with many northern California special-status species. With a special interest and expertise in owls, Julie is a US Geological Survey Master Bander and she has worked extensively with **northern spotted owl**, burrowing owl, western screech owl, and northern saw-whet owl. She manages and performs surveys and monitoring for a variety of special-status species throughout Northern California. She has worked on numerous vegetation management/fuel treatment projects, providing planning support, habitat assessments, environmental training, and monitoring of treatment activities to avoid sensitive species and their habitats. She has contributed to a range of technical documents and reports, including Biological Opinions and Assessments and Natural Environmental Surveys. Ms. Woodruff has led and coordinated field survey efforts for many of Sequoia's wildfire mitigation support projects.

Jason Moghaddas, RPF, Director of Natural Hazards Team—Role: Plan Definition



Jason Moghaddas brings over 20 years of experience in forestry, fuels reduction, and natural resource project planning and management. Jason is a recognized leader in the field having worked for or on projects with SIG, the Feather River Land Trust, the Plumas National Forest, and El Dorado County Fire Safe Council. Jason has applied for and received Resource Advisory Committee funding for multiple fuel reduction projects. Through his on-going work on this and other studies, Jason has been a lead or co-author on over 20 published scientific papers. In addition to a strong research background, Mr. Moghaddas brings the practical experience of being a current **Registered Professional Forest (#2774)** along with extensive experience as a wildland fire fighter and wildlife field technician. Jason is working with Panorama on the Midpen WFRP and the SLVWD Vegetation Management Plan.

Carl Rudeen, Rangeland Specialist, GIS Analyst—Role: GIS and Technical Input



Carl worked as a civilian geospatial analyst for 13 years with the U.S. Air Force. He brings significant experience as a GIS specialist, rangeland specialist, and program manager. Notable among his strengths and experiences are his analysis of spatial natural resources datasets to make management decisions and knowledge of post-fire rehabilitation of rangelands. Carl built the web-based portal and is providing all of the GIS support on the SLVWD project in close coordination with Caitlin Gilleran and prepared the geodatabase and detailed mapping of fuel treatments across of Midpen's lands for the WFRP. Carl runs a cattle ranch in Idaho.

Phil Dye, Principal—Role: Expertise in Plan Definition and Prescribed Burning



Phil is the founder and owner of Prometheus Fire Consulting, LLC. He has over 20 years of experience working in fire management and prescribed burn planning. Phil has also served as Incident Commander for several NorCal Training Exchanges (TREX) as well as the inaugural Cascadia TREX. Over the span of his 20 year career, Phil progressed through the ranks to become a Fire Captain. In 2017, he retired from the fire agency, but remains active as a volunteer. He is qualified as a National Wildfire Coordinating Group Prescribed Fire Burn Boss, and has led over 50 prescribed fires across the nation. Currently, Phil is assisting on a range of projects for Panorama, working closely with the team to provide ground truthing and definition of fuel treatment units. His relationships in the fire protection community and deep knowledge of how fire burns provides unique insight into the planning process, complementing and bringing in real-world aspects.

Brad Gallop, Sole Practitioner—Role: Expertise in Plan Definition and Implementation

Brad Gallup has prepared detailed plans and fuels management prescriptions for many wildfire hazard reduction and resource management sites in the wildland-urban interface of the East Bay Hills. He has performed fuels assessments based on natural fuels photo series and his first-hand wildland firefighting experience. His prescriptions include site vegetation conditions, management goals and objectives, and treatment recommendations that include reducing fuel volume and fire intensity, minimizing crown fire potential, selecting for desirable species regeneration, disposing of biomass, and enhancing natural habitat. Many of the fuel reduction projects he implemented were located along strategic ridgeline fuel breaks and on steep slopes and close to homes, facilities, and major commute corridors. As director of the East Bay Regional Park District's fuels management program, Mr. Gallup managed over 1,000 acres of wildland fuels each year. He has successfully converted several hundred acres of dense eucalyptus, pine, and brush stands to shaded fuel breaks characterized by healthy native woodlands and brush habitat.

Cassidy DeBaker, Archaeologist—Role: Cultural Resources Lead



Ms. DeBaker is a Principal Investigator, Project Manager, and Historical Archaeologist with more than 20 years of professional archaeologist experience in Northern and Central California. Her regulatory expertise in compliance with Section 106 of the NHPA, NEPA, and CEQA applies to both large- and small-scale projects across federal, State, and local governments, utilities, and private developers, and encompasses a broad range of cultural resources investigations. Cassidy led the Carr Fire Emergency Response project.

Mike Ratte, Senior Air Quality Specialist—Role: Air Quality Modeling and Analysis



Michael Ratte is a Senior Air Quality Scientist at RCH Group. Mike has been a practicing meteorologist and air quality specialist within the consulting business for over 30 years. Mike's technical expertise includes CEQA/NEPA environmental planning, air emissions inventories, ambient air monitoring, atmospheric dispersion modeling, General Conformity determinations, CO/PM roadway intersection hot-spot analysis, air quality permitting, health risk assessments, and climate change analyses. Mike is well versed in a wide array of air emission models

including, EMFAC, OFFROAD, NONROAD, MOVES, CAL3DMOD, and AP-42 along with dispersion models such as AERMOD, CAL2QHC, EDMS/AEDT, and HARP, with strong data management and ACCESS programming skills. Mike has worked extensively for local, State, and federal agencies, as well as a wide array of commercial businesses and industries. He has provided air quality modeling for Panorama's projects including the MMWD BFFIP EIR and the Midpen WFRP EIR.

William B. Vandivere, M.S., P.E., QSD/QSP—Role: Hydrology Analysis



William Vandivere is a CA-registered civil engineer (#35613) and has been consulting in the fields of hydrology and water resources engineering in the San Francisco Bay area since 1980. His areas of expertise include hydrologic and hydraulic analyses; hydrologic and hydraulic modeling (HEC-HMS, HEC-RAS, SWMM, other hydraulic programs); water quality assessments; stream-groundwater interaction and hillslope groundwater assessments; fluvial geomorphic assessment and design; watershed and sediment management plan development;

stream and wetland restoration planning and design; stormwater low-impact development (LID) and mitigation design; stormwater bioretention facilities design, stormwater control plans and Stormwater Pollution Prevention Plans; and preparation of engineering construction plans and specifications as well as field oversight. Mr. Vandivere has prepared hydrology and water quality sections for dozens of EIRs, including those for resource management plans and vegetation management plans.

Migi Lee, Senior Transportation Planner—Role: Transportation and Traffic Analyses



Migi Lee is a Senior Transportation Planner with 15 years of experience in transportation planning, transit service planning, and traffic analysis. She has prepared transportation analysis for over 150 CEQA/NEPA documents. As part of her CEQA/NEPA experience, she developed several Transportation Management Plans (TMPs) for major infrastructure projects for the San Francisco Public Works, SFPUC, and EBMUD to mitigate their transportation impacts during construction and operation. Migie also has extensive experience in transit planning projects. She

was the Project Manager for the UC Berkeley Shuttle Bus Project and the Project Planner for the Van Ness BRT Project. Migie has worked with Panorama on several projects, including the UCSF Mount Sutro Vegetation Management Plan.

Staffing Plan

The key components of our success with on-call services contracts are establishing a work plan at contract initiation to streamline workflow processes, and maintaining close communication amongst our team and with the client throughout the contract implementation. When a task order request is made by staff at the MWPA, our goal is to provide an immediate response within a few hours.

Our approach includes reviewing the information provided on a particular task request and assigning appropriate team members for the project through communication with the MWPA along with assessment of team members' experience and availability. We will communicate closely with the MWPA's Project Manager to ensure our assumptions are accurate before preparing a scope and budget. We will then prepare the scope of work, budget, and schedule following a standardized format. Our Work Plan for performing and delivering services is shown in the graphic on the bottom of this page

Our project teams will be organized to include a Project Manager (PM) and qualified specialists depending on the needs of the project. A project

contact list will define each team member and their role(s). A kickoff meeting will be held. Panorama's PM will oversee the project and be the MWPA's main point of contact. The PM will ensure a strong commitment to quality by implementing our project management tools, including senior oversight and senior review, Quality Assurance (QA)/Quality Control (QC) Plan, communication protocols and tools (e.g., instant messaging, Zoom conferences), budget tracking, and schedule management. Other tools important to our workflow include collaboration tools, such as Slack and Google documents, a cloud-based timekeeping and budgeting system called Harvest (www.getharvest.com) to track costs in real-time across all employees charging to the project, and Microsoft Project and Asana to manage tasks and schedules.

Maintaining a Successful Relationship with the MWPA

We maintain successful relationships with our clients by providing responsive, high quality services, that are better than our competitors'. We have asked our clients what they see as our team's strengths and what makes us different from our many competitors. The resounding response is that our clients find that

Workflow Process for Task Order Assignments under the On-Call Contract



our entire leadership and management team are initiative takers and creative problem solvers. Clients have told us they appreciate most that we figure out what needs to get done, present them with our plan of execution, and tirelessly work towards project success, no matter the obstacle. Along with initiative, our team's other strengths include reliability and quality. We say what we do and do what we say. Our project managers know how to motivate the greater team to achieve a common goal, which is important on an on-call contract where multiple staff may be working on multiple projects at the same time.

Panorama also brings a team that is known for completing work within or under budget, as exemplified by our performance on the MMWD Ross Reservoir Landslide Repair Project. Our management tools and training prioritize staff and expert efficiency, and ensuring value for time spent. We communicate frequently to address issues before they become a schedule and budget concern.

Finally, our strengths also lie in our **open communication and relationships**. We bring technical team members with deep and solid relationships with regulatory agency staff. We grow strong relationships with our on-call clients, such that we are often communicating daily on any number of topics and concerns, sometimes even to provide advice on projects with other consultants.

Strengths of Our Team

- Defining projects for CEQA and permitting along with working integrally with our clients staff, engineers, and designers to minimize environmental impacts early in the planning process.
- Deep understanding of the important biological consideration to integrate into the planning approach based on real-world field implementation experience for fuel management.
- Ability to manage a high volume of projects and to provide quick and efficient turnaround of quality work products.



Throckmorton Fuelbreak Before (above) and After (below) Treatments. Implementation under BFFIP. Photos Courtesy of MMWD.



Porteous Residence Before (above) and After (below) Treatments. Implementation under BFFIP. Photos Courtesy of MMWD.

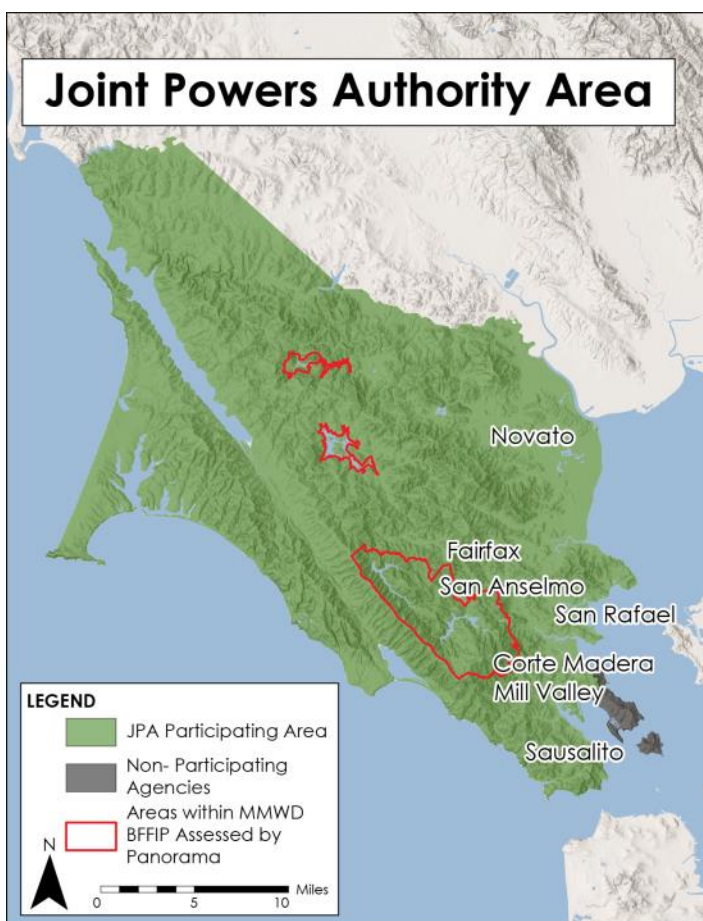
3. & 6. PROJECT UNDERSTANDING, SCOPE, AND ABILITY TO COMPLETE THE WORK

Project Understanding

MWPA

Marin County voters passed Measure C in 2020, which established a 17-member Joint Powers Authority to fund and oversee proactive state-of-the-art wildfire prevention and preparedness efforts within the County. Members include several cities and towns, fire protection districts, and community service districts. The MWPA will have a budget of \$20M per year, with 60 percent of the budget directed at vegetation management projects, evaluation route clearing/system improvements, grants, public education, and fire detection. Projects requiring environmental compliance will likely comprise approximately \$8M per year (project implementation cost), and will comprise core program projects and projects for local agencies.

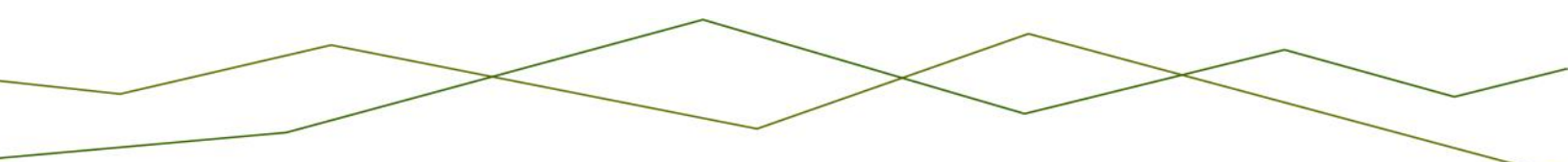
Funded vegetation management actions will be implemented using a suite of methods based on what is most practical and effective for the areas of interest, including manual and mechanical removal, prescribed fire, and grazing. Projects could occur anywhere within the MWPA area, shown on the right, which includes inland, bayside, and coastal areas. Each project will require an individual assessment of the best and most efficient method for completing the CEQA (and occasionally, NEPA) review and permitting. A suite of options is available ranging from Cat Exs (or other exemptions) to conducting a PSA under the CAL FIRE VTP EIR, to preparing individual IS/MNDs. Based on advice from legal counsel, the MWPA may also want to consider an individual Program EIR to cover all activities, should a process of exemptions, IS/MNDs, and PSAs prove more difficult to implement after a year or two of trial. Panorama is a perfect partner for the MWPA in this respect because we are very familiar with the exemption and PSA processes, and we have completed two program EIRs for vegetation management at the landscape scale in the Bay Area, including locally for MMWD. We know how to



apply vegetation management activities and mitigation to be appropriate and effective at the local scale, and we have performed the implementation at the local level to understand the on-the-ground issues that may not be as well covered when utilizing a state-wide document. We also have been following the Marin Countywide Fine Scale Vegetation Map and Landscape Database Project, co-led by the Golden Gate Conservancy (Danny Franco), in collaboration with a broad coalition of agencies and partners. This project will provide useful information, and LiDAR data to aid various analyses.

MWPA's Goals and Objectives

The MWPA is requesting an immediate proposal for professional services for environmental compliance for the work that will be included in the annual MWPA Work Plan. The scope of consultant services desired by the MWPA generally includes completing



the necessary CEQA/VTP EIR/NEPA administrative and documentation requirements on behalf of the MWPA, from project submittal to entitlement.

Key Considerations and Strategies

The key considerations for projects are going to be related to strategically defining the projects and carefully considering and deciding the right environmental approach that is the most defensible, while being time and cost efficient. We know from experience that the Marin County community is well informed and actively interested and involved in the work of local agencies and land stewards. The CEQA process can most likely become derailed during the community involvement processes (or lack thereof, if that is the case). We see that transparency is an important value of the MWPA, and that the MWPA has developed an ArcGIS StoryMap to communicate their program of activities to the public, and is developing a Citizen's Oversight Committee. Integration and trust with the community is of critical importance to be able to complete timely and efficient work.

Our approach will include an early outreach effort in collaboration with the MWPA and CAL FIRE (as appropriate) to identify the key interest groups, several of which we are familiar with given our recent work on the BFFIP for MMWD. We suggest obtaining feedback from key stakeholders and interest groups on the process for determining the appropriate CEQA review and the technical support studies needed, as well as appropriate mitigation. We took this approach when utilizing a CEQA exemption for the Ross Reservoir Landslide Repair project. If the public contested the use of an exemption, it would have derailed the schedule. We knew we needed buy-in before putting the exemption in front of the Board of Directors. We got that buy-in and our approach worked! We also propose undertaking an outreach effort with the key permitting agencies typically involved or interested in fuel management projects, including CDFW, USFWS, CCC, and BCDC. We will discuss

when a permit is need and methods to adapt project actions to avoid the need for a permit, where feasible.

Another aspect of our approach will be to formalize a process for determining the right CEQA review process based on checklists and protocols so as to add predictability and transparency to the process. We propose, at the outset, to create an **Environmental Review and Permitting Manual**. This manual will identify the various CEQA exemptions available and the parameters by which projects could fall under each exemption. We reviewed the detailed memorandums from Remy, Manly, Moose that provide excellent guidance on the processes for each approach. We propose to turn that guidance into a user-friendly manual!

The process will be step-wise, such that if a Cat Ex does not apply, then the manual will describe how to determine if a VTPEIR PSA (or VTP Addendum) or IS/MND may apply, and finally when an EIR may be needed. The manual will also identify the key environmental studies needed to support each environmental document, and the timing considerations important for effective implementation of the entitlement process. The SFPUC implements a similar type of manual to determine the appropriate environmental review for projects. We will build off of our analogous experiences with SFPUC to create the manual. Ideally, the manual will include checklists and flowcharts, and will result in support documentation for each decision on each project for the administrative record. In developing the manual, we will also communicate with key CAL FIRE staff who have implemented PSAs under the CAL FIRE VTPEIR (Shannon Johnson) to ensure clarity in the process. Our team talked to a few entities that have prepared PSAs (Feather River RCD and State Coastal Conservancy) and feedback included developing clarity with CAL FIRE early regarding the survey needs and process to ensure a smooth process.

As discussed, a key component of our strategy and theme of our approach is **standardization**. Our team does not need to reinvent the wheel! We have at our disposal many different resources to determine appropriate protection and mitigation measures for

vegetation management activities based on activity type and geography. **We propose to include in the manual a standard list of best management practices and measures to address key environmental resources.** By standardizing these measures, each environmental review process should be easier to compile, and the review should be streamlined. We will utilize our Program EIR for BFFIP, the VTPEIR, and other environmental documents to define biological resource protection (e.g., northern spotted owl), cultural resource measures, and geologic and slope stability measures, to name a few. We will lean on our extensive, local experience when addressing resource concerns, including the implementation experience of our team members. For example, we know the acceptable measures to address cultural resources having coordinated directly with the Graton Tribe on the BFFIP EIR.

Finally, our strategy will include integration of technology into the process. As a separate option, we can create a web platform to capture the projects, environmental review process, and implementation process and data in one centralized location.

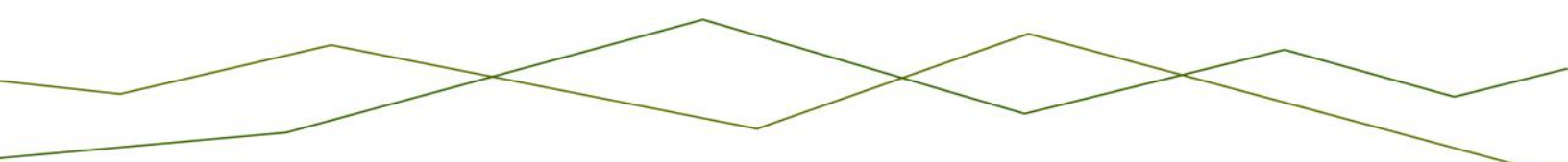
Advantages of Our Team's Approach and Experience

Panorama will bring a team of experts in CEQA strategy and implementation. Our team works as a cohesive unit. We coordinate the forestry knowledge of our specialists with the understanding of fuel management implementation of our biological and other technical experts, and our resource agency and community relationships to strategically define each project for environmental review. Our approaches are based on what we have learned through field implementation—we never lose sight of the implementation side of projects and the practicality and feasibility of our approaches and recommendations. Our biologists at Sequoia have been performing the implementation of fuel management for EBRPD for years. We also bring staff who have experience leading prescribed burns

on the ground (Phil Dye). This on-the-ground experience is invaluable as we apply back the lessons learned to the planning phase of projects and utilize real-world data from implementation to justify our approaches with the community and resource agencies. Through our project experience, our team regularly meets with numerous fire protection district staff, fire chiefs and fire marshals, and CAL FIRE staff to understand their operations, role, and perspective on fuel treatments. Our team includes several on-the-ground former and current firefighters and, thus, has been able to develop an instant rapport and trust with fire agency professionals.

Beyond just our CEQA, NEPA, and permitting experience, we bring a local and forward-thinking team working at the cutting edge of technology with regards to wildfire detection, evacuation, implementation, and monitoring. SIG brings experts in the climate change and carbon offset markets, including experience in new and innovative funding models to accelerate fuel management on the landscape. They built the state-wide fire hazard model used by the CPUC for all utilities. They are also leading Pyregence, a consortium of partners from leading research institutions, industry, academia, and government. Pyregence is comprised of working groups for advanced research into extreme weather, fire behavior, forecasting, and fire scenario analysis. SIG is also a regular and key partner to Zonehaven, whose technology we know the MWPA is leveraging. Our team is also currently working with Stanford University, developing their Wildfire Management Plan. One aspect of our work has been to coordinate with Stanford faculty performing research into fire detection and technology to ensure that we integrate forward-thinking approaches into the plan. We will bring that expertise and experience to the MWPA.

Our team is well integrated into regional activities and grant funding opportunities, having worked closely with CAL FIRE grant staff, Natural Soils Conservation Service staff, FEMA staff, and local Resource Conservation Districts for other clients. We maintain a database of grant funding opportunities that we share with our clients and we also offer to



work as a liaison to bring our clients into larger collaborative efforts.

Dedicated Team and Favored Client Status for MWPA

We have a track record of successful program management and implementation, and a demonstrated ability to handle multiple projects at one time, acting as in-house staff to our agency clients. We will provide the MWPA with a dedicated team of experts who will respond to the MWPA immediately upon request. We will assign a team whose primary focus and thus, their highest priority will be these projects, as we have done for SFPUC. If we were to assist other agencies, MWPA will remain our highest priority.

As a favored client, MWPA will be provided with direct access to our staff, a response time of a few hours on all project requests, and the ability to meet on site and in person, on short notice, since most of our team is based in the Bay Area, including San Francisco and the North Bay. Each project will be staffed with a PM and coordinator, to ensure that someone is reachable at all times. We can also provide reduced rates and a waiver of travel time, should the level of work from the MWPA support a high team utilization. As a small firm, we have a great deal of flexibility in how we provide services without a lot of corporate overhead.

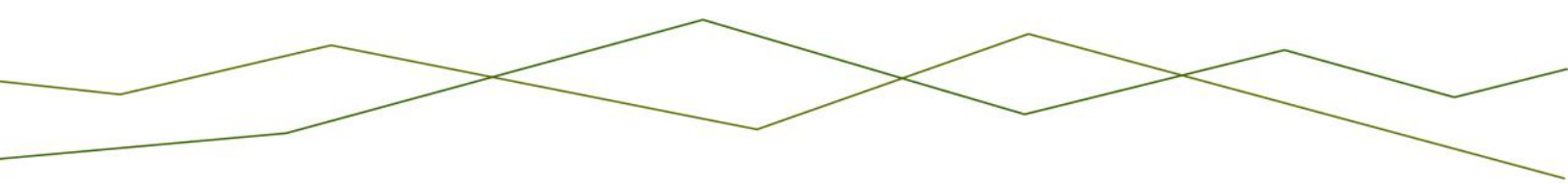
Methods (Scope of Work)

Overview

This section of our proposal describes our approach to the scope of work identified in the RFP. We outline an initial task to develop the **Environmental Review and Permitting Manual**, and to conduct outreach. Under each service that we could provide, we then describe the tasks and considerations.

Task 1: Initiation of the Contract and Development of the Environmental Review and Permitting Manual

An Environmental Review and Permitting Manual will be prepared that defines a process and standards to clearly define when a project could be processed under an exemption from CEQA, a PSA, an IS/MND, or an EIR. Guidelines will be defined after careful consideration of the exemption options. Thresholds for a Cat Ex will be tied to acreage based on Cat Ex language, treatment types based on Cat Ex types, and whether there are any unusual circumstances for which a Cat Ex would not apply (such as potential to impact a listed species). The threshold for an IS versus an EIR will be tied to where a potential for a significant unavoidable impact could occur, where added complexity and need for public involvement may merit an EIR under the CEQA Guidelines, or where significant and unavoidable cumulative impacts could occur. The purpose of creating these guidelines is to impart some degree of certainty and consistency in the environmental review approach. The manual will include flowcharts and checklists to help guide the decision on the appropriate CEQA review and completing the checklist will provide the substantial evidence needed to justify the document type decision. The manual can also include, as appropriate, a Cat Ex and IS/MND template as well as streamlined mitigation measures (most relevant to the habitats and geography of Marin County) to create a consistent process that will save time and money as more projects are implemented. We will work with the MWPA and their legal counsel to prepare this manual and we expect that it will be a living document that can be adapted and updated as we and the MWPA gain more experience with projects. As part of this effort, we can also provide initial outreach to the community and likely permitting agencies to discuss the overall approach for the environmental review and permitting of



upcoming projects.

Task 2: As Needed Environmental CEQA/CalVTP/NEPA Consultation

We will provide expertise on all aspects of CEQA and NEPA compliance through our deep knowledge and understanding of environmental laws and regulations. We also stay up-to-date on recent case law and industry trends to ensure that we provide accurate and the most effective and strategic advice. Answers to technical questions from those about biological analyses, about meeting carbon goals, and on how long a public review period should be to providing advice on how to respond to public comments on a CEQA document are all fair game. Should we not know the answer right away (or there is not one answer), we will research the question to provide options, pros and cons of various approaches, and our recommendations.

We will prepare staff reports, as requested. The content and format will be determined in consultation with the MWPA. Staff reports will be concise, with the pertinent information emphasized and supporting information in attachments. Our team can assist with presenting information at Board meetings, something we do frequently for Midpen and our work on their WFRP and EIR.

Our team includes experts in public communication, facilitation, and mediation. Meetings can take many formats. We will work with the MWPA to determine the meeting format and content. We will identify the goals of the meeting, get a sense of the audience, and provide feedback to MWPA staff to determine the most effective approach to a public meeting. We can also support all aspects of public meetings, including meetings held entirely using online tools such as Zoom.

Task 3: CEQA/CalVTP/NEPA Documentation

Determine Appropriate Document Type

Under this task we will determine whether or not a proposed activity qualifies as a “project” under CEQA and/or NEPA, as well as the appropriate level of environmental review, utilizing the guidance in the Environmental Review and Permitting Manual. We will also assist the MWPA in finding ways to modify projects such that an exemption could be applicable, if it is appropriate to do so. We will verify our recommendations with the MWPA’s legal counsel, as needed.

Prepare Cat Ex’s

We expect that many activities will be eligible for a Cat Ex from CEQA (or other exemption). Our advice could also include suggestions on how to modify a project such that it could qualify for an exemption versus an IS/MND. For any project where we determine in coordination with the MWPA that a Notice of Exemption (NOE) is applicable, we will prepare the NOE, including a brief project description; a finding that the project is exempt from CEQA, including a citation to the relevant statute or guidelines section; and a brief statement of reasons to support the findings. Technical studies may be required to substantiate the reasons and demonstrate no unusual circumstances or impacts for Cat Exs. We will include a written explanation demonstrating how and why the project’s size, location, design and type of activities involved meet all of the criteria of the claimed exemption. Exemptions are filed with the County Clerk and do not require a public review period. A 35-day challenge period commences with filing of the Cat Ex.

The two Cat Ex’s that are most likely to apply to MWPA projects include the Class 4 “minor

alterations to land” exemption and the Class 33 exemption for small habitat restoration projects. In our experience, Class 4 exemptions have been applied to shaded fuelbreak creation and maintenance, prescribed herbivory, and removal of hazard trees and vegetation, although many conditions apply (e.g., for vegetation management work within 100 feet of structures if a fire protection agency deems it necessary). Class 33 exemptions usually only apply to small areas of less than five acres. It should also be noted that Class 4 exemptions generally can not be used in “particularly sensitive environments.” Exemptions also cannot be used where cumulative impacts of successive projects could occur. On October 30, 2015, Governor Brown declared a state of emergency with respect to drought conditions, tree mortality, and resulting high hazard fire conditions. The proclamation provides that CEQA is suspended for activities by state agencies, utilities, and local agencies to remove dead or dying trees and incidental vegetation in high hazard zones that threaten power lines, roads and other evacuation corridors, critical community infrastructure, and other existing structures. We will work with the MWPA and their attorneys as well as CAL FIRE to determine if use of this exemption is feasible.

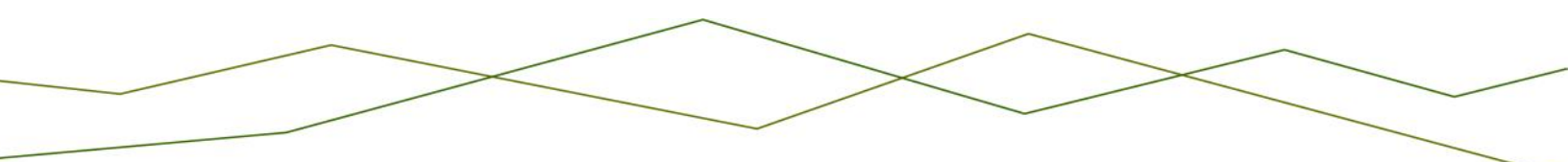
For any projects that could have federal involvement, NEPA may apply. We have found that the federal lead agency typically prepares their own CEs for these projects. We will provide the necessary back-up to support those decisions, if needed.

Prepare PSA Checklist

The VTPEIR is intended to be used by local agencies carrying out fuel reduction activities within the “treatable landscape” portion of State Responsibility Areas (SRAs). Several areas within the MWPA’s jurisdiction appears to fall within the treatable landscape; therefore, the VTPEIR can be used for these actions. If a project does not qualify for a Cat Ex as previously discussed, Panorama will screen the activity to see if it is a contemplated activity and fully included in the treatable landscape under the VTPEIR. Panorama has performed similar screening and reviews for both the SLVWD and Alpine County. If covered, Panorama will prepare a PSA to document how the project is “within scope” of the VTPEIR. This process is similar to preparing a CEQA Initial Study Checklist; however, the mitigation from the VTP EIR must be utilized. This step will likely include performing technical studies as outlined in the VTPEIR. We will coordinate and communicate early and frequently with CAL FIRE to ensure that the approach to technical studies is clearly laid out. After the PSA is completed for a project that is determined to be within the scope of the VTP, and we conclude that the project would not result in any new or more severe impacts, the MWPA will then approve the project, and we will assist the MWPA in filing a Notice of Determination (NOD), and submit the completed PSA to the Board of Forestry for tracking. Benefits of the PSA is that while the documentation is like an IS/MND, no additional public review is needed for documents found entirely “within scope.”

In preparation of this proposal, we asked staff from the Feather River RCD about their experience implementing a PSA for their work on the Yuba Foothills Healthy Forest Project. They implemented a PSA, as well as a **PSA Addendum** to cover non-SRA lands. The primary feedback was that the PSAs saved time and provided the mitigation needed, but survey guidance was less clear and CAL FIRE was still working out how to implement the program. They said the CEQA process took six months to complete with CAL FIRE approval a few months later, which is a similar timeframe to an individual IS/MND.

We also asked staff from the State Coastal Conservancy for their experience and advice preparing a PSA for the Martin Griffin Preserve. They said the PSA process was smooth because of early establishment of communication with CAL FIRE staff in the region who were incredibly helpful. Navigating permits with the County took time for this project, but it came down to communication to streamline the process.



Only a handful of PSAs have been completed, available here: <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=4a4c99f99ba1407c851d86f37e4c01b5>. The State Coastal Conservancy completed a PSA for the Martin Griffin Preserve in December of 2020 and the Yuba Water Agency completed a PSA for the Yuba Foothills Healthy Forest Project in September of 2020. Most other completed or proposed actions under the CalVTP EIR were led by or are proposed by CAL FIRE versus a local agency. Our clients, including Midpen and Alpine County, chose to prepare their own Program CEQA reviews versus conducting the work under the CalVTP EIR, primarily due to limitations in the types of work allowed in certain areas, and lack of full coverage, as well as desiring to determine their own conditions that may be more cost effective than those identified in the VTP EIR.

That said, Panorama has no biases with regard to the VTP EIR, and therefore, we will work with the MWPA with the goal of finding the best solution for their projects that saves time and money while providing a defensible approach. We are very familiar with the VTP EIR having screened projects for applicability; having reviewed the PSA for the Feature River Resource Conservation District and the State Coastal Conservancy for Martin Griffin Park, and having discussed the process with those entities; and having attended webinars and training sessions on it. We are confident our extensive experience with CEQA review for fuel management projects will translate well allowing our team to easily implement PSAs and the VTP EIR approach in close coordination with MPWA and CAL FIRE.

Prepare IS/MNDs or EA

Panorama will work with the MWPA to prepare IS/MNDs, should a project qualify for neither a Cat Ex nor a PSA (or VTP Addendum). We will either build on the analysis in the VTP EIR or prepare a stand-alone IS/MND. We will utilize mitigation from the VTP EIR and from MMWD's BFFIP EIR. Our approach to preparing an IS is to start from an example that the MWPA finds acceptable and to develop the CEQA Checklist template from the example. We will prepare the project description in coordination with MWPA staff and our forestry team. We often provide a checklist of questions in order to develop all the parts of the CEQA Project Description.

We provide clear explanations of impacts for each checklist question and attach or cite the supporting data. We may need to incorporate technical studies into the IS/MND, as defined in Task 3. We prepare an Administrative Draft, Check Draft, and Public Review Draft document. From our experience with other similar agencies conducting fuel reduction projects, we recommend that legal review be incorporated for projects that may be contentious. We have previously worked with MMWD's attorneys (Remy, Moose, Manley) and our approach to addressing their comments include providing clear comment responses in both table format and in the document section. We will provide the noticing for public review of the IS/MND (Notice of Intent to Adopt, Notice of Completion with the State Clearinghouse, if appropriate, and submission to the County Clerk). When public comments are received, our team prepares a catalog of the comments in a sortable Excel table or a database, by topic and comment. We will draft responses and make any edits to the document as needed. The Final IS/MND will be processed through the same review as the draft (technical staff, attorneys if needed) and published. We can also assist with notice filings on behalf of the MWPA.

If the project has a federal component to it, Panorama could also draft an EA, following a similar process as for the IS/MND. Panorama would work with MWPA and the federal agency to ensure the EA meets that particular agency's policies and follows their standard template. An EA typically

requires public outreach and Panorama would work with MWPA and the federal agency to determine the appropriate level of outreach.

Recommend Scope of EIR/EIS

Panorama will advise MWPA staff on when a project may need an EIR or EIS and can provide the initial scope of that document. Given our vast experience with fuel management projects, significant and unavoidable impacts typically are limited to air quality and greenhouse gas impacts (most often from prescribed burning) and from visual changes, which tends to be a subjective analysis. We will also work with the MWPA and our forestry team to determine if there is a way to avoid significant unavoidable impacts to reduce the need for an EIR or EIS.



Northern spotted owl. Photo courtesy of MMWD

Task 4: Other Environmental Services

Overview

This task will include conducting data collection (to understand baseline conditions), studies, modeling, and analyses to support the CEQA or NEPA review for projects, as defined in Task 3. We have brought together a team of experts that can address every topic or concern related to environmental analysis of fuel management projects and as may be required to support a Cat Ex, PSA, or IS/MND.

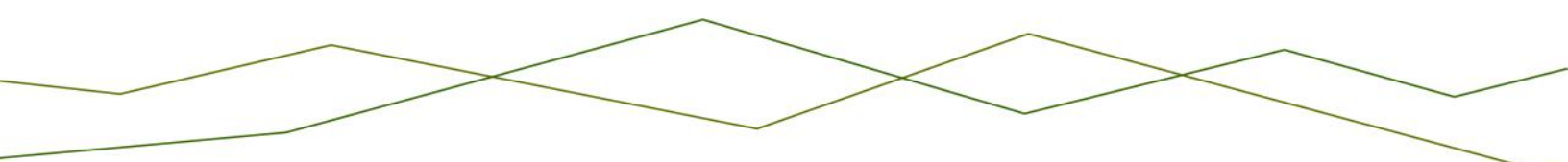
Field Reconnaissance Visit

Under this task, our core team can conduct field reconnaissance studies and background research to inform the MWPA of potential resources that may be impacted and to inform project design, potentially to avoid or minimize impacts to resources and or minimize permit requirements. We will involve the appropriate technical specialists to make the assessments. For other clients, we have completed very simple CEQA checklists to help them understand the resource constraints and permitting needs, which can later be folded into the environmental review document.

Biological Studies

Sequoia will provide the biological support needed for all projects. Sequoia's biologists will apply their extensive knowledge of the planning processes and implementation challenges associated with vegetation clearing, grading, exclusion fencing installation and maintenance, and work area demarcation gained from Sequoia's work on programmatic efforts and other wildfire mitigation projects for clients throughout Northern California. Sequoia brings specialized expertise conducting water quality monitoring and wildlife monitoring and relocation for the region's protected species. To maintain a cohesive strategy at all sites, Sequoia will assign experienced and dedicated local team members to projects. Sequoia's broad pool of qualified biologists allows them to accommodate any last-minute biological survey and monitoring requests, and frequently changing schedules, which are common in complex programmatic efforts where work is often performed concurrently on multiple sites and is subject to a variety of factors including weather and crew availability. Sequoia's substantial staff of full-time and on-call biologists will be available to support MWPA as needed.

Sequoia has worked effectively with Panorama and its team, and we will establish a project-specific



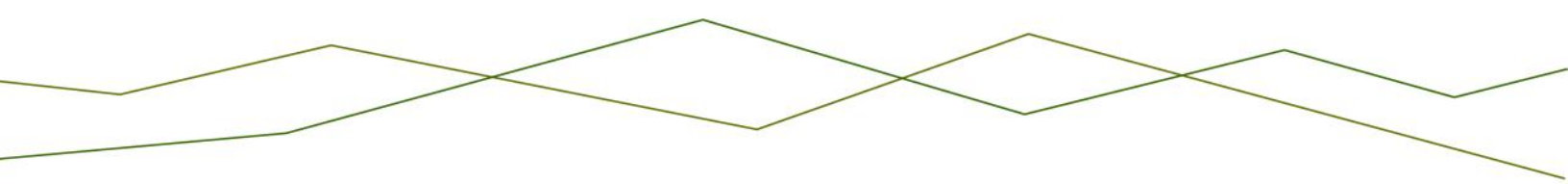
communication protocol scaled to the effort to ensure the team is cohesive, effective, and efficient during work. To maintain a smooth flow of agency coordination, Sequoia's biologists only communicate with agency personnel if directed to do so by the client. Unless otherwise specified during project kickoff meetings, Sequoia's communications will always go through our client and their Project Manager first.

For projects falling within SRAs, Sequoia will work with MWPA and our team's RPFs to develop site prescriptions that are aligned with the Standard Project Requirements (SPRs) as outlined in the CalVTP PEIR. Qualified biologists and botanists will conduct the site assessment and perform surveys as directed by the PEIR in order to prepare a comprehensive PSA. The goal will be to help design the project using treatment methods that will avoid significant impacts to natural resources. This strategy qualifies projects for coverage by the CalVTP PEIR in SRAs, thereby avoiding the need for additional studies or alternate reporting. For projects where significant impacts to sensitive resources are unavoidable, Sequoia biologists will analyze the options available to modify design, and consider pursuit of an IS/MND, as appropriate. For projects outside the SRAs, Sequoia will work with MWPA and the RPFs to design treatments to avoid and/or minimize impacts to natural resources. When sensitive resources cannot be avoided, Sequoia will assist MWPA in identifying mitigation measures and applying for required permits to allow work to proceed with appropriate mitigation.

Cultural Resources Studies

Far Western will provide the cultural resources and Native American consultation support needed for projects undertaken by the MWPA. Far Western's staff has the resources and experience to conduct all archaeological-related studies and prepare all subsequent documentation to standards required by the SHPO for compliance with Section 106 of the National Historic Preservation Act and cultural resource provisions under CEQA. Far Western staff routinely works successfully with clients to identify a viable Area of Direct Impact given records search and survey findings. Our team is also familiar with the cultural resources review requirements under the VTP EIR. The proposed treatable landscape discussed within the VTP covers 20.3-million acres, so it was not feasible in the VTP EIR to account for known archaeological resources within the subject area. Instead, it provided a general overview of the site types and applicable methodologies for project proponents to follow prior and during vegetation management activities. The cultural resources activities outlined in the VTP EIR follow the standard requests for conducting a records search, contacting Native American tribes, background research, pedestrian inventory, and treatment of archaeological resources, as necessary, and providing Workers' Environmental Awareness Training for construction crews. A similar process for cultural resources review will be applicable to support Cat Exs and an IS/MND. An important aspect of the program we developed for MMWD was to document survey areas and results in a GIS database. Future work in previously surveyed areas can commence without further cultural review.

Many areas within Marin County are heavily brushed with limited accessibility. In some cases, it may be more appropriate to include a cultural resource monitor while completing the work. For the MMWD BFFIP, our team looked at some of the existing archaeological sensitivity studies by Beard and Origer (1995) to identify areas of higher archaeological potential, with the need for follow up field work in areas where higher potential for resources may be identified. Far Western has an outstanding team of geoarchaeologists who can assess likelihood of finding resources based on geology. Geological work can also be applied to regional sensitivity studies for buried sites, paleoenvironment, site structure and formation, and assessments of integrity.



A wide range of studies and reports may be required for the projects. Far Western Principal Investigators have prepared reports for all potential phases of the cultural resources review process. They are supported by Senior Archaeologists, technical editors, full-time Production and GIS staff members, and a rigorous internal quality control program, all of which ensure the production of high-quality technical reports.

The scope included here will also include Native American outreach, per Assembly Bill 52. Our team has worked directly with the Graton Tribe to define mitigation to address key issues related to cultural resources in Marin County.

Air Quality and GHG Modeling and Analysis

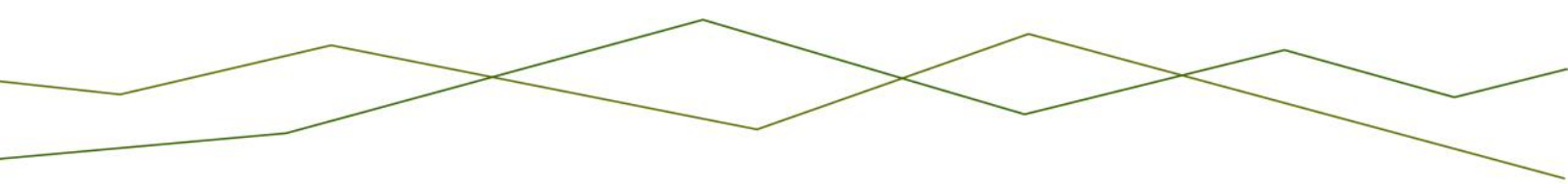
Projects may require air quality and greenhouse gas (GHG) emissions modeling and analysis. The air quality and GHG analyses will be prepared pursuant to the Bay Area Air Quality Management District's *CEQA Air Quality Guidelines* for assessing the significance of air quality impacts. Mitigation measures (including as identified in the VTP EIR) such as equipment combustion and fugitive dust emission reduction measures will be evaluated. Under the CalVTP EIR and a PSA, the potentially significant air quality impacts likely pertain to the generation of emissions, as well as health and odor impacts from prescribed burning.

Project emissions will be based upon the duration, work area footprint, equipment needs, throughput, characteristics of prescribed burning, and requirements anticipated for the project combined with appropriate California Air Resources Board emission models such as EMFAC/OFFROAD, the Consume Model (for pile burning) and the U.S. Forest Service First Order Fire Effects Model (FOFEM). Health impacts from project operations related to combustion exhaust, fugitive dust, and prescribed burns will be discussed in the context of local and regional impacts. A health risk assessment, if needed, will address proposed project health impacts on nearby receptors (existing schools and residences). The health risk assessment will be prepared based on the California EPA's Air Toxics Hot Spots Program Risk Assessment Guidelines.

A GHG emissions inventory will be developed. The greenhouse gas inventory will include emissions of carbon dioxide, methane, and nitric oxide associated with treatment activities. Among other items the GHG emissions will be based fuel type (i.e., tree, scrub, and grass). The most appropriate GHG emission inventory guidelines, tools, and methods recommended by the CARB and USEPA will be used. Vegetation management can decrease the occurrence of high severity wildfires and increase the potential rates of carbon sequestration, resulting in a cumulative net carbon benefit over the long term. This aspect of vegetation management and GHG emissions will be discussed.

Other Technical Studies and Analyses

Visual Resources Assessments. Panorama will prepare analyses as needed to address visual resource impacts, including creating before and after simulations, such as for fuelbreak projects, if needed (such as to support a Board report or a particular public concern). Typically, in our CEQA documents we have included photographs of different types of vegetation management activities both before and after treatments, and have several examples available from Midpen and MMWD. Our analysis focuses on not just visual change but visual degradation. We identify effects to views from designated scenic areas, but also consider the visual adjustment to managed landscapes when



considering magnitude of impact.

Paleontological Studies. Panorama has on-staff an experienced paleontologist who can perform records searches and field review, as needed, to address potential project impacts to paleontological resources.

Geologic Studies. Our team can also conduct baseline studies and make recommendations with regard to geologic impacts from activities, particularly as it pertains to erosion and potential for landslides. In our experience, the public and agencies such as the California Geologic Society tend to have concerns over these geologic hazards that can result when projects occur on steep slopes. Our geologic team can review soil types and slopes to make site-specific and appropriate recommendations to minimize the potential for erosion and landslides. Most measures include modifying the methods of vegetation removal, use of special equipment on certain slopes, avoiding work before and after substantial rain, and installation of slope stabilization devices.

Hydrologic Studies. We can bring in special expertise, if needed, to address changes to water flow and drainage. We have not needed to perform detailed drainage studies for the MMWD BFFIP EIR, nor for the Midpen WFRP EIR; however, we did provide a detailed hydrologic study for the Mount Sutro Vegetation Management Plan EIR for UCSF. We have included Clearwater on our team, should flow modeling ever be needed.

Traffic and Recreation Studies. Vegetation management work is temporary and temporal. It does not result in a sustained increase in traffic and activities fall under any thresholds for more formalized studies. In our experience, traffic analyses to support fuel management projects have included an assessment of road hazards from incompatible uses (e.g., we assessed the use of skippers to remove logs through San Francisco for the UCSF Vegetation Management Plan EIR). Our team can provide the appropriate level of traffic and recreation impact analyses needed, depending on the project. We have included transportation team members from CHS, should a more complex analysis be needed for a project.

Mitigation Monitoring and Field Implementation

Panorama and our team members can perform compliance documentation and field monitoring for the MWPA, as needed. Panorama has developed our own cloud-based data management system called PanoFACTS for tracking compliance with project environmental requirements and permits. Panorama's approach to implementation monitoring is tailored to the complexity of the project, the permit requirements, and the environmental review requirements and includes both office and field review. We can customize PanoFACTS for any type of project and all reporting can be generated out of PanoFACTS. Our system is efficient and results in cost savings. We also have considerable experience interfacing with the regulatory agencies if issues arise, in order to proactively address them. We could answer or provide feedback and input on any questions that arise related to mitigation monitoring and agency reporting.

Required mitigation and conditions during implementation will likely be heavily focused on biology. Our team's biologists will also provide assistance during implementation of projects. During implementation of treatments, Sequoia will work with crews to implement biological mitigation and avoidance measures. Qualified biologists will conduct pre-activity surveys and flag sensitive resources, such as nesting birds, listed plants, and others, for avoidance; establish buffers; delineate

fencing location; and train treatment crews on how to identify and avoid the sensitive resources.

Sequoia takes a proactive approach to preventing work delays or stoppages, focusing on providing thorough support to the crews during environmental training and education, as well as preconstruction flagging to work around sensitive resources and avoid unnecessary permitting. Sequoia's environmental training covers natural resource avoidance and impact mitigation in a manner that is specifically tailored to fuels treatment methods. Biologists will address burn pile locations, when and how to burn, whether to use masticators versus chainsaws and hand tools, and when a biologist should be present, as well as when a biologist is not needed. Sequoia's biologists can create bilingual training documentation and deliver the in-person training in Spanish if beneficial to achieve successful communication and compliance with permit requirements and Best Management Practices.

Sequoia biologists will monitor the crews when required by the VTP EIR mitigation measures, or by specific measures identified to support an IS/MND, to ensure avoidance of sensitive resources.

Once treatment is completed, biologists can conduct a post-treatment assessment to assist MWPA and CAL FIRE in determining treatment method effectiveness, maintenance intervals for treatment, or for research purposes (e.g., effects on habitat for various species, including plants and wildlife). Should restoration be necessary or required post-treatment, Sequoia's staff are experienced in developing, implementing, and/or overseeing restoration plans throughout the state, and a certified Consulting Botanist will be available to identify needs to reseed with local natives, erosion control mixes, or other specific requirements for sites undergoing restoration. Sequoia has developed and monitored implementation of many mitigation and restoration plans and has performed long-term monitoring to ensure restoration efforts meet minimal success criteria.

Task 5: Regulatory Assistance

The lands in Marin County include many natural areas that support a wide range of listed and special-status species, including both plant and animal species. Much of the Mount Tamalpais Watershed is in Critical Habitat for northern spotted owl. Our team includes permitting experts at both Panorama and Sequoia that can advise on whether or not a State or federally listed species may occur, and if so how it could be impacted, and what regulations pertain to those impacts. We will focus on providing ideas to the MWPA on how impacts can be avoided to minimize the need for permits, but where impacts are unavoidable, we will identify the process, timelines, and considerations, and potentially costs, for the permits.

Ross Reservoir Landslide Repair Inter-Agency Meeting

For the Ross Reservoir Landslide Repair Project, when Panorama put forth the proposal to use the Emergency Exemption from CEQA, Panorama also convened an on-site meeting with all potential regulatory agencies, including CDFW, USFWS, the Regional Water Quality Control Board, and the Army Corps of Engineers to determine, in the field, the appropriate permit process and mitigation requirements. Through this process other permit exemptions became apparent and our team was able to work through concerns from CDFW.



Schedules

Overview

This section provides information on schedules for the various tasks and services that could be provided under this contract. The schedules presented here are meant to give the MWPA a sense of our responsiveness, turnaround times for acting on requests, and our understanding of the considerations and scope of the various services that may be requested. Timeframes presented here are based in actual experience, but could vary depending on circumstances.

Under all circumstances, we will have team members available with capacity to meet the MWPA's needs. Work under this on-call contract will be prioritized. The MWPA will be a favored client with high priority status. We will respond to a request for services within 1 day, if not within a few hours. Our response time for requests under our SFPUC contract is under 4 hours. Tania is available to take request by phone or email, but if she is not available, Caitlin, Rita, or Emily will be available to field calls and emails and to organize the right team of people to respond. We will communicate frequently with the MWPA's project manager.

Typical Schedules by Task/Service

Task 1: Initiation of the Contract and Development of an Environmental Review and Permitting Manual	Initial Meeting —at contract initiation Meeting with MWPA Staff and Collecting and Reviewing Information —2 weeks Prepare Environmental Review and Permitting Manual —2 to 4 weeks MWPA Review —2 weeks
1—2 months	
Task 2: As Needed Environmental CEQA/VTP/NEPA Consultation	The schedule for each type of activity includes:
1 day to 30+ days	• CEQA, NEPA, Permitting, Monitoring, and Resource Impact Advice and Expertise—These requests typically have immediate turnarounds. Within 1 day of the request, we expect that we can meet with the MWPA to understand the request or questions and provide our feedback. Requests that require additional research or field review may take 1 to 2 weeks to complete. • Preparation of Board Reports and Briefings and Public Meeting Planning—Typically, 1 to 2 weeks to gather information, prepare, review and finalize. Planning of public meetings would be on the MWPA's schedule and could take up to 1 month. • Document Reviews—Review of documents as a CEQA Responsible Agency or internal reviews of MWPA prepared documents would typically take 2 weeks, but would depend on the size and complexity of the document. Under our on-call contact with the CPUC, we routinely review full environmental documents with thousands of pages of information and studies in less than 30 days.

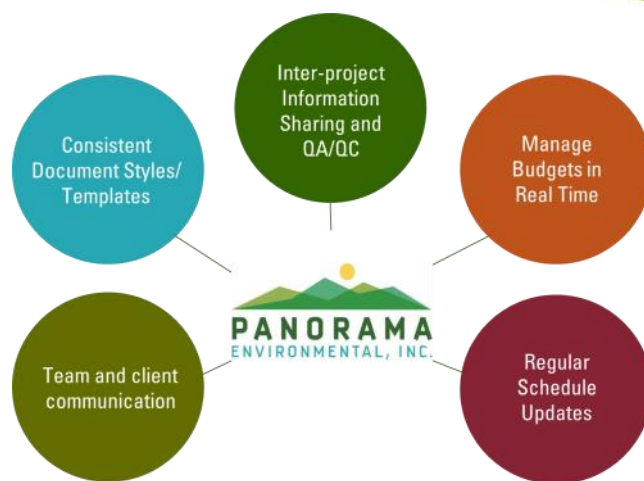
Task 3: CEQA/CalVTP/NEPA Documentation 30 to 45 Days for CEs ~2-3 months for PSAs ~4 to 6 months for IS/MNDs	Cat Exs: Preparation of an exemption requires development of the project description and sometimes, technical studies. In our experience, an exemption typically takes about 1 to 1.5 months to complete, including review times. PSAs: PSAs typically take around 2 to 3 months with definition of the projects, data collection, and screening of impacts and identifying mitigation. Current PSAs have taken longer, but as the process is streamlined more efficiencies will be realized. Larger projects or projects that require a VTP Addendum may take up to 6 to 9 months IS/MNDs: We can typically prepare CEQA IS/MNDs in 4 to 6 months, with the first draft prepared for MWPA review within 2 months. We usually allow for 2 to 4 weeks of review by the MWPA and we aim to turnaround edits within approximately 2 weeks for simpler projects.
Task 4: Other Environmental Services ~1 week to 3 months	Technical Studies: Preparation of technical studies will depend on the size and scale of the study being undertaken and the timing for the study. For example, botanical surveys have a specific window of timing each year, within which the surveys must be completed. Other technical studies, such as cultural resource reviews take a few weeks to complete records searches, conduct field studies, and to prepare reports. Most other technical studies (e.g., air quality modeling), once the project is well defined, take approximately 1 to 3 months to complete. Panorama will work with the MWPA to establish the schedule for studies, to ensure that the studies are planned early enough to maintain the overall schedule. Monitoring Programs and Implementation: Given our templates and PanoFacts format, we can prepare monitoring programs in as quick as a day. More complex projects with many permits may require 1-2 weeks to prepare the program, with another 1 to 2 weeks for review. Implementation is usually as long as the fieldwork and could include daily to weekly monitoring and reporting.
Task 5: Regulatory Assistance 1 to 12 months, depending on need	Permitting: Preparing permit applications for natural resource permits (Section 1600, and ESA permits) can take several months to complete. We typically need 1 month to define the project and prepare the permit applications, then a few weeks for client review and submission to the agency. If technical studies or mitigation must be defined, the permit applications can take a few more weeks to prepare. Panorama has successfully prepared, submitted, and received 401 and 1600 permits in less than 3 months where we had a strong relationship with agency staff and the project was not complex. Permits for take of threatened and endangered species and wetland permits can take up to 12 months to prepare, submit, and negotiate with the regulatory agencies. These types of permits are not common for fuel and vegetation management projects. We have found that for fuel and vegetation management projects, the most common permits are Section 1600 permits and State and federal ESA permits. However, these permits can sometimes be avoided entirely through coordination with the agencies and modification to the projects (such as avoiding certain times for work within northern spotted owl activity centers).

Project Management

Project Management Plan and Methods

Environmental planners and practitioners must understand and balance the needs and requirements of a complex array of participants, rules, processes, and technical details. We create order and bring organization to simplify and streamline the permitting process for our clients through our project management approach, which is a critical factor in our success. Through continuous experience and learning, we constantly refine our management methods.

The graphic to the right is the framework of our approach, comprised of schedule and budget management, communication and information sharing, and technical oversight and quality control. Each aspect is described in more detail, below.



Schedule Tracking and Performance

Schedule management is achieved through close coordination with our team, as well as through the implementation of schedule tracking tools, primarily Microsoft Project. We provide monthly status updates in progress reports and at meetings. Our clients often cite our reliability as one of our strongest assets. When we set a deadline, we do everything in our power to make sure it is met. We often need to “manage up” with our clients to ensure that we receive the information needed and we are always proactive to obtain missing information or to figure out ways to move a project ahead even with missing information. We often start with the deadline and work backwards to define the critical milestones, which helps all parties understand how different aspects of a project fit together. We keep our client and team informed of the due dates and provide regular check-ins to ensure the schedule is met. A recent task under an on-call contract with San Francisco Public Works required the preparation and fabrication of an informational panel to mitigate for impacts to a historic structure. The task required work products from our team’s historian, review by San Francisco Planning, coordination with Public Works’ architect on the design, and coordination with a fabricator. We developed a detailed timeline and acted as the go-between for the entire team to make sure each interim deadline was met, often communicating daily.

Communication and Information Sharing

Our project managers acts as liaisons among all team members to share cross-discipline knowledge and findings. We see our role as the central intelligence of the project or task. We have emphasized the development of long-term working relationships with subconsultants who have a proven track record of technical excellence, responsiveness, and quality services. Our in-house team and subconsultants work from defined scopes and, in the case of subconsultants, project-specific task orders (under master contracts). Each team member follows written protocols for analysis and document preparation. We use modern, cloud-based collaboration tools to integrate the team working environment by sharing data, documents, and other information among all team members, and we have a dedicated staff member responsible for ensuring the central organization, cataloging, and distribution of data. Work is reviewed and discussed on an ongoing basis to ensure issues are addressed quickly. We hold monthly or bimonthly check in calls with our clients and we take detailed notes, including identifying action items, which are tracked from meeting to meeting in a Google document. We use a file share system (SharePoint) that integrates with our own server to seamlessly and securely share data and information across all team members.

Cost Control

Cost control is comprised of team communication and the use of cost tracking/timekeeping programs. Panorama uses a cloud-based timekeeping and budgeting system called Harvest (www.getharvest.com) to track costs. Each team member working on the project is given an allotment of hours and detailed instructions of tasks to be completed within their time allotment. Subconsultants must provide the same level of tracking. An important part of costs-control is tracking the scope of work and informing the client immediately of any issues that could result in scope creep.

Technical Oversight and Quality Assurance and Quality Control (QA/QC)

Technical oversight involves ensuring that appropriate scientific or procedural methods are used, analyses are technically accurate and appropriately reflect the project, and that any conclusions are adequately supported with evidence. Our project managers are not just administrative managers ensuring budget and schedule, they are also experienced in all technical topics under CEQA and are trained to critically review information provided by technical experts in order to provide the technical oversight. Technical oversight becomes a part of our QA/QC process.

Panorama's QA/QC policy is to ensure that our documents and other deliverables are compliant with regulatory requirements and written so that the information is easily understood. By incorporating this QA/QC process, document authors and reviewers identify errors and omissions or conflicts, ask questions, ensure consistency with policies and environmental regulations, and raise issues that may present a problem. This process applies to both Panorama's internal staff and subconsultants. We strive to create highly organized technical documents, using consistent headings and language and with a concise analysis. Important concepts that we stress with our team include: the following:

- Utilizing language and analysis from previous documents
- Avoiding repetition in technical reports and documents
- Carefully ensuring that consistent terminology for all aspects of the project is carried throughout the reports
- Minimizing or avoiding the use of imprecise language

The implementation of our QA/QC process is facilitated by using Panorama's style manuals. The basic steps in our QA/QC process are shown in the green box.

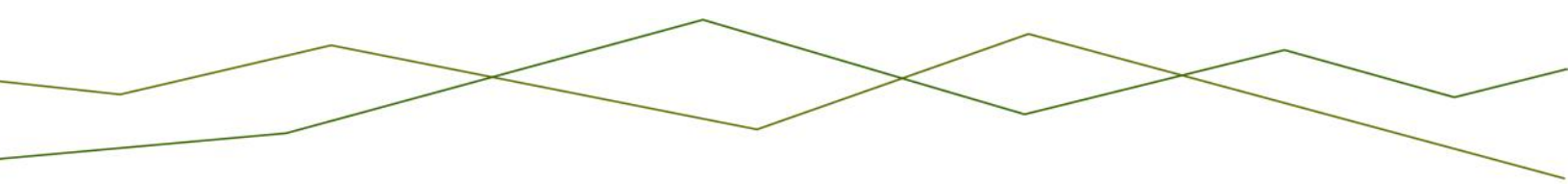
Delivering Projects On Budget

Our user-friendly accounting system allows us to carefully track and ensure that we stay within allotted budgets. We understand the process of working under grant programs as well.

- Panorama completed a project for the East Bay Municipal Utility District \$120,000 under our budget, demonstrating our efficiency and budget management skills.
- Panorama recently completed a project for Marin Municipal Water District over \$90,000 under budget by devising an alternative approach that saved money and nearly a year of time.
- Panorama completed the Alpine County Fire Hazard Mitigation Plan within budget. The County also received a CAL FIRE grant for the work. Panorama managed the budget closely throughout the plan development and communicated early with the County to avoid scope creep. Both the budget and schedule stayed exactly on-track in accordance with the grant requirements.

Focus QA/QC Procedures

- **Project Preparation by Project Manager** to develop technical outlines, document and terminology standards and conventions, and review tracking tools.
- **Technical Review** performed by senior staff and/or PM for content and analysis.
- **QA/QC Review by Panorama Principals** for quality, consistency, accuracy
- **Editorial Review** by technical editor including checking for document standards, grammar, and copy- editing
- **Production Review** by designated team member with "fresh eyes" using printed copy



Statement of Our Team's Ability to Complete the Work

Throughout this proposal, we have demonstrated that our team has the extensive relevant experience, the most qualified staff, and the availability and capacity to complete the work needed to support the MWPA.

7. RATES FOR TASKS

Example Costs by Task and Type of Service

Panorama charges by hourly labor rates; however, we provide estimated costs for each task, and not-to-exceed totals for tasks and projects. This section presents a scenario of estimated hours for each task, as well as the estimated costs that would be charged by Panorama staff versus subconsultant experts. The breakout of hours and costs would likely be different from what is presented here, as the actual level of effort would be project- and task- specific and depend on MWPA needs. Our team is flexible and transparent about costs, and is open to discussions to cooperatively find ways to complete tasks within financial constraints. Generally, we find that subconsultants comprise approximately 25 percent of our business revenue and that our average costs per hour across all projects is approximately \$158.

Task 1: Initiation of the Contract and Development of an Environmental Review and Permitting Manual

Environmental Review and Permitting Manual.

Approximately 25 page-manual with checklists and flow chart.....\$15,000

Kick-off Meeting and Review of Existing

Documentation. One in-person or web-based meeting and review of information.....\$5,000

Task 2: As Needed Environmental CEQA/CalVTP/NEPA Consultation

Advice and Council on Project, Plans, and

Resources Concerns. Will vary depending on need, could be up to 5 hours per week as an average.....\$800/wk

Staff Reports/Board Reports. Typically, up to 12 hours of staff time to prepare, including graphics and reviews.....\$2,000

Preparation and Attendance at Public Meetings.

Includes preparation of meetings, a facilitator, Power Point and assistance with noticing.....\$7,500

Document Reviews for Other Entities or Agencies

Depends on size and complexity....\$2,000—\$15,000+

Task 3: CEQA/CalVTP/NEPA Documentation

Cat Ex Documentation. Consultations and preparation of documentation. Support studies are separate under technical studies.....\$2,500 to \$7,500

IS/MND or VTP Addendum. Prepare IS/MND and all processing, including review drafts and responses to public comments (technical studies are separate).....>.....\$15,000—\$65,000

VTP EIR Checklist and Processing. Prepare VTP checklist, coordinate with CAL FIRE and other agencies as appropriate, determine mitigation, review and finalize (technical studies are separate)\$5,000—15,000+

Task 4: Other Environmental Services

Biological Reconnaissance Surveys. Depends on size.....\$2,500—\$15,000

Protocol Surveys (wildlife, botanical). Depend on species and area considered.....\$10,000—\$40,000

Aquatic Resources Jurisdictional Delineation.
Depends on size and location\$10,000+

Cultural Resources Records Search. Varies by project size and urgency.....\$1,000—\$5,000+

Visual Assessment. Including assessment of impacts in a separate report with a visual simulation.....\$2,500+

Paleontological Studies. Records search and field visit, if needed, dependent on project size and location.....\$7,500

Geologic Studies and Support. Review of slopes, soils, and analysis of project work and preparation of a report.....\$5,000—\$15,000+

Mitigation Monitoring Planning Work.
 Developing monitoring plan and reports
~\$10,000

Cultural Resources Survey. Depend on project size and terrain. A survey covering approximately 50 acres in Marin as an example.....\$10,000

Air Quality and GHG Modeling and Analysis.
 Including for a mix of activities including prescribed burning and a Health Risk Assessment in a separate report.....\$5,000—\$15,000+

Hydrology Modeling. Modeling of drainage pattern flow changes or other hydrology support
\$7,500 to \$20,000+

Traffic Studies. Analysis of hazards, turning radius, and traffic impacts.....\$10,000 to 25,000+

Mitigation Monitoring Field Work. Pre-work surveys and in-field monitoring....~1,000 to 1,500 per day per person

Task 5: Regulatory Assistance

Section 1600 Permits. Consultation and completion of permit application.....\$10,000+

Coastal Commission and BCDC Permitting.
\$10,000+

Burn Plans/Smoke Permits\$6,000

Section 401 and 404 Permits, assuming Nationwide Permit.....\$7,500

California and Federal ESA Permitting..... \$5,000 to \$25,000+

2021 Schedule of Billing Rates

Our team's billing rates are shown below. These rates are effective for the 2021 calendar year. Rates increase by ~3% per year.

Panorama Environmental, Inc.	Hourly Rate
Administration	\$90
Environmental Analyst I	\$100
Document Production	\$100
Environmental Analyst II	\$110
Cartographer/GIS Specialist I	\$115
Senior Botanists/Biologists	\$105 -120
Environmental Analyst III	\$120
Environmental Scientist I/Planner I	\$125
Cartographer/GIS Specialist II	\$145
Environmental Scientist II/Planner II	\$145
Visual Resources Specialist	\$150
Environmental Scientist III/Planner III	\$155
Fire Ecologist	\$165
Air Quality/Noise Specialist	\$165
Environmental Scientist IV/Planner IV/Project Manager	\$165
Environmental Scientist (Planner) IV/Project Manager—Caitlin Gilleran	\$175
Sr. Project Manager/Scientist (Planner) V/Project Manager	\$185
Sr. Manager	\$195
Sr. Consultant/Director	\$200
Principal	\$210
Public Facilitator	\$215

Sequoia Ecological Consulting	Hourly Rate
Field Scientist	\$71
Field Scientist	\$81
Clerical	\$92
Associate Biologist	\$99
Technical Editor	\$101
Staff Biologist	\$106
Project Administrator	\$107
Project Biologist	\$122
GIS Technician	\$128
Assistant Project Manager	\$130
Botanist	\$143
Associate Project Manager	\$144
Senior Arborist	\$147
Planner	\$151
Senior Biologist	\$155
Project Manager	\$161

Sequoia Ecological Consulting, Continued	Hourly Rate
Senior GIS Specialist	\$165
Senior Botanist	\$168
Senior Planner	\$173
Senior Technical Editor	\$173
Senior Regulatory Specialist	\$187
Senior Scientist	\$199
Senior Technical Specialist	\$220
Program Manager	\$222
Senior Program Manager	\$228
Regulatory Compliance Manager	\$237
President/Principal	\$239
Other Direct Costs	
Regular Vehicles (GSA rate)	\$0.56/day
Submeter GPS	\$100/day
UTV and Trailer	\$95/day
Fleet Vehicle	\$85/day
Infra-red Wildlife Monitor	\$50/day
Spotting Scope	\$30/day
Acoustic Bat Monitor	\$35/unit/day
Night Vision Goggles	\$30/day
Kayak Kit	\$75/day
Streamlight Strion HPL Flashlight	\$12.50/day
Aquatic Pond Sampling Kit	\$25/day
Color Graphics, Field Supplies, Equipment Rental, Media Reproduction, Transportation, Lodging and Meals	At cost
Notes:	
- Hours beyond 8 hours per day are charged at an overtime rate of 1.5 times our standard hourly rates. - Labor Hours for Sequoia's Principal, Debie Montana, will not be billed to the project - Principal Brett Hanshew (Role: Technical Advisor) will be billed at the Sr. Technical Specialist Rate	

Spatial Informatics Group	Hourly Rate
GIS, Data Modeler, Technician	\$150
GHG Expert	\$150
Fire Ecologist	\$165
Registered Professional Forester (RPF)/Foresters	\$165

Prometheus Fire Consulting	Hourly Rate
Fire Consultant	\$145

Far Western Anthropological Group					
Labor Category	Staff	Rate	Labor Category	Staff	Rate
Principal Investigator	McGuire, Kelly	\$200.35	GIS Analyst	Stotz, Nicole	\$71.25
Principal Investigator	Mikkelsen, Pat	\$187.00	GIS Analyst	Bradeen, Jill	\$70.46
Principal Investigator	Hildebrandt, William	\$179.16	GIS Analyst	Rice, Darla	\$70.46
Principal Investigator	Siskin, Barb	\$175.95	GIS Analyst	Kline, Nicholas	\$69.11
Principal Investigator	Rosenthal, Jeffrey	\$173.13	GIS Technician	Deutsch, Kyle	\$58.63
Principal Investigator	Duke, Daron	\$171.78	GIS Technician	Cordtz, Eva	\$57.33
Principal Investigator	King, Jerome	\$171.78	Lab Director	Harold, Laura	\$98.34
Principal Investigator	Whitaker, Adrian	\$171.78	Lab Director	O'Horo, Kasey	\$73.12
Principal Investigator	Young, D. Craig	\$171.78	Lab Assistant	Armstrong-Ingram, Angela	\$82.40
Principal Investigator	Byrd, Brian	\$162.66	Lab Assistant	Eubanks, Jill	\$78.18
Principal Investigator	DeBaker, Cassidy	\$135.56	Lab Assistant	Galindo Arias, Patricia	\$70.46
Principal Investigator	White, Gregory	\$132.90	Lab Assistant	Torres, Rosario	\$63.79
Principal Investigator	Scher, Naomi	\$130.30	Lab Assistant	Martinez, Alexxandria	\$56.03
Principal Investigator	Pacheco Patrick, Melinda	\$119.87	Art Director	Norton, Tammara	\$120.76
Principal Investigator	Byerly, Ryan	\$119.61	Production Director	Pardee, Michael	\$91.21
Principal Investigator	Clay, Vickie	\$119.61	Production Specialist	Kramm, Jacqueline	\$77.29
Principal Investigator	Waechter, Sharon	\$119.35	Production Specialist	Montgomery, Kathleen	\$70.46
Principal Investigator	Wohlgemuth, Eric	\$116.96	Production Specialist	Sterling, Liz	\$70.46
Principal Investigator	Hyde, David	\$111.64	Production Specialist	Cary, Nora	\$70.44
Principal Investigator	Younie, Angela	\$108.46	Production Specialist	Saenz, Angelica	\$58.47
Principal Investigator	Roberson, Joanna	\$106.32	Senior Archaeologist	Wall, Bridget	\$98.34
Principal Investigator	Parker, Ashley	\$98.34	Senior Archaeologist	Higgins, Courtney	\$95.69
Principal Investigator	Martin, Erik	\$93.03	Senior Archaeologist	Darcangelo, Mike	\$91.21
Principal Investigator	Martindale Johnson, Lucas	\$85.06	Senior Archaeologist	Garner, Albert	\$88.60
Principal Investigator	Buonasera, Tammy	\$83.39	Senior Archaeologist	Parker, Christopher	\$87.71
Principal Investigator	Freund, Kyle	\$83.39	Senior Archaeologist	Guggenbuehl, Sarah	\$82.09
Geoarchaeologist	Meyer, Jack	\$148.85	Senior Archaeologist	Engbring, Laurel	\$78.18
Geoarchaeologist	Kaijankoski, Phil	\$132.90	Senior Archaeologist	Hartman, Amanda	\$78.18
Principal Paleontologist	Shapiro, Russell	\$132.90	Senior Archaeologist	Pritchard, Carrisa	\$78.18
GIS Director	Brandy, Paul	\$171.78	Senior Archaeologist	Neidig, Steven	\$76.88
GIS Supervisor	DeArmond, Shannon	\$111.64	Senior Archaeologist	Colligan, Kaely	\$74.43
GIS Analyst	Nagy, Andras	\$77.09	Senior Archaeologist	Davis, Kathy	\$74.43
GIS Analyst	Karthauser, Chelsea	\$74.43	Senior Archaeologist	McCabe, Allen	\$72.08
Staff Archaeologist	Lindley, Stephen	\$74.43	Staff Archaeologist	Wu, Andrea	\$57.17
Staff Archaeologist	Osterlye, Montserrat	\$74.43	Staff Archaeologist	Kwoka, Laure	\$56.03
Staff Archaeologist	McWaters, Joshua	\$73.22	Asst. Project Manager	Grace, Ananda	\$75.96
Staff Archaeologist	Caretti, Gina	\$71.77	Logistics Coordinator	Townsend, Valarie	\$67.75
Staff Archaeologist	Garvey, Devin	\$78.18	Project Accountant	Fawcett, Lynda	\$90.37
Staff Archaeologist	Gingerich, Eric	\$71.77	Project Accountant	Chavez, Monika	\$85.99
Staff Archaeologist	Longo, Nick	\$71.77	Project Accountant	Russell, Ann	\$85.06

Far Western Anthropological Group, Continued

Position	Staff	Rate	Position	Staff	Rate
Staff Archaeologist	Diaz-Longo, Martha	\$70.46	Project Accountant	Kaur, Harkiran	\$72.97
Staff Archaeologist	Sanchez, Monique	\$69.11	Project Accountant	Green, Christina	\$70.36
Staff Archaeologist	Hanrahan, Kathleen	\$67.75	Project Accountant	Idehara, Courtney	\$65.15
Staff Archaeologist	Kuypers, Martijn	\$67.75	Jr. Project Accountant	Riding, Samantha	\$65.15
Staff Archaeologist	Maybee, Michele	\$67.75	Project/Proposal Director	Johnson, Melissa	\$95.69
Staff Archaeologist	Meyer, Margo	\$67.75	Director of Finance	Langer, Ashley	\$125.45
Staff Archaeologist	Ziogas, Eleni	\$67.75	Human Resources	Eason, Erin	\$78.18
Staff Archaeologist	Caywood, Cameron	\$65.15	Office Manager	Turner, Jerry	\$66.46
Staff Archaeologist	Davies, Rachel	\$65.15	FIELD EMPLOYEES		
Staff Archaeologist	DeOrnellas, Brieann	\$65.15	Technician A	Technician A	\$65.15
Staff Archaeologist	Castillo, Alexandra	\$63.84	Technician B	Technician B	\$57.33
Staff Archaeologist	Zummo, Hailey	\$57.33	Technician C	Technician C	\$46.91

RCH Group

Hourly Rate

Technical Associate	\$100
Technical Scientist	\$110
Sr. Air Quality Scientist	\$160
Principal/Senior Scientist	\$170

Clearwater Hydrology

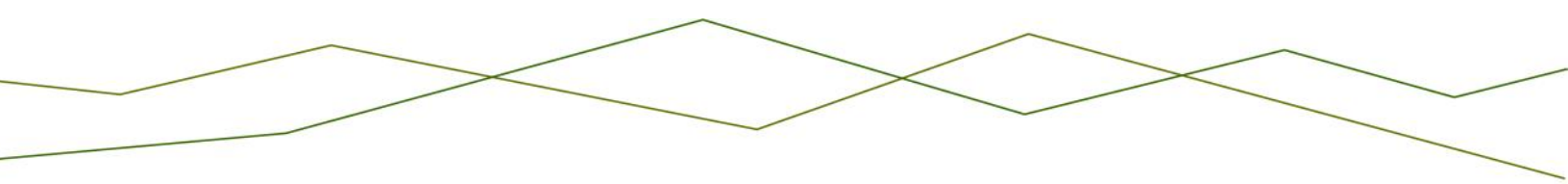
Hourly Rate

Water Resource Engineer	\$110
Hydrologist	\$120
Principal Hydrologist/Engineer	\$180
Per Diem: \$180/day; Total Station Use Fee: \$75/day	

CHS Consulting

Hourly Rate

Administrative	\$85—\$110
Technical Editor	\$105—\$140
Graphic Designer	\$90—\$130
Assistant Engineer	\$100—\$125
Assistant Planner	\$100—\$120
Associate Engineer	\$125—\$150
Associate Planner	\$120—\$145
Sr. Engineer	\$150—\$225
Sr. Planner	\$145—\$220
Principal Engineer	\$210—\$325
Principal Planner	\$205—\$320
Principal	\$320—\$390



Other Charges

Mileage for standard vehicles (2WD) is charged at the IRS Standard Rates for the current year (\$0.575/mile). Mileage for off-road (4WD) vehicles is charged at \$0.75/mile. Travel expenses are billed at cost. Outside services, equipment, and facilities not furnished directly by Panorama or our subconsultants will be billed at cost plus 10% including, but not limited to:

Shipments and express delivery	Special fees, permits, insurance, etc.
Printing and photographic reproductions	Subcontractor rates
Rental of equipment	Supplies

Payment is net 30 days. Thereafter, one percent (1%) interest per month will be charged on the unpaid balance.

8. SAMPLE WORK

Sample work products are attached to this proposal. We have included the following documents on a flash drive with summaries of the documents provided in **Appendix B**:

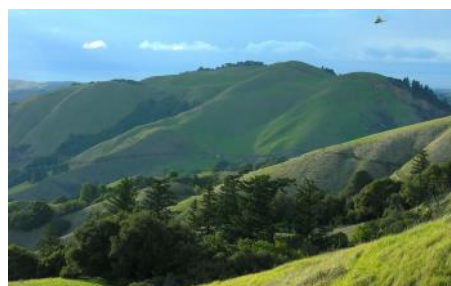
- Marin Municipal Water District Biodiversity, Fire, and Fuel Integrated Plan
- Marin Municipal Water District Biodiversity, Fire and Fuel Integrated Plan, Program EIR
- Midpeninsula Regional Open Space District Wildland Fire Resiliency Program
- Midpeninsula Regional Open Space District Wildland Fire Resiliency Program EIR
- Alpine County Wildfire Hazard Mitigation Plan
- Alpine County Wildfire Hazard Mitigation Plan IS/MND
- Marin Municipal Water District Ross Reservoir Slide Repair, Notice of Exemption, with Attachments
- UCSF Mount Sutro Vegetation Management Plan Technical Studies

We have also included a few samples from Sequoia's work, since biological resource surveys and reports are expected to be needed for most projects and Sequoia will be a key partner under this contract:

- EBRPD Post-Treatment Assessment Survey, Claremont Canyon Regional Preserve
- EBRPD Fuels Management Daily Monitoring Form, Tilden Regional Park
- EBRPD Fuels Management Daily Field Job Safety Analysis
- North Orinda Shaded Fuel Break Project Environmental Awareness Training- Alameda Whipsnake
- North Orinda Shaded Fuel Break Project Environmental Awareness Training- California Red-legged Frog

9. REFERENCES

Our references can attest to our experience, approach, process, and successes. Below are references for key personnel. Some of our subconsultants have also worked with us on these projects and our references can attest to their work and our ability to work as a cohesive team, as well. A full description of these projects, and more, can be found under Section 1.



Project: Midpeninsula Regional Open Space District Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA) - Public
Contact: Coty Sifuentes-Winter, Natural Resources Manager
Phone No. 650.691.1200
Email: csifuentes@openspace.org

Project and Services: Panorama and SIG prepared the WFRP for Midpen to address wildfire risk in the District's open space preserves and Panorama prepared the Program EIR. This comprehensive program covers over 60,000 acres of preserve wildlands managed by Midpen, including all 26 of the District's open space preserves. The program consists of several components, including a Vegetation Management Plan that includes the prescriptions for fuelbreaks and fuel reduction areas constructed along ingress-egress routes and key areas to protect infrastructure and assets; a Prescribed Fire Plan that defines prescribed fire units and methods; a Resource Advisory Map and Wildland Fire Pre-Plan; and a Monitoring Plan. The Program EIR will allow vegetation management activities to commence after EIR approval. A project specific analysis is included with the Final EIR to document coverage of projects under the Program EIR.

Project Size: 60,000 acres

CEQA Services Budget: \$655,774

Team Members: Tania Treis, Project Manager; Caitlin Gilleran, Deputy Project Manager; Jason Moghaddas, Plan Development and Mapping; Phil Dye, Prescribed Burn and Treatment Definition, Mike Ratte, Noise and Air Quality
Reference can speak to Panorama, SIG, and RCH

Project: Marin Municipal Water District Biodiversity, Fire, and Fuels Integrated Plan (Marin County, CA) - Public
Contact: Shaun Horne, Water Resources Manager
Phone No. 415.945.1190
Email: shorne@marinwater.org

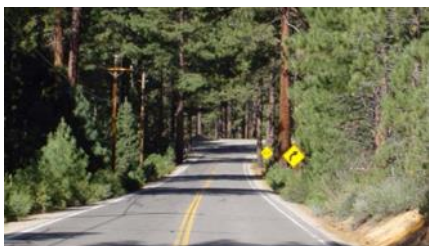


Project and Services: Panorama prepared the Biodiversity, Fire, and Fuels Integrated Plan in close collaboration with MMWD staff and prepared the associated EIR to address vegetation management activities on 22,000 acres of watershed lands in Marin County. The Final EIR was certified and the Plan approved in November 2019. The BFFIP includes definition of fuel management zones for both infrastructure (roads and structures) and for natural resources. Panorama, with MMWD, identified 27 management actions, the locations where they would occur, and the prioritization of the actions. A detailed five-year plan was included in the BFFIP, with a costs analysis, total acreages to treat by mapped zone, and performance criteria to measure the success of treatments. Panorama led outreach efforts for the plan and EIR.

Project Size: 22,000 acres

CEQA Services Budget: \$1,007,679

Team Members: Tania Treis, Project Manager; Caitlin Gilleran, Deputy Project Manager; Scott Conway, Fire Behavior Modeling, Mike Ratte, Noise and Air Quality - *Reference can speak to Panorama and RCH*



Project: Alpine County Wildfire Hazard Mitigation Plan and IS/MND (Alpine County, CA) - Public
Contact: Zach Wood, Environmental Planner and PM
Phone No. 530.694.1371
Email: zwood@alpinecountyca.gov

Project and Services: Panorama prepared the Wildfire Hazards Mitigation Plan for Alpine County. The plan includes an evaluation of fire hazards through fire behavior modeling, identification and ranking of high value resources and assets (HVRAs) through a collaborative process with a steering committee, identification of several priority projects including defining the specific fuel treatments such as new fuelbreaks, and defining the costs associated with those treatments. Panorama then evaluated projects for the appropriate CEQA coverage, including review under the CalVTP EIR, and prepared an IS/MND that covered the top three projects, plus an additional nine projects at a programmatic level. Panorama led the cultural and biological surveys for the top three priority projects. Panorama also assisted with landowner outreach and public meetings.

Project Size: All of Alpine County

Environmental Services Budget: \$200,000

Team Members: Tania Treis, Project Director; Rita Wilke, Project Manager *Reference can speak to Panorama and SIG*

Project: Post-Fire Recovery, Critical Asset Hardening, Vegetation, and Fuels Management Plan (Santa Cruz County, CA) - Public
Contact: Rick Rogers, District Manager
Phone No. 831.338.2153
Email: rrogers@slvwd.com



Project and Services: The Panorama team was selected to provide services to address wildfire concerns in the San Lorenzo River Watershed for the SLVWD. Our team is accounting and mapping the San Lorenzo Valley Water District resources and assets in order to understand exposure to potential wildfire during critical fire weather. Panorama is supporting the District in an array of services, ranging from extensive grant research and writing and coordination with CAL FIRE and the National Resource Conservation Service, to coordinating post-fire response, to preparation of a Vegetation Management Plan to address defensible space around important water infrastructure throughout the watershed, to reviewing the VTP EIR and other CEQA options for environmental clearance. We prepared a successful CFIP grant for the District.

Project Size: 2,000 acres

Environmental Services Budget: \$100,400

Team Members: Tania Treis, Project Director; Caitlin Gilleran, Project Manager/grant and CEQA support; Jason Moghaddas, Plan Development and Mapping; Phil Dye, Treatment Definition, *Reference can speak to Panorama and RCH*



Project: UCSF Mount Sutro Vegetation Management Plan and EIR—Public
Contact: Diane Wong, Principal Planner
Phone No. 415.502.5952
Email: Diane.Wong@ucsf.edu

Project and Services: Panorama prepared the CEQA EIR for UCSF's Vegetation Management Plan for Mount Sutro. The plan included thinning as well as replanting of eucalyptus trees. The project was extremely controversial and the University expected a lawsuit. Panorama managed and led the CEQA process, including a 2,000 page Final EIR that thoroughly addressed all comments, including comments regarding carbon sequestration and loss from tree removal. Panorama completed the EIR in 12 months. The project was not sued and UCSF began implementation in 2018.

Project Size: 62 acres

Environmental Services Budget: \$474,352

Team Members: Tania Treis, Project Director; Caitlin Gilleran, Deputy Project Manager; Rita Wilke, CEQA planner; Corey Fong, graphics; Bill Vandivere, Hydrology; Migi Lee, Traffic *Reference can speak to Panorama, Clearwater, and CHS*

Subconsultant References

We expect that our biological and cultural resources specialists will be utilized frequently for field surveys, analysis, permitting, and monitoring support. Panorama has an existing, long-term relationship with both Sequoia and Far Western. We have included some additional references for both firms who can attest to their quality of service.

Sequoia Ecological Consulting

East Bay Regional Parks District Fuels Reduction Program Support (Public)

Project Services: Biological resources support during project implementation.

Contact: East Bay Regional Park District
Kristen Van Dam, Resource Analyst/Ecologist
Phone: (510) 544-2324
Email: kvandam@ebparks.org

North Orinda Shaded Fuelbreak (Public)

Project Services: Biological resources support for 55 treatment units in Contra Costa County

Contact: CAL FIRE
Ed Orre, Chief
Phone: (408) 206-3704
Email: Edgar.Orre@fire.ca.gov

Far Western Anthropological Group

Pacific Gas and Electric Cultural Resources Support for Post-Fire Response (Private)

Project Services: Cultural resources support for large-scale emergency response following the Camp Fire in Shasta County, California (Whiskeytown National Recreation Area), and the Carr Fire in Butte and Plumas Counties, California (Plumas National Forest).

Contact: Jennifer Darcangelo, Tribal and Cultural Resource Land Consultant
2730 Gateway Oaks, Suite 220
Sacramento, CA 95833
Phone: (925) 324-5171
Email: J5D8@pge.com

10. COMMITMENT TO NEGOTIATE IN GOOD FAITH

Panorama and all of our proposed team members and subconsultants are committed to negotiating in good faith to execute a professional services agreement for completion of the tasks outlined in MWPA's Scope of Work, including a not-to-exceed compensation total for expenses and reimbursables.



Appendix A: Resumes



TANIA TREIS, PRINCIPAL

EDUCATION AND SPECIALIZED TRAINING



- M.S., Geology, San Jose State University
- M.A., Biology, University of Pennsylvania
- B.A., Mathematical Biology, University of Pennsylvania
- Wetland Delineation Training Program
- Geographic Information Systems Analyst Certificate Program
- Years of Experience: 19

EXPERTISE

- CEQA/NEPA, permitting, technical analysis, hydrology, geology, and geomorphology, overall program development and project management

Project: Marin Municipal Water District Biodiversity, Fire, and Fuels Integrated Plan (Marin County, CA)

As project manager, Tania managed the preparation of the BFFIP and worked closely with Marin Municipal Water District to ensure that the BFFIP adequately addressed public concerns, that it is concise and clear, and that it facilitates the environmental analysis for the CEQA document. Tania also led the preparation of the Program EIR. She led the technical team and reviewed all technical analyses to produce the Draft EIR and authored the water quality and geology sections.

Project: Midpeninsula Regional Open Space District Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA)

The Midpeninsula Regional Open Space District is creating the Wildland Fire Resiliency Program to address wildfire risk in the District's over 60,000 acres of open space preserves. Tania is helping define the non-fire fuels management plan, a prescribed fire plan, wildland fire pre-plan/resource advisor maps, and a monitoring plan. As project manager, Tania is responsible for development of the plan, public outreach, and preparation of two EIRs.

Project: Wildfire Hazard Risk Mitigation Plan and IS/MND (Alpine County, CA)

The Alpine County Wildfire Hazard Risk Mitigation Plan and EIR involves an assessment of hazardous fuels and the risk they cause to communities and public infrastructure. Tania prepared the Wildfire Hazard Risk Mitigation Plan document utilizing the technical analyses and risk modeling prepared by our team members from SIG and provided the oversight and QA/QC for the IS/MND that covered the program and 3 shovel-ready projects. She also participated in all public outreach efforts.

Project: San Lorenzo Valley Water District Fire Management Plan (Santa Cruz County, CA)

As Project Director, Tania oversaw the preparation of a Wildland Fire Management Plan for San Lorenzo Valley Water District (SLVWD). The team defined the immediate actions to protect existing assess in the recent fire season. Tania provided QA/QC of the plan and participated in the coordination with regional partners including CALFIRE, Santa Cruz County, City of Santa Cruz, the San Mateo and Santa Cruz RCDS and others. Tania is also providing strategic support to assist the district in determining appropriate CEQA

and permitting routes for the work, including CALVTP EIR and exemptions, as well as coverage under other CALFIRE programmatic documents (e.g., for the CFIP program).

Project: Stanford University Vegetation Management Plan (Santa Clara and San Mateo Counties, CA)

Panorama was hired to conduct outreach and a policy review and analysis to ultimately prepare an update to Stanford's previous vegetation management plan. Tania is the Project Manager for this effort and is overseeing the team that is preparing the risk modeling. Tania prepared an outreach plan and lead jurisdictional outreach that included 6 jurisdictions and the fire, emergency, general management, planning, and public works staff from each of these agencies, in addition to CALFIRE. Tania oversaw the preparation of a detailed regulatory review and outreach report, including identification of when CEQA review and NEPA review may be needed (e.g., for updates to an HCP).

Project: Portola Valley Cluster Subdivision Fire Plan (Santa Cruz County, CA)

Stanford University is proposing to create faculty housing in the Town of Portola Valley. Due to wildfire risks in the project area, the Town of Portola Valley and Woodside Fire Protection District requested Stanford University to conduct fire behavior modeling and prepare a vegetation management plan for the project. Tania led a team of specialists from Spatial Informatics Group and Prometheus Fire Consulting to conduct fire behavior and hazard modeling. Tania also managed the preparation of a Vegetation Management Plan that identifies treatments to meet Woodside Fire Protection District's and legal requirements to reduce the potential for high severity fire.

Project: UC San Francisco Mount Sutro Open Space Reserve Vegetation Management Plan (San Francisco County, CA)

UCSF initiated the process to develop a vegetation management plan for their 61-acre Mount Sutro Reserve since 2002. As project manager, Tania led the CEQA process for the project and oversaw the work off all technical experts including on issues pertaining to fire hazards, changes in slope stability and erosion, visual changes, changes to a historic landscape, and a detailed analysis of carbon sequestration from changes in tree cover in the forest. Tania worked closely with the RPF on the project to revise vegetation management prescriptions to address environmental concerns.

Project: On-Call Services to Quincy Engineering and Eastern Sierra Engineering (Inyo County, CA)

Tania has served as the Contract Manager for on-call services contracts to Inyo County Public Works Department, where Panorama is teamed with Quincy Engineering (for civil bridge work projects) and Eastern Sierra Engineering (for civil road work projects). Panorama provides a wide range of environmental services including CEQA/NEPA support, preparation of technical studies, agency coordination, permit acquisition, contract specification review, input into design, pre-construction surveys, and construction monitoring. Panorama has undertaken over 15 projects with Inyo County Public Works since 2004. Much of the work has included preparing Categorical Exclusions from NEPA with the support studies, following Caltrans processes.

Project: PG&E Fulton-Fitch Mountain Reconductoring Project (Sonoma County, CA)

The project involves replacing poles and conductor along a 9.9-mile-long section of 60 kV and 230-kV transmission lines and modifying a substation in central Sonoma County. The project was affected by both the 2017 Tubbs Fire and the 2019 Kincaid Fire. Part of the review included ensuring adequate vegetation management and fire protection measures during construction. Tania served as the Project Director for the application review process, AB 52 coordination, agency and stakeholder outreach, and provided the QA/QC for the preparation of an IS/MND and a Supplement to the initial IS/MND pursuant to CEQA to address project changes proposed by PG&E.

Project: Calpine-Geysers Enhanced Geothermal Systems (EGS) Project (Lake County, CA)

Tania managed the preparation of an EA for Calpine's proposed EGS project in the Geysers. The EA was prepared for the DOE. The EA included an extensive report on induced seismicity. Tania also reviewed and coordinated the Section 106 compliance, devised mitigation, and coordinated with the agencies.

Project: Patua Geothermal Project Phases I and II (Churchill and Lyon Counties, NV)

Tania managed the preparation of two Environmental Assessments under NEPA. In addition to two geothermal plants, the EAs considered the potential impacts of constructing transmission lines and geothermal pipelines. The project was located on federal and private land, with a portion of transmission located in the Fernley Wildlife Management Area. Tania reviewed all sections of the EAs and oversaw coordination with involved agencies, including the Bureau of Land Management, Bureau of Reclamation, and Nevada Department of Wildlife.

Project: Gemini Solar Project EIS, Reports and Plans, and Environmental Compliance (Clark County, NV)

The solar project is a 690-MW solar photovoltaic power generating and battery storage facility located on BLM lands to the east of Las Vegas. Tania managed the entire NEPA process, from preparation of 26 technical support studies, the project engineering, and preparation of the EIS for the BLM, and is current the Project Director for Panorama's role as the Environmental Compliance Management team during construction. Tania's leadership was instrumental in meeting nearly impossible deadlines and she managed to also ensure the highest quality documents throughout the review process that have become a model.

Project: Vallejo Flood Control and Wastewater District Floodwall FEMA Grant Application (Vallejo, CA)

Tania prepared the application for a FEMA Hazard Mitigation Grant for construction of a floodwall around Vallejo's Wastewater Treatment Plant on the Napa River at the San Francisco Bay. She prepared all aspects of the grant from the purpose, engineering, environmental, and financial components. The grant application was successful, and Valley Wastewater was awarded \$3M.

Project: City of Redwood City Public Works Cordilleras Creek and Bayfront Canal Biological Studies and Permitting Assistance (San Mateo County, CA)

Tania assisted the City in determining necessary permits for stream cleanout and vegetation management and maintenance work at Cordilleras Creek and Bayfront Canal. She oversaw biological studies conducted by Panorama biologists and coordinated with the City on mitigation requirements for impacts to wetland and riparian habitats to come up with cost effective terms for the City.

Project: Peacock Gap Recycled Water Pipeline (Marin County, CA)

The project included preparation of an Initial Study and CEQA-Plus (NEPA) documentation for construction and operation of a new recycled water pipeline in Marin County, and modifications to an existing wastewater treatment plant. Tania served as the Project Manager and scoped the project, met with the State Water Resources Control Board, led biological and cultural studies and the drafting of the IS/MND. The project was abandoned before completion of the CEQA-plus project due to internal funding losses within MMWD.



CAITLIN GILLERAN, PROJECT MANAGER/ENVIRONMENTAL PLANNER



EDUCATION AND SPECIALIZED TRAINING

- B.S., Environmental Management and Protection, Emphasis in Science and City and Regional Planning, California Polytechnic State University, San Luis Obispo
- CalEEMod
- AERMOD Training Course
- Annual Advanced CEQA Workshops
- CEQA Caselaw Updates
- Climate Change AEP 2016 Institute
- Years of Experience: 11

EXPERTISE

- CEQA/NEPA, air quality modeling, technical analysis

Project: San Lorenzo Valley Water District Post-Fire Recovery, Critical Asset Hardening, Vegetation, and Fuels Management Plan (Santa Cruz County, CA)

Panorama was hired to conduct several tasks for SLVWD to assist in identification of fuel reduction projects and finding grants that could support these fuel reduction projects. During preparation of the management plan the CZU Lighting Complex ignited and burned much of SLVWD land and infrastructure. Prior to the fire, Caitlin identified a suite of grants that could be applied for to fund a range of wildfire management projects. Caitlin was able to assist SLVWD by identifying grants and funding sources for disaster relief in the short term and infrastructure rebuild in the long term. She prepared the now approved grant application for the California Forest Improvement Program grant, which involved extensive coordination with the local CALFIRE representation. She participated in preparation of the draft plan and identified permitting and environmental review approaches that SLVWD could implement to conduct the projects identified in the plan.

Project: Stanford University Vegetation Management Plan (Santa Clara and San Mateo Counties, CA)

Panorama was hired to conduct outreach and a policy review and analysis to ultimately prepare an update to Stanford's previous vegetation management plan. Caitlin assisted in jurisdictional outreach including identifying the specific individuals who would be interested and provide valuable feedback for the planning process. She conducted an extensive review of the local policies and regulations that would or may apply to the client's property. The various potential permits were laid out into flow charts for easier use to identify which would apply under which circumstances. Caitlin has begun background research for the vegetation management plan while the modeling is underway.

Project: Midpeninsula Regional Open Space District Ecosystem Resiliency Vegetation Management Program and Program EIR (Santa Clara, San Mateo, and Santa Cruz Counties, CA)

The program would enable Midpen to conduct environmentally sensitive vegetation management for all

of Midpen's preserves and other land under management agreements. She is serving as the Deputy Project Manager during the environmental process. Caitlin is assisting in the preparation of the program and CEQA review. She researched Midpen and other agency wildland fire policies and planning guidance to identify policy recommendations. She prepared the materials and attended the public community meetings for the Program.

Project: UCSF Mount Sutro Open Space Reserve Vegetation Management Plan and EIR (San Francisco County, CA)

The UCSF Mount Sutro Open Space Reserve Vegetation Management Plan (plan) provides a management framework for protecting, enhancing, and restoring vegetation in the 61-acre Mount Sutro Reserve. The primary actions of the plan include forest treatments, management of high-risk trees, native plant restoration, and maintenance of trails and public access. Caitlin assisted in preparing the detailed project scenario necessary to conduct an adequate environmental analysis. She calculated air quality and greenhouse gas emission to identify the year with the greatest level of management actions to present a conservative analysis. She was responsible for preparing the analyses for air quality, greenhouse gases including carbon sequestration, hazards and hazardous resources, and finalizing geology and soils. She conducted research and calculations, to prepare several complex responses to Draft EIR comments.

Project: Biodiversity, Fire, and Fuels Integrated Plan and EIR (Marin County, CA)

The Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) details management actions, including fuelbreak construction, fuelbreak maintenance, forest management, and invasive species management, for the 21,600 acres of Marin Municipal Water District (District) lands. Caitlin served as the Deputy Project Manager and oversaw completion of the EIR. She reviewed the plan to identify inconsistencies and clarifications to ensure a clear project description. She calculated the air quality and greenhouse gas emission for the baseline activities and the maximum activity level that could occur within District lands. She analyzed the impacts and addressed client comments. Caitlin outlined and implemented a methodology to conduct clear, easy to understand analyses for a nuanced detailed Plan.

Project: Walker Basin Water Transactions Program and EIR (Mono County, CA)

The program involves General Plan amendments that would set policies to address water transactions associated with the operation of the Walker Basin Restoration Program (WBRP) in Mono County. Caitlin reviewed the feasible water transactions and developed clear scenarios to conduct the environmental analyses. She clarified the project extent based on water rights availability and data. She conducted research and several environmental analyses in the EIR incorporating the detailed water rights transactions scenarios.

Project: Lazy K Ranch Permittee-Responsible Off-Site Mitigation Preserve Project IS/MND (Merced/Madera County, CA)

This project involved placing the Lazy K Ranch property under a Conservation Easement and implementing a vernal pool restoration plan. Vernal pool restoration would include excavation of pools and restoration of mima mount topography followed by inoculation with soil and seed material. Caitlin analyzed the potential environmental impacts of vernal pool restoration with particular focus on biological resources. Caitlin prepared the air quality and GHG technical calculations associated with emissions from equipment use during restoration.



RITA WILKE, PROJECT MANAGER

EDUCATION AND SPECIALIZED TRAINING



- B.S., Ecology (cum laude), San Francisco State University
- B.A., German (cum laude), San Francisco State University
- A.A., Humanities, Folsom Lake College
- Wetland Delineation Training Program
- Advanced CEQA Workshop
- Basic NEPA Workshop
- Years of Experience: 10

EXPERTISE

- CEQA/NEPA, permitting, technical analysis, noise, overall program development and project management

Project: Marin Municipal Water District Biodiversity, Fire, and Fuels Integrated Plan (Marin County, CA)

The project involves the preparation of the Biodiversity, Fire and Fuels Integrated Plan for the MMWD Mt. Tamalpais watershed. Panorama prepared the Plan and Programmatic EIR. Rita prepared impact analyses for Hazards, Fire, Cultural Resources, Aesthetics, Noise, Recreation, and Traffic. She also prepared a comprehensive list of cumulative projects within the watershed and analyzed cumulative effects of Plan implementation for the EIR.

Project: Midpeninsula Regional Open Space District Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA)

The Midpeninsula Regional Open Space District is creating a Wildland Fire Resiliency Program to address wildfire risk in the District's 65,000 acres of open space preserves. Rita is assisting with the development of the program, collecting and collating data and information and will prepare the noise analyses for the CEQA review for the program. Rita helped with the planning and preparation of materials for the initial public meetings for the project and will assist with preparation of the CEQA document.

Project: Wildfire Hazard Risk Mitigation Plan and IS/MND (Alpine County, CA)

Alpine County received funding to develop a Wildfire Hazard Risk Mitigation Plan. Rita managed subconsultant data collection, fire modeling, and identification of high value resource assets within Alpine County during development of the Plan. Rita coordinated with County staff to develop and implement an outreach program. Rita attended all public outreach meetings and prepared meeting materials, including presentation and handouts. Rita managed preparation of the Initial Study/Mitigated Negative Declaration and facilitated tribal outreach efforts under AB 52. Additionally, Rita prepared a work plan that identified tasks and responsible parties that would be necessary to reach project implementation for three high-priority projects and nine lower priority projects. The Plan and IS/MND received praise and were adopted unanimously by the County Board of Supervisors in mid-February 2021.

Project: Marin Municipal Water District Ross Reservoir Landslide Repair Project (Marin County, CA)

The project involves stabilization of an active landslide located downslope of the existing Ross Reservoir. The reservoir is a partially-buried, concrete-lined, covered structure that supplies water to 20 percent of

MMWD's service area. Rita prepared documents to support MMWD's decision to use an emergency CEQA exemption for the project. Rita developed the project description using information and plans provided by MMWD and prepared outreach materials to local government and organizations. Rita managed outreach to permitting agencies and presented the project to CDFW, USACE, the Water Board, and National Marine Fisheries Service at an inter-agency meeting.

Project: City of Calistoga Conn Creek Water Pipe Crossing Project (Napa County, CA)

The City received a Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant to remove an existing segment of the North Bay Aqueduct from the Conn Creek streambed. In addition, approximately 3,000 linear feet of water pipeline would be replaced along the shoulder of Silverado Trail/Highway 128. Rita is assisting the project engineers (Murraysmith) in the development of the pipeline to reduce or avoid impacts to sensitive resources. Rita is managing preparation of an IS/MND, FEMA Environmental and Historic Preservation Checklist, and applications for permits from CDFW and the Regional Water Quality Control Board (RWQCB). Additionally, Rita is assisting the City with AB 52 consultation with two consulting tribes: Middletown Rancheria and the Mishewal-Wappo.

Project: Marin County Flood Control and Water Conservation District Corte Madera Creek Flood Risk Management Project (Marin County, CA)

Panorama prepared the EIR for flood risk improvements to the concrete and earthen lined channel of Corte Madera Creek in the communities of Ross and Kentfield. Improvements include widening and removing portions of the concrete channel along Corte Madera Creek to create a flood plains and habitat, installing flood walls adjacent to the banks, stabilizing creek slopes, and removing the wooden fish ladder in Ross. Rita prepared the project description for the EIR and screened alternatives suggested by the public, as well as alternatives from a previous iteration of the project, against the project objectives.

Project: Sonoma County Freestone Flat Road Bridge Replacement Project (Sonoma County, CA)

The project involves replacement of a narrow bridge in rural Sonoma County. The bridge crosses Salmon Creek, which is known to support steelhead and is designated Essential Fish Habitat for steelhead and Coho salmon. The project requires consultation with USFWS and National Marine Fisheries Service for impacts to California red-legged frog, California freshwater shrimp and salmonids. Other environmental issues include removal of riparian habitat and more than 30 trees. Rita managed the preparation of an IS/MND and technical studies to support a National Environmental Policy Act (NEPA) Categorical Exclusion, including Natural Environment Study, Biological Assessment, and Water Quality Assessment Report.

Project: East Bay Municipal Utility District Photovoltaic Renewable Energy Project (Contra Costa County, CA)

The project involves construction of a 5-megawatt solar facility on EBMUD land. As a Senior Environmental Scientist, Rita was responsible for defining impacts to jurisdictional waters and preparing permit applications for USACE and the RWQCB. Rita also prepared wildlife take permit applications for USFWS and CDFW for impacts to California red-legged frog and Alameda whipsnake.

Project: California Public Utilities Commission Riverside Transmission Reliability Project (Riverside County, CA)

This project includes construction of a new 10-mile, 230-kilovolt overhead double-circuit transmission line. Rita, as Project Manager, managed Panorama staff and technical experts to develop the scope of and prepare the Subsequent EIR. The project was highly controversial and required extensive outreach to various regulatory and local agencies, which Rita coordinated and led. Rita presented the findings of the Draft Subsequent EIR to agencies and the public during two well-attended public informational workshops in Riverside County. A substantial number of comments on the Draft Subsequent EIR were received from agencies, tribes, organizations, and the public, and Rita is managing the preparation of the Final Subsequent EIR, which includes a response to each comment received on the Draft Subsequent EIR.

Project: Inyo County Department of Public Works On-Call Contract (Inyo County, CA)

Rita is the project manager assigned to manage all environmental compliance projects with Inyo County Public Works. Rita has managed environmental compliance four bridge replacement projects (funded through Caltrans/FHWA) and three emergency road repair projects (two funded through Caltrans/FHWA; one through California Office of Emergency Services) for the County. Work included CEQA and NEPA documents as well as construction compliance and post-construction revegetation, monitoring and reporting.

Project: Plumas County Spanish Ranch Road Bridge Replacement Project (Plumas County, CA)

The project involves replacing Spanish Ranch Road Bridge, a single-span one-lane bridge over Spanish Creek, with a new, double-span two-lane bridge in the same alignment. The purpose of the project is to improve public safety, address the structurally deficient bridge, and increase creek capacity under the bridge during high-flow events. Rita is providing environmental compliance oversight for construction of the bridge. Rita negotiated a 1600 permit amendment to modify the permitted construction detour and managed preparation of an Incidental Take Permit application in one week of observing foothill yellow-legged frog and Sierra Nevada yellow-legged frog during pre-construction surveys. The Incidental Take Permit application was received within 2 months of observing the frogs on site.

Project: East Bay Municipal Utility District Briones Tower Retrofit Project (Contra Costa County, CA)

The EBMUD Briones Tower Seismic Retrofit Project includes seismic retrofits on the Briones Reservoir inlet/outlet tower located within the reservoir. The project requires use of floating platforms to assist with construction on the inside of the tower. Panorama worked with project engineers and EBMUD staff to identify impacts and permits associated with various construction techniques. Rita prepared the Project Description for all environmental documents and permits. She provided guidance on avoidance and minimization of environmental impacts to support a Categorical Exemption from CEQA. Rita also prepared the 1600 permit application to CDFW and provided feedback and clarifications on the draft permit.

Project: California Public Utilities Commission Sycamore – Peñasquitos 230-kV Transmission Line Project EIR (San Diego County, CA)

This project involved the preparation of an EIR for a 230-kV transmission line in San Diego County, CA. Rita reviewed SDG&E's Proponent's Environmental Assessment (PEA) for deficiencies and data needs. Rita managed subcontractors preparation of additional data requests and technical reports. Rita prepared the Noise and Fire and Fuels Management sections of the EIR. While preparing the impact assessment, Rita worked with technical experts to identify significant impacts and develop mitigation. Helicopter noise during project construction and corona noise during operation were the impacts of main concern. The public was deeply concerned about fire safety. Rita co-authored the Hazards and Hazardous Materials of the proposed project and prepared the cumulative impact analysis for the Noise, Fire and Fuels Management, and Hazards and Hazardous Materials resource areas.

Project: California Public Utilities Commission Fulton-Fitch Mountain Reconductoring Project IS/MND (Sonoma County, CA)

Panorama prepared the Initial Study/Mitigated Negative Declaration for reconductoring a 10-mile 230-kV transmission line in Sonoma County, CA. Rita conducted the noise impact analysis in coordination with the noise technical expert and identified noise impacts from project construction, including helicopter use. Rita prepared the outline for the Noise Technical Report and collaborated with the technical expert to identify representative noise monitoring locations to characterize ambient noise levels in the project vicinity.



EMILY CAPELLO, SENIOR MANAGER



EDUCATION AND SPECIALIZED TRAINING

- M.P.A., Environmental Science and Policy, Columbia University
- B.A., Dual Major in English and History, Tufts University
- Years of Experience: 19

EXPERTISE

- CEQA/NEPA, permitting, technical analysis, renewable energy and federal land use planning, overall program development and project management

Project: Border Fuels and Fire Management Project (San Diego County, CA)

As project manager, Emily managed the preparation of the Environmental Assessment for the Bureau of Land Management (BLM) Border Fire and Fuels Management Project and worked closely with the BLM's Fire Specialist to define the proposed action, identifying the range of fire and fuels management activities that may be required. Emily worked with the BLM to define the action broadly enough to allow for a range of activities at each individual fire and fuels management area. Mitigation was also defined as a range of activities to reduce the particular action selected for each location.

Project: San Sebastian Marsh and San Felipe Creek Fuels Management Project (Imperial County, CA)

Emily managed the preparation of the Environmental Assessment for the BLM for the vegetation management and invasive species management for the San Sebastian Marsh and San Felipe Creek area. This area has seen large growth of Tamarisk, leading to a reduction in native habitat and an increase in vegetation fuel. Emily worked with the BLM to identify appropriate methods to eliminate invasive species and reduce vegetation fuel in this sensitive region. She is a recognized expert in the BLM Planning Documents for the California Desert Conservation Area, ensuring the BLM considered all appropriate management actions for the project.

Project: PG&E Gas Pipeline 300 A/B Vegetation Management Project (San Benito County, CA)

Mitigated Negative Declaration and Supporting Initial Study for Pacific Gas and Electric Company Gas Pipeline-300A/B Vegetation Management Project. Project Manager for this IS/MND including reviewing the PG&E submittal, coordinating with CDFW regarding publication of the document, and finalizing publication. Project includes removal of vegetation along numerous segments of natural gas pipelines in an unincorporated portion of San Benito County, California.

Project: CDFW On-Call Contract (California)

Contract manager for the five-year CDFW Pacific Gas and Electric On-call Contract, including coordinating with the CDFW on the environmental review of each project under this contract. Emily manager several IS/MND projects under this contract that required Lake and Streambed Alteration Agreements and Incidental Take Permits. Projects included pipeline replacement projects in the Bay Area and California Desert, access road repair projects, and pipeline testing projects.

Project: Targeted and Prescribed Grazing of Annual Grasses in Great Basin Ecoregions of Nevada (Nevada)

Emily authored the Wild Horses and Burros section and the Recreation and Travel Management section for the Environmental Assessment. The EA assessed treatments to reduce fuel loads from invasive annual grass species to address increased wildfire risk and diminished ecological integrity. This included increased use of existing trails and the construction of temporary access and illegal use of such trails. Emily coordinated directly with the BLM specialists regarding the impacts of the proposed action and alternatives.

Project: Cressey-Gallo 115 KV Power Line Project (Merced County, CA)

Emily managed the IS/MND for this project under contract with the California Public Utilities Commission. She worked closely with the CPUC and PG&E and the legal team to develop alternatives that would reduce the impacts of the proposed route and to define mitigation such that it would reduce the impacts but would also be feasible from the PG&E right-of-way.

Project: Arica and Victory Pass Solar Power Projects (Riverside County, CA)

Emily is managing the technical reports for the NEPA and CEQA review of two solar photovoltaic (PV) and storage projects located on approximately 2,000 acres each of land administered by the BLM. Emily has managed specialty subcontractors and all QA/QC for technical reports, communication with the client and agencies (BLM, CDFW, USFWS, and the County), and managed schedules of deliverables. Emily has strategized with the developer regarding alternatives, mitigation measures, and ways to minimize any schedule slippage throughout the entire process, from pre-survey work to post approval. Emily is also managing the production of the Draft NEPA document for BLM review which includes one EA for both projects, and the Draft CEQA document, one EIR for both projects for review by the CDFW's contractors. Emily is closely managing the CEQA schedule and providing additional input to facilitate CDFW's review and minimize schedule concerns. This includes early coordination regarding permit applications.

Project: Brookfield Renewable Mesa and Alta Mesa Wind Repowers Initial Study/MND (Riverside County, CA)

Emily managed the preparation of technical documents for the NEPA and CEQA review of two wind repowers outside of Palm Springs in Riverside County. Emily worked closely with the developer and the agencies to develop alternatives that would reduce the impacts of the wind projects to nearby communities and to ensure the documents were legally adequate. Emily managed preparation of the Environmental Assessment for the Mesa project coordinating with the BLM and the developer to incorporate numerous mitigation measures as applicant proposed measures. Emily managed the Initial Study/MND for the Mesa Project working with the CDFW as the lead agency and the Initial Study/MND for the Alta Mesa Project working with Riverside County as the lead agency.

Project: Palen Solar Power Project EIS/EIR (Riverside County, CA)

Emily managed the Supplemental EIS and EIR for this 500 MW solar PV project in Riverside County. She reviewed all technical reports, and the draft and final NEPA and CEQA documents. Emily worked with the BLM and the developer to determine the best approach to this atypical Supplemental EIS/EIR that not only built off of two previous NEPA and CEQA documents but also included a change in the CEQA lead agency. She worked directly with the CEQA legal team during drafting of the CEQA decision document.



WHITNEY BROEKGING, PROJECT MANAGER/ENVIRONMENTAL PLANNER



EDUCATION AND SPECIALIZED TRAINING

- B.A., Global Studies, University of California, Santa Barbara
- Annual Advanced CEQA Workshops
- Years of Experience: 11

EXPERTISE

- CEQA/NEPA, permitting, technical analysis, cultural resources

Project: Midpeninsula Regional Open Space District Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA)

The Midpeninsula Regional Open Space District is creating the Wildland Fire Resiliency Program to address wildfire risk in the District's over 60,000 acres of open space preserves. Whitney is serving as an environmental planner during the environmental review process and drafted the alternatives chapter and cumulative impact analyses for the EIR.

Project: PG&E Fulton-Fitch Mountain Reconductoring Project (Sonoma County, CA)

The project involves replacing poles and conductor along a 9.9-mile-long section of 60 kV and 230-kV transmission lines and modifying a substation in central Sonoma County. The project was affected by both the 2017 Tubbs Fire and the 2019 Kincaid Fire. Part of the review included ensuring adequate vegetation management and fire protection measures during construction. Whitney served as an environmental for the Supplement to the initial IS/MND pursuant to CEQA to address project changes proposed by PG&E.

Project: Gemini Solar Project EIS, Reports and Plans, and Environmental Compliance (Clark County, NV)

Whitney served as an environmental planner for the 690 MW Gemini solar project in the Nevada Desert northeast of Las Vegas. The project was approved and is currently in the construction phase. Once constructed, it will be the largest PV solar facility in North America. Whitney authored the Public Health and Safety Technical Report, prepared the paleontological resources, cultural resources, Native American religious concerns, and Old Spanish National Historic Trail resource sections of the EIS, helped oversee revisions to technical reports and the EIS per BLM comments, and prepared various pre-construction plans.

Project: Marin County Flood Control and Water Conservation District Corte Madera Creek Flood Risk Management Project (Marin County, CA)

Panorama prepared the EIR for flood risk improvements to the concrete and earthen lined channel of Corte Madera Creek in the communities of Ross and Kentfield. Improvements include widening and removing portions of the concrete channel along Corte Madera Creek to create a flood plains and habitat, installing flood walls adjacent to the banks, stabilizing creek slopes, and removing the wooden fish ladder in Ross.

Whitney prepared the aesthetics and recreation resource section of the EIR and drafted the response to public comments on the Draft EIR.

Project: Southeast Outfall Islais Creek Crossing Replacement Project (San Francisco, CA)

Whitney is the deputy project manager for the preparation of a Mitigation Negative Declaration (MND) and acquisition of federal and state resource permits and authorizations for a project involving the underwater replacement of a wastewater pipeline under Islais Creek located in the San Francisco Bay. The project will require acquisition of a USACE Section 404 Nationwide Permit, National Marine Fisheries Service (NMFS) Section 7 consultation, NMFS Incidental Harassment Authorization for impacts to marine mammals, RWQCB Section 401 Water Quality Certification, and CDFW Section 2081 Incidental Take Permit. She is also managing the CEQA approval process with the SFPUC and the City and County of San Francisco (CCSF) Environmental Planning Department.

Project: 501 Tunnel Avenue (Recology Modernization Project) (San Francisco and Brisbane, CA)

Whitney is the Deputy Project Manager for the preparation of an IS/MND for the modernization of Recology's San Francisco Campus at 501 Tunnel Avenue. The proposed project would consolidate and modernize Recology's operations at the existing facility by moving operations from its 250 Executive Park Boulevard and 900 7th Street sites in San Francisco to Tunnel Avenue in order to maximize efficiency and support the City of San Francisco's Zero Waste efforts

Third Street Bridge Rehabilitation Project (San Francisco, CA)

Whitney is the Project Manager providing historical architecture support for the Third Street Bridge Rehabilitation Project (historic steelwork repair, repaint, and recoat components). This project involved background studies of the paint color of the bridge and field visits, which include preparation of associated field reports. The Project involves coordination with the historic subconsultant and San Francisco Public Works.

Project: 159 Fell Street (San Francisco, CA)

Whitney is the Project Manager for the preparation of a Major Project Application and Community Plan Evaluation for the demolition of a historic building and construction of a 7-story mixed-use building in San Francisco. Whitney is also managing the preparation of various technical reports to support the Major Project Application, including a Wind Tunnel Study, Phase I ESA, Site Mitigation Plan, Soil Management Plan, and Historic Mitigation Feasibility Analysis.

Project: Fire Station #5 at 1301 Turk Street (San Francisco, CA)

Whitney managed the preparation of HABS-level Documentation Booklet for the recently demolished fire station, which was deemed a historic structure, and creation of a publicly accessible interpretive display at the newly built fire station. This project involves coordination with the historic subconsultant, San Francisco Public Works and Planning.

Project: Harvey Milk Plaza Historic Resource Evaluation (San Francisco, CA)

Whitney managed the preparation of a Historic Resource Evaluation, Part I, for Harvey Milk Plaza at the Castro/Market Street MUNI Station. The HRE evaluated whether the property is eligible for listing in the California Register of Historical Resources. SFTMA is proposing to redesign the Harvey Milk Plaza at the Castro/Market Street MUNI Station, and because of the social and cultural significance of the Harvey Milk Plaza, it required evaluation as a part of the CEQA review process.



SUSANNE HEIM, PRINCIPAL



EDUCATION AND SPECIALIZED TRAINING

- M.A. Political Science – Environmental Policy, University of Nevada, Reno (2010)
- B.A., Political Science – International Relations, University of California San Diego
- Wetland Training Institute, Wetland Delineation Training Program
- Streambank Soil Bioengineering Technical Training Workshop
- Water Rights, Allocation, and Resource Management
- Wetland Law and Policy, Environmental Concern
- Lake Tahoe Environmental Improvement Program Award - 2009
- Years of Experience: 18

EXPERTISE

- CEQA/NEPA, water resources, wetlands, permitting

Project: Marin County Flood Control and Water Conservation District, Corte Madera Creek Flood Risk Management Project, Phase I Environmental Impact Report and Permitting (Marin County and Town of Ross)

The primary goal of the project is to reduce the frequency and severity of flooding in the Town of Ross and community of Kentfield. The project would make improvements to the concrete channel that the USACE built in 1960s. Susanne is managing the preparation of an EIR, agency coordination, and permit applications for the project, including the Biological Assessment and National Marine Fisheries Service approval. The project has a 50-year history where the local community previously stopped the project from being implemented. Susanne worked closely with the District in conducting early public outreach to frame the public's concerns and integrate public feedback into the project design and mitigation and alternatives evaluated. Susanne coordinated several early outreach meetings with the agencies to define the mitigation requirements, permit approach, technical requirements for the project, and define an approach to permitting project options that allows the project to be implemented within the grant funding schedule. Susanne also led development of alternatives to ensure there would be adequate analysis of alternatives that would allow a flood control project to be implemented if the County or Town of Ross wish to proceed with an alternative that does not include construction within Frederick Allen Park. Susanne is also assisting the District in defining areas for tree mitigation to address California Department of Fish and Wildlife requirements for oak tree replacement.

Project: Marin Municipal Water District Ross Slide Repair Project (Marin County, CA)

The project was proposed to address a landslide that was compromising the Ross Reservoir water storage tank, which was initially constructed in the 1920's. The water storage tank

supplied water to approximately 20 percent of Marin Municipal Water District's (MMWD) customers and is a critical asset for MMWD. The landslide below the reservoir had caused cracking the concrete foundation and in 2017 encroached to within 10 feet of the foundation. Repair of the hill slope was necessary to protect the ongoing use of the water storage tank. Panorama was initially contracted by MMWD to prepare an IS/MND for the project. As the Project Manager, Susanne defined the urgency of the project and the need to start construction a year ahead of MMWD's schedule. Susanne led the process to demonstrate the emergency nature of the work, coordinate with stakeholder groups and agencies, and obtain an emergency exemption for the project. Susanne also managed the regulatory agency permitting including expedited Section 7 consultation to allow the project to be constructed a year ahead of schedule. She also coordinated with several agencies to expedite the approval of a wetland mitigation bank to streamline the permit process. Construction was successfully completed in 2020 and ahead of MMWD's initial schedule.

Project: San Francisco Public Utilities Commission On-Call (San Francisco, CA)

Susanne serves as the contract manager for the SFPUC on-call services contract. Panorama has provided on-call CEQA services as an extension of SFPUC staff, including preparation of numerous Categorical Exemptions. Panorama has also prepared a Mitigated Negative Declaration (MND) and provided construction monitoring support for SFPUC projects under the on-call services agreement.

Project: California Public Utilities Commission On-Call Contract (Various, CA)

Susanne serves as the contract manager for the CPUC on-call CEQA consulting contract. Projects conducted under the on-call contract include preparation of Environmental Impact Reports, Initial Study/Mitigated Negative Declarations (IS/MNDs), technical studies, review of application information, stakeholder coordination, mitigation monitoring, and development of an application checklist to verify that all investor-owned utilities are providing technical and project information needed to support the CEQA process. Susanne has managed more than a dozen CEQA contracts with the CPUC over the last decade.

Project: Mono County Planning On-Call Contract (Mono County, CA)

Susanne serves as the contract manager for the Mono County on-call planning contract. Susanne has managed or directed planning projects under the on-call contract including Section 15183 exemptions, preparation of Initial Study/Mitigated Declaration, and Supplemental Environmental Impact Reports for planning projects throughout the County. The projects have ranged from cannabis facilities that grow and produce cannabis products to residential and business development. In general, Panorama's approach to the CEQA analysis is to rely on and tier from the General Plan or Specific Plans to the extent feasible to streamline the environmental analysis.



AARON LUI, SENIOR PROJECT MANAGER / GIS SPECIALIST



EDUCATION, SPECIALIZED TRAINING, AND AWARDS

- B.A., Geography, University of California, Berkeley, 2008
- A.A., Liberal Arts/ A.A., Humanities, Sierra College, 2006
- GIS Certificate of Accomplishment, Community College of San Francisco, 2018
- OSHA HAZWOPER Training, 2012-2019
- CEQA Workshop, Association of Environmental Professionals, 2011, 2015, and 2019
- NEPA Workshop, Association of Environmental Professionals, 2012
- Endangered Species Protection and Regulation Course, UC Extension, 2020
- University of California, Berkeley, Cartography Award, 2008
- Matthew M. Lyon Prize in Photography, University of California, Berkeley, 2008
- Years of Experience: 11

EXPERTISE

- CEQA/NEPA, technical analysis, visual resources, land use and recreation, GIS, compliance management, and mitigation monitoring

Project: Marin Municipal Water District; Biodiversity, Fire, and Fuels Integrated Plan and EIR (Marin County, CA)

The plan details management actions, including fuelbreak construction, fuelbreak maintenance, forest management, and invasive species management, for the 21,600 acres of District lands. Aaron developed a complex interactive planning and compliance tracking tool for District staff to use before, during, and after implementation of management actions. The tool will allow the District to quickly identify specific plan and mitigation requirements by management action, tools or method, habitat type, and other resource conditions.

Project: University of California, San Francisco; Mount Sutro Open Space Reserve Vegetation Management Plan (San Francisco County, CA)

The project involved implementation of a 20-year vegetation management plan to address unsafe forest conditions in the Mount Sutro Open Space Reserve, located immediately south of the UCSF Parnassus Heights Campus. The plan involved removing a substantial number of dead or dying eucalyptus trees from the Reserve and replanting trees and other vegetation of varying types and sizes to establish a healthier more sustainable forest environment. Aaron prepared impact sections for an EIR with support from technical subconsultants for sections including transportation and traffic, noise, and hydrology.

Project: Arevia Power & Solar Partners XI, LLC; Gemini Solar Project (Clark County, NV)

Aaron served as the Deputy Project Manager and lead visual analyst for the 690 MW Gemini solar project in the Nevada Desert northeast of Las Vegas. The project was approved and is currently in the

construction phase. Once constructed, it will be the largest PV solar facility in North America. Aaron authored the Visual Resources Technical Report as well as a comprehensive Land Use and Corridor Study following BLM guidelines, oversaw preparation of visual simulations, and wrote the land use and visual resources section of the EIS. Aaron is currently supporting the environmental compliance effort through the construction phase.

Project: California Public Utilities Commission; PG&E Fulton-Fitch Mountain Reconductoring Project (Sonoma County, CA)

The project involves replacing poles and conductor along a 9.9-mile-long section of 60 kV and 230-kV transmission lines and modifying a substation in central Sonoma County. Helicopters were used extensively to facilitate construction in steep terrain. Aaron managed the application review process, facilitated AB 52 coordination, conducted agency and stakeholder outreach, and preparation of an IS/MND pursuant to CEQA. Aaron developed and is overseeing implementation of an extensive mitigation monitoring program during and following construction, and is overseeing the work of environmental monitors, archeologists, and biologists to ensure compliance. Aaron serves as the lead coordinator between the CPUC and PG&E's environmental and construction teams. Aaron also prepared a Supplement to the initial IS/MND pursuant to CEQA to address project changes proposed by PG&E.

Project: California Public Utilities Commission (Subconsultant to Aspen Environmental Group); SCE Ivanpah-Control Project (Inyo, Kern, and San Bernardino County, CA)

The project involves the replacement of a portions of a 400-mile-long transmission line that runs through Inyo, Kern, and San Bernardino Counties located on federal, state, and private lands. Aaron is overseeing the preparation of EIR sections for visual resources, land use, noise, agriculture and forestry resources, and mineral resources. Aaron is also part of the AB 52 team and involved in extensive consultation efforts with more than 40 Native American tribes with traditional or cultural affiliation to the project area.

Project: California Public Utilities Commission; PG&E Atascadero–San Luis Obispo 70kV Reconductoring Project (San Luis Obispo County, CA)

The project involved replacing poles and conductor along a 14-mile-long section of 70 kV transmission line in central San Luis Obispo County. Aaron was the lead GIS specialist during preparation of the IS/MND and was the monitoring manager during and following construction where he verified compliance with mitigation measures and conditions of the Biological Opinion, ITP, 1600, 401, and 404 permits. Aaron developed and oversaw implementation of an extensive mitigation monitoring program during and following construction, and is oversaw the work of environmental monitors and biologists to ensure compliance. Aaron monitored the restoration of impacted habitats and special-status plant populations. Aaron served as the lead coordinator between the CPUC and PG&E's environmental and construction teams.

Project: California Public Utilities Commission; PG&E Crazy Horse Canyon Switching Station Project (Monterey County, CA)

The project involved preparation of an IS/MND for construction of a new switching station and reconfiguration of two 115-kV power lines. Aaron managed the mitigation monitoring effort for multiple years of construction and post-construction restoration. Aaron managed the work of other monitors and biologists, reviewed and prepared compliance documentation, surveys, and reports. Aaron also processed applicant requests and drafted approval letters on behalf of the CPUC. Aaron

regularly coordinated with the applicant's environmental team, construction personnel, and resource agency staff.

Project: San Francisco Public Utilities Commission (SFPUC); Bay Corridor Transmission and Distribution Project (San Francisco, CA)

The project includes installation of underground electrical distribution and transmission lines, installation of a substation, and replacement and installation of water pipelines along multiple streets in the Mission Bay, Dogpatch, and Bayview neighborhoods of San Francisco. The project was processed through four separate categorical exemptions and is subject to SFPUC monitoring oversight in accordance with standard mitigation measures, archeological resource protection, hazardous material permits, and wastewater discharge permits. Aaron is managing the work of environmental monitors, reviewing reports and compliance documentation, and coordinating with construction management to resolve issues on behalf of the SFPUC.

Project: Gradient Resources, Inc.; Patua Geothermal Project Phases I and II (Churchill and Lyon Counties, NV)

The project involved preparation of two Environmental Assessments (EAs) that considered the potential impacts of constructing two geothermal plants, transmission lines, and geothermal pipelines. The project was located on federal and private land, with a portion of a transmission line located in the Fernley Wildlife Management Area. Aaron created maps for two EAs. He also researched cadastral boundaries and performed due diligence for site development and layout conflicts.

Project: California Public Utilities Commission; ExteNet State Route 35 Fiber-Fed Distributed Antenna System Project (San Mateo County, CA)

The project involved installation of fiber optic cable and node facilities along State Route 35. Aaron managed the mitigation monitoring effort for the project throughout construction. He reviewed the work of a field monitor and compliance reports from the applicant, and prepared mitigation monitoring reports for the CPUC. Aaron prepared a final compliance report for the project that summarized construction and successful implementation of project mitigation.

Project: Inyo County Department of Public Works; Sabrina Road over Middle Fork Bishop Creek Bridge Replacement Project (Inyo County, CA)

The project involved a bridge replacement within the Inyo National Forest near Lake Sabrina at 9,200 feet elevation. Aaron provided GIS support for the technical review team, identified environmental constraints, and determined land impacts for the project. He prepared maps and graphics for a CEQA and NEPA environmental document, Caltrans studies, and permit applications. Aaron also monitored construction where he reviewed project plans, prepared compliance reports, identified erosion and sediment control needs.

Project: Inyo County Department of Public Works; Tecopa Hot Springs Park Sewage Lagoon Repair Project (Inyo County, CA)

The project involved the preparation of environmental documents pursuant to NEPA and CEQA for upgrades to a leaking wastewater treatment facility. Aaron provided GIS support to the design and technical review team, and prepared maps and graphics for the Environmental Assessment, IS/MND, and permit applications. Aaron monitored construction for the project that was adjacent to Amargosa vole habitat, a state- and federally endangered species, and verified compliance with project mitigation measures, plans, and permit conditions. Aaron monitored an adjacent wetland during construction to ensure water levels remained intact to support the Amargosa vole population. Aaron prepared compliance reports throughout construction for the USFWS, BLM, and Inyo County.



SEAN PAGNON, ENVIRONMENTAL PLANNER



EDUCATION AND SPECIALIZED TRAINING

- B.S., Environmental Sciences (cum laude), University of California, Berkeley
- Intermediate CEQA Workshop, Association of Environmental Professionals
- Wetlands Regulation and Mitigation, UC Davis Extension
- Endangered Species Regulation, UC Davis Extension
- OSHA 10-hour Construction Safety and Health
- Birds of the Bay Area, Golden Gate Audubon Society
- Years of Experience: 5

EXPERTISE

- CEQA/NEPA, permitting, biological resources, compliance monitoring

Project: Marin Municipal Water District; Biodiversity, Fire, and Fuels Integrated Plan and EIR (Marin County, CA)

The plan details management actions, including fuelbreak construction, fuelbreak maintenance, forest management, and invasive species management, for the 21,600 acres of District lands. Sean prepared cumulative impact analyses for the EIR and assisted the District with establishing procedures for annual vegetation management and compliance reporting, which included helping develop a complex interactive planning and compliance tracking tool. Specific tasks performed for the tracking tool include reviewing and organizing complex plan and mitigation requirements. The tool allows the District to quickly identify specific plan and mitigation requirements by management action, method, habitat type, and other resource conditions.

Project: University of California, San Francisco; Mount Sutro Open Space Reserve Vegetation Management Plan (San Francisco County, CA)

The project involved implementation of a 20-year vegetation management plan to address unsafe forest conditions in the Mount Sutro Open Space Reserve, located immediately south of the UCSF Parnassus Heights Campus. The plan involved removing a substantial number of dead or dying eucalyptus trees from the Reserve and replanting trees and other vegetation of varying types and sizes to establish a healthier more sustainable forest environment. Sean conducted public scoping and prepared cumulative impact analyses during preparation of the EIR.

Project: Marin Municipal Water District; Ross Reservoir Landslide Repair Project (Marin County, CA)

The project involved emergency repair of a landslide threatening to damage the district's 1-million-gallon Ross Reservoir. Sean prepared Section 401 and Section 404 permit applications for the Regional Water Quality Control Board and U.S. Army Corps of Engineers, and coordinated with wetland mitigation banks to obtain mitigation to the agencies' approval. Sean also prepared a Biological Assessment for the U.S. Fish and Wildlife Service, conducted pre-construction species surveys, and

conducted biological monitoring during construction. Notable resources in the project area included designated critical habitat for Northern Spotted Owl, Coho salmon, and steelhead.

Project: California Public Utilities Commission; PG&E Fulton-Fitch Mountain Reconductoring Project (Sonoma County, CA)

Panorama conducted the CEQA review and monitored compliance for reconductoring a 10 mile 60-kV transmission line in Sonoma County, California. Sean conducted public outreach during preparation of the Mitigated Negative Declaration. During the current construction phase, Sean served as the compliance supervisor by conducting two years of weekly site inspections, reviewing the utility's compliance documentation, and working with the utility's management and field monitors, agencies, and stakeholders to verify the completion of complex permit and mitigation requirements. Compliance with wildfire prevention requirements was a key and highly scrutinized issue throughout construction, as the PG&E project was constructed within areas directly affected by the highly destructive Tubbs and Kincadee Wildfires.

Project: San Francisco Public Utilities Commission; Southeast Bay Outfall Islais Creek Crossing Replacement Project (San Francisco, CA)

Panorama is preparing a Mitigated Negative Declaration to replace a segment of SFPUC's Southeast Bay outfall system, which transports treated effluent from a Water Pollution Control Plant to the San Francisco Bay. Sean prepared the biological resources impact analysis section for the Mitigation Negative Declaration. Notable biological resource considerations included impacts to state- and federally-protected aquatic species, compliance with municipal tree protection ordinances, and removal of vegetation providing nesting bird habitat.

Project: San Francisco Planning Department; Recology 501 Tunnel Avenue Project (San Francisco, CA)

Panorama is conducting the CEQA review for Recology's modernization of its 44-acre solid waste transfer and collection center. Sean prepared the hydrology/water quality and biological resources impact analysis sections for the IS/MND.

Project: California Public Utilities Commission; SDG&E TL 695 and TL 6971 Reconductoring Project (Orange and San Diego Counties, CA)

Panorama prepared a Mitigated Negative Declaration for a 10.23-mile-long transmission line project located primarily on Marine Corps Base Camp Pendleton. Sean conducted public noticing and solicitation of comments during preparation of the MND.

Project: County of Sonoma; Freestone Flat Road Bridge Project (Sonoma County, CA)

The project involves replacement of a narrow bridge in rural Sonoma County. The bridge crosses Salmon Creek, which is known to support steelhead and is designated Essential Fish Habitat for Coho salmon. Sean prepared the biological resources impact section of the Initial Study and developed project mitigation measures to reduce potential impacts to sensitive species and habitats. Mitigation measures were carefully developed to be consistent with the Natural Environment Study and Biological Assessment to simplify construction oversight of biological resource measures.

Project: California Public Utilities Commission; SCE Riverside Transmission Reliability Project (Riverside County, CA)

Panorama prepared a Subsequent EIR for SCE's new substation construction, new pole installation, and reconductoring of its 10-mile 230-kV transmission line. Sean conducted public outreach, prepared

agricultural resources, alternatives, and cumulative impact analysis sections for the Subsequent EIR, and prepared responses to public comments.

Project: San Francisco Public Utilities Commission; Bay Corridor Transmission and Distribution Project, Phases 2-3 (San Francisco, CA)

The project involves installation of underground duct banks and vaults, water pipelines, and construction of a new substation in the Mission Bay, Dogpatch, and Bayview neighborhoods of San Francisco. Sean worked with the city and contractor construction management teams to help manage the environmental compliance process for three separate construction contracts. He also conducted weekly site inspections for the three contracts and documented compliance with CEQA categorical exemption and permit requirements.

Project: California Public Utilities Commission; SCE Ivanpah-Control Project (Inyo/Kern/San Bernardino Counties, CA)

The project involves rebuilding, reconductoring, and replacing structures along 262 miles of existing 115 kV subtransmission lines in Inyo, Kern, and San Bernardino Counties, California. Sean supported the CPUC cultural resources team with the extensive Assembly Bill (AB) 52 tribal consultation process for the project, which involved consultation with 18 Native American tribes. Specific duties included attending consultation meetings and documenting resource and impact concerns, conducting formal noticing and other tribal correspondence, and managing the administrative record.

Project: California Public Utilities Commission; PG&E Ravenswood-Cooley Landing Reconductoring Project (San Mateo County, CA)

The project involves reconductoring a 1.6-mile 115-kV transmission line within the San Francisco Bay shoreline. Panorama is assisting the CPUC with CEQA compliance monitoring of mitigation measures from the Mitigated Negative Declaration during construction of the project. Sean prepared the mitigation monitoring plan to outline compliance verification procedures for the construction phase.

Project: California Public Utilities Commission; SDG&E Sycamore-Peñasquitos 230-Kilovolt Transmission Line Project (San Diego County, CA)

The project involves construction of a 17-mile 230-kV transmission line and relocation of existing transmission facilities within residential development, parks, and preserves. Sean conducted public outreach during preparation of the EIR. During the construction phase, Sean tracked the completion of the utility's pre-construction compliance requirements and issued a Notice to Proceed.

Project: East Bay Municipal Utilities District; Upper San Leandro Reservoir Restoration Project (Alameda County, CA)

EBMUD seismically retrofitted its Upper San Leandro Reservoir tower, which involved impacts to waters of the State. Sean monitored the restoration site for revegetation success in accordance with the conditions of the California Department of Fish and Wildlife Lake Streambed Alteration Agreement and Regional Water Quality Control Board 401 permit for the project.

Project: East Bay Municipal Utilities District; Alameda-North Bay Farm Island Pipeline Crossing Projects (Alameda County, CA)

Panorama conducted the CEQA review and permitting for the construction of three new water pipeline crossings from the City of Oakland to the City of Alameda to improve municipal water service reliability. The project involves extensive horizontal directional drilling underneath the bed of the Oakland Inner Harbor. Sean prepared two regionwide permit applications for the San Francisco Bay

Conservation and Development Commission for the geotechnical boring and pipeline crossing phases of the project.

Project: East Bay Municipal Utilities District; Alameda-North Bay Farm Island Pipeline Crossing Projects (Alameda County, CA)

Panorama conducted the CEQA review and permitting for the construction of three new water pipeline crossings from the City of Oakland to the City of Alameda to improve municipal water service reliability. The project involves extensive horizontal directional drilling underneath the bed of the Oakland Inner Harbor. Sean prepared two regionwide permit applications for the San Francisco Bay Conservation and Development Commission for the geotechnical boring and pipeline crossing phases of the project.

Project: City of Sunnyvale; Sunnyvale Civic Center Modernization Master Plan (Santa Clara County, CA)

Panorama prepared a Program EIR for the City of Sunnyvale's 20-year, multi-phase modernization and expansion of its 26-acre civic center. Sean prepared the aesthetics, geology, land use, and cumulative impact analysis sections and conducted public outreach for the Program EIR. Sean also conducted regulatory building and landscape documentation of the designated historic project campus.

Project: East Bay Municipal Utilities District; Mokelumne Aqueducts Delta Tunnel Project (Contra Costa and San Joaquin Counties, CA)

Panorama is conducting alternatives environmental screening and feasibility analysis for the district's proposed long-term rehabilitation of 10 miles of its Mokelumne Aqueducts, which supply municipal water to approximately 1.4 million customers in the San Francisco East Bay. Sean assisted with the alternatives and feasibility analysis by evaluating the existing settings for all CEQA resource topics and screening alternatives with respect to potential impacts to sensitive resources.

Project: Arevia Power & Solar Partners XI, LLC; Gemini Solar Project (Clark County, NV)

The project involves construction of a 7,000-acre, 690-megawatt photovoltaic solar facility on Bureau of Land Management Land in Clark County, Nevada. Sean helped compile and organize the extensive permit and NEPA mitigation requirements for the project into a tracking program for the developer compliance monitoring team, which involved organizing requirements from over 70 different permits and plans managed by a variety of agencies. Sean also helped develop monitoring procedures and reporting templates to support the compliance monitoring team.



YINGYING CAI, ENVIRONMENTAL PLANNER

EDUCATION AND SPECIALIZED TRAINING



- Master of Urban Planning, University of Washington, Seattle
- B.S., Environmental Sciences, University of California, Los Angeles
- Wetlands Regulation and Mitigation Workshop
- Years of Experience: 4

EXPERTISE

- CEQA, permitting, technical analysis, environmental Inspection

Project: Marin Municipal Water District Biodiversity, Fire, and Fuels Integrated Plan (Marin County, CA)

The Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) details management actions, including fuelbreak construction, fuelbreak maintenance, forest management, and invasive species management of the 21,600 acres of Marin Municipal Water District lands. Yingying assisted the preparation of the Mitigation Monitoring and Reporting Plan for the BFFIP. Also, Yingying coordinated the publication and public meeting for the Draft EIR of the BFFIP.

Project: Marin Municipal Water District Ross Reservoir Landslide Repair Project (Marin County, CA)

The project involves stabilization of an active landslide located downslope of the existing Ross Reservoir. The reservoir is a partially-buried, concrete-lined, covered structure that supplies water to 20 percent of MMWD's service area. Yingying assisted with the preparation of 401 permit application package for the project.

Project: Marin County Flood Control & Water Conservation District Corte Madera Creek Flood Risk Management Project, Phase 1 (Marin County, CA)

The project is located along the Corte Madera Creek in Ross and Kentfield. The project involves flood plain restoration, removal of fish ladder, and installation of floodwalls. Yingying prepared environmental analyses for various environmental topics in the project EIR, including Geology and Soils, Hazards and Hazardous Materials, Wildfire, and Cumulative Impacts.

Project: PG&E Fulton-Fitch Mountain Reconductoring Project (Sonoma County, CA)

Panorama is conducting the CEQA review for reconductoring a 10-mile 230-kV transmission line in Sonoma County, CA. Yingying is currently assisting the mitigation monitoring effort by conducting site inspection of the construction site and completing associated field reports to monitor environmental compliance.

Project: Bay Corridor Transmission Distribution Project (San Francisco, CA)

The project included installation of electrical duct banks and vaults, replacement and rehabilitation of wastewater pipelines, and sidewalk upgrades in the Mission Bay and Dogpatch neighborhoods of San

Francisco. Yingying is currently assisting the mitigation monitoring effort by conducting site inspection of the construction site and reviewing compliance document.

Project: Gemini Solar Project EIS (Clark County, NV)

The project involves the construction of solar arrays, access roads, collector lines, two substations, and ancillary buildings and other infrastructure for a 690-MW photovoltaic solar electric generating facility located 25 miles northeast of Las Vegas, Nevada. Yingying assisted with project file maintenance and provided technical support for the preparation of the Draft and Final Environmental Impact Statement.

Project: Hells Kitchen Geothermal Exploration and Development Project (Imperial County, CA)

Panorama is assisting CTR to obtain permit for a 280 MW geothermal power plant at the Salton Sea, through the California Energy Commission and additional regulatory agencies. Yingying is assisting the Project Manager to obtain authorizations including Nationwide Permit from the USACE, a biological opinion from the U.S. Fish and Wildlife Service and CDFW, and the Imperial County Water Quality Control Board. She also assisted with the preparation of a Habitat Mitigation Monitoring Plan for the project.

Project: San Pablo Avenue Bridge Replacement Project (Contra Costa County, CA)

The San Pablo Avenue Bridge Replacement Project involves replacing an existing San Pablo Avenue Bridge at the Burlington Northern Santa Fe railroad. The City of Pinole is proposing a four-lane replacement structure with bike lane and sidewalks to address deficiencies of the 80-year-old bridge. The new bridge will provide enhanced vehicle, bicycle and pedestrian safety while meeting modern design code. Yingying is preparing a CEQA IS/MND and Caltrans studies, including Water Quality Assessment Memorandum and Section 4(f) Assessment.

Project: Freestone Flat Road Bridge Replacement Project (Sonoma County, CA)

The Freestone Flat Road Bridge Replacement Project involves replacing an existing bridge to meet the current Federal Highway and Seismic Safety Standards. The project would include the construction of a new bridge and demolition of an existing bridge over Salmon Creek in Sonoma County. Yingying assisted the Project Manager to prepare Project Description, Biological Assessment, and Initial Study/Mitigated Negative Declaration (IS/MND) for the project.



COREY FONG, GIS SPECIALIST

OVERVIEW OF EXPERIENCE AND EXPERTISE



EDUCATION AND SPECIALIZED TRAINING

- B.S., Environmental Studies – Restoration Ecology, San Jose State University
- Certificate in Geographic Information Science, West Valley College
- Professional Development, University of California Extension, Berkeley
- Professional Development, ESRI Virtual Campus, On-going

KEY PROJECTS

Fire Management Projects

Project: Biodiversity, Fire, and Fuels Integrated Plan (Marin County, CA)

The project involved identifying tools and actions MMWD could take to reduce fuel loads and fire risks and improve ecosystem health. Corey used various GIS tools to analyze environmental impacts of the proposed project. He analyzed changes in vegetation cover over time. He identified areas for installing fuelbreaks and additional treatments. Corey prepared all graphics and acreage impact calculations for the Environmental Impact Report (EIR).

Project: Wildland Fire Resiliency Program (San Mateo County and Santa Clara County, CA)

The program documents and permits various planning efforts needed to meet MROSD objectives for establishing wildland fire resiliency in its 65,000 acres of preserves and open space. Corey used the project GIS to identify fuelbreaks, fuel management zones, and defensible space zones. Corey prepared all graphics and acreage impact calculations for the Program.

Project: Wildfire Risk Mitigation Plan (Alpine County, CA)

Alpine County proposed a Wildfire Risk Management Plan to enable implementation of activities that address the risk of wildfire as well as reduce wildfires. Corey used the project GIS to identify areas of interest. He created a fire risk assessment and historic fires map for the county. Corey prepared all graphics and acreage impact calculations for the document.

COREY FONG

Project: Portola Valley Cluster Subdivision Fire Plan (San Mateo County, CA)

Corey used the project GIS to identify areas of fire hazard for a proposed subdivision project in San Mateo County. He used the project GIS to generate a slope map for the proposed project area. Corey prepared graphics and acreage impact calculations for the plan.



GEOFFREY HORNEK, SENIOR AIR AND NOISE SPECIALIST



EDUCATION AND SPECIALIZED TRAINING

- Candidate for M.P.H., University of Minnesota School of Public Health, Minneapolis, Minnesota
- Master of Science, Engineering/Applied Science University of California, Davis, 1980.
- Bachelor of Arts, Physics, Queens College of the City University of New York, 1974.

KEY PROJECTS

Project: Port of Richmond Residential Development

This project entailed review of air dispersion and noise modeling for a proposed residential development adjacent to a major freeway, near a railyard and just downwind of the Port of Richmond. Geoffrey revised the dispersion modeling to more closely follow Air District guidelines. The revised modeling provided guidance for redesign of the residential development to fully protect future residents from the adverse health impacts of airborne pollutants and from disruptive noise intrusions.

Project: Georgia-Pacific Gypsum Plant

This project involved upgrading the ship terminal/wharf at the Georgia-Pacific Gypsum Plant in Antioch, California. Geoffrey provided air and noise analyses for a Mitigated Negative Declaration for the project. His work included air pollution emission inventories, and air toxic health risk and pile driving noise level modeling for the closest residential areas.

Project: USX-POSCO Permit to Operate

Geoffrey reviewed and critiqued a USX-POSCO steel mill Permit to Operate as a consultant to the Bay Area Air Quality Management District.

Project: San Francisco Giants Stadium

This project involved preparing the Environmental Impact Study for the San Francisco Giants downtown baseball park. Geoffrey's work included a comparative emission inventory of the various transportation modes associated with the existing stadium and the new ballpark, and estimates of noise from ballgames, concerts, and traffic.

Project: Canadian Nickel Mine/Mill/Smelter Complex

Geoffrey developed methods for reconstructing occupational pollutant exposure histories from limited measurement data by using physical models and statistical techniques. The study subjects were workers at a large Canadian nickel mine/mill/smelter complex. Geoffrey collected worker exposure data at the smelter, oversaw its entry into an electronic database, and sorted/analyzed the data to obtain work-activity-dependent particulate and nickel exposure levels.

Project: Southeast Wisconsin Air Pollutant Emission Inventory

For this project, Geoffrey compiled, updated and reviewed air pollutant emissions inventories from industrial sources in southeast Wisconsin. He inspected industrial facilities to determine compliance with federal and state rules, statutes and permit conditions related to criteria and toxic air pollutant emissions. He also investigated citizen complaints related to air pollutant emissions, odors, and unauthorized asbestos removal.



CHRISTINA KOSSA, VISUAL AND DESIGN SPECIALST



EDUCATION AND SPECIALIZATION

- Mills College, Oakland, CA; B.A. in Studio Art
- California State Hayward, A.S.C.E. Hydrology Seminar, 1995
- U.C. Berkeley Extension, Water Resources Engineering, 1993

KEY PROJECTS

Project: Egbert Switching Station (San Francisco County, CA)

The project involved the construction of a new 230-kV switching station in a semi-rural portion of the City of San Francisco. Christina was in charge of field records, photography, massing studies, and analysis for five siting alternatives for this switching station to be located near the Martin Substation in Daly City. She also provided support for the permit application process, including visual analysis for the selected site, and photo-realistic simulations of the switching station, architectural treatment, and landscaping.

Project: Crazy Horse Canyon Switching Station Project (Monterey County, CA)

This switching station project, located in a rural part of Monterey County, north of Salinas, included complex siting and intertie challenges. Christina worked on various aspects of this project, including field photography and photo simulation, as well as support for the conceptual landscape plan, for both the initial siting study and the permit application process.

Project: Contra Costa-Las Positas Reconductoring Project (Contra Costa County, CA)

The project involved reconductoring and tower modifications along an existing 230-kV transmission line located in Contra Costa and Alameda counties. Christina was the lead technician for visual simulations during the preparation of the visual impact assessment included with the project application. She completed initial field work and photography, as well as visual simulations and other graphics for the aesthetics section of the document.

Project: Mesa 500 kV Substation Project (Los Angeles County, CA)

The project involved the upgrade to 500-kV and relocation of an existing substation located, primarily, in unincorporated Los Angeles County near the City of Montebello. Christina was the lead technician for detailed project modeling, including optional layouts, and nine visual simulations during the preparation of the visual impact assessment included with the project application.

Project: Transmission Line Rating Remediation (TLRR) Project (Inyo, Kern, Los Angeles, Mono, and San Bernardino, CA)

Christina assisted with modeling and digital simulation for over 20 visual simulations for this 5-line project stretching over 500 miles in rural Inyo, Kern, Los Angeles, Mono, and San Bernardino Counties.

Project: Potrero 230 kV Switchyard (San Francisco County, CA)

This new switchyard near the former Potrero Power Plant, in San Francisco, included architectural treatment and a small public open space. It was analyzed as part of the Embarcadero-Potrero 230-kV Transmission Line Project; Christina lead the field photography, detailed 3D modeling, and visual simulation work related to the application process.

Project: Sycamore – Peñasquitos 230-kV Transmission Line Project (San Diego County, CA)

The project involved construction of a 17-mile 230-kV transmission line with above-and below-ground segments, and relocation of existing transmission facilities within residential developments, parks, and preserves. Christina was involved in all parts of the preparation of the aesthetics chapter of the PEA document. Her tasks involved field reconnaissance, project modeling, visual simulation, report graphic preparation, and writing within the chapter.

Project: Malibu Canyon Road Pole Replacement Project (Los Angeles County, CA)

The project involved the replacement of approximately 80 pole and 3 ½ miles of transmission line along Malibu Canyon Road. Christina lead the effort of modeling and creation of over 20 digital simulation of pole replacement along a scenic corridor.

Project: Ravenswood to Ames (San Mateo and Santa Clara County, CA)

The project involved the replacement of transmission towers and line along portions of a more than 16-mile route between the San Mateo Substation, near Coyote Point Park, in San Mateo and Ames Substation, in Mountain View. Christina was the lead technician for a set of visual simulations to be used for the preparation of the visual impact assessment included with the project application, including initial field work and photography.

Project: Oakland J to Eastshore (Alameda County, CA)

The project involved the replacement of transmission towers and line along portions of a more than 16-mile route between the Oakland J Substation, in Oakland and the Eastshore Substation, in Hayward. Christina has assisted with the creation of a set of visual simulations to be used for the preparation of the visual impact assessment included with the project application, including leading the effort of initial field work and photography.

Project: Spring Substation (Santa Clara County, CA)

Christina completed field research, photography, and preliminary massing studies simulation preparation for the planned Spring Substation, in the Morgan Hill area.



LACAR MUSGROVE, TECHNICAL EDITOR

EDUCATION AND SPECIALIZATION

- B.A., English, Boston University
- M.F.A., Creative Writing, University of New Orleans
- American Copy Editors Society
- Poynter ACES Certificate in Editing

Key Projects

Project: Fulton-Fitch Mountain Reconductoring Project (Sonoma County, CA)

Lacar was the lead technical editor during preparation of the Supplemental Initial Study/Mitigated Negative Declaration. Lacar reviewed all draft sections and provided comments on content and consistency that were incorporated in the final.

Project: Gemini Solar Project (Las Vegas, NV)

Lacar was the lead technical editor during preparation of the Environmental Impact Statement. Lacar reviewed all draft sections and provided comments on content and consistency that were incorporated in the final.

BETH DUFFEY, TECHNICAL EDITOR



EDUCATION AND SPECIALIZED TRAINING

- B.A., History, Monmouth College
- International Division, Waseda University, Tokyo
- CUI Certification (Controlled Unclassified Information and doing business with the federal government)
- Years of Experience: 30

EXPERTISE

- Technical editing of CEQA/NEPA, permitting, and other environmental documents; document controls management; technical studies support

KEY PROJECTS

Project: Marin County Flood Control and Water Conservation District, Corte Madera Creek Flood Risk Management Project, Phase 1, Administrative Draft EIR (Marin County, CA) November 2020, for Panorama

As technical editor, Beth reviewed the chapter that presented descriptions and evaluations of alternatives to the proposed project (including the required No Project Alternative), described the alternatives screening process and alternatives eliminated from consideration, compared the environmental merits of the alternatives, and identified the environmentally superior alternative. The project will reduce risk of flood damage in the Town of Ross and unincorporated Kentfield by channel improvements and widening along Corte Madera Creek, implementing a single flood mitigation project with multiple components.

Project: Marin County Open Space District, Bolinas Lagoon North End Project, Topographic Survey and Hydraulic Modeling Report (Marin County, CA) December 2017

Beth performed an edit review of this report, which described the two-dimensional hydraulic modeling study of Lewis Gulch Creek, conducted to determine the minimum dimensions of two proposed crossings.

Project: Transportation Agency for Monterey County, Monterey County Regional Conservation Investment Strategy (Monterey, CA) July 2020

Beth did an edit review to revise the technical draft of this large (360+ pages) document. The Regional Conservation Investment Strategy (RCIS) is a program with a bold vision of future conservation in Monterey County, to sustain and enhance ecological resources, biodiversity, and ecological processes and functions, as well as to promote resilience for the benefit of biological communities, watersheds, geographically unique areas, and other special-status or non-special-status species. Wildfire is part of the natural disturbance regime in many natural communities in the RCIS area (e.g., chaparral, closed-cone pine-cypress). Wildfire suppression without active forest management has caused unnatural succession in wildfire-adapted communities and increased wildlife intensity. Wildfire suppression activities (e.g., command posts, fire lines, fire retardant) also have had negative impacts, such as increased erosion and sedimentation, air and water pollution, and introduction of non-native species. The program, administered by the California Department of Fish and Wildlife, is voluntary, non-binding, non-regulatory regional plan for species and habitat conservation that guides regional conservation of focal species and sensitive habitats through

strategic, scientifically grounded actions and investments; establishes conservation priorities, goals, objectives, and actions; and describes and promotes conservation investment that will contribute to species and habitat conservation. Among others, the conservation strategies proposed in the RCIS will promote adaptation to climate change. The document includes a detailed monitoring strategy and the requirements for development of Mitigation Credit Agreements.

Project: State Water Resources Control Board, Lake Fordyce Dam Seepage Mitigation Project, Administrative Draft Initial Study/Mitigated Negative Declaration (Nevada County, CA) March 2020

As senior editor, Beth was responsible for review of this more than 200-page document, to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of construction of the proposed project. Portions of the project area are in a State Responsibility Area (SRA) and are classified as being in a very high fire hazard severity zone, and several small patches of the project area are classified as being in a moderate fire hazard severity zone. The proposed project could expose the public to pollutant concentrations from a wildfire or the spread of a wildfire if activities during construction resulted in a wildfire. Heat or sparks from construction equipment or vehicles would have the potential to ignite adjacent vegetation and start a wildfire, especially during the fire season. PG&E would implement wildland fire prevention mitigation measures to reduce potentially significant impacts. Furthermore, PG&E would implement prevention activities associated with erosion and slope failures. BMPs would be implemented to reduce erosion and slope failures that can lead to landslides, debris, rock fall, and wildfire events, to reduce potentially significant impacts.

Project: Caltrans Devil's Slide Tunnel Project Third Annual Progress Report, Work Tasks of the Management and Monitoring Plan for the Shamrock Ranch Mitigation Easement Areas and Operations and Maintenance Center Basin Pond (San Mateo County, CA) December 2019

Beth was senior editor for the Caltrans' Devil's Slide Tunnel Project over several years. This report describes the biological management and monitoring work tasks required by the Management and Monitoring Plan. It focuses on population monitoring and the enhancement and maintenance of habitat for the federally threatened California red-legged frog (*Rana draytonii*; CRLF). Potential wildfire fuels are to be managed as needed by cutting or mowing in areas, where approved by USFWS. A biological monitor has to be present after determining that vegetation needs to be cut for wildfire risk management, to ensure that the vegetation is cut to the prescribed height and no take of CRLF occurs.

Project: California Department of Water Resources, Environmental Impact Report for Long-Term Operation of the California State Water Project, Administrative Draft Report (Sacramento, CA) September 2019

Beth was senior editor for review of this Draft Environmental Impact Report, prepared for CEQA and in compliance with the State CEQA Guidelines. DWR used this EIR to evaluate the proposed project's potential environmental impacts and determine whether any feasible mitigation measures and alternative would be necessary to approve, modify, or deny project approval. This document also was prepared for use by the California Department of Fish and Wildlife, as a responsible agency as defined by CEQA, in its discretionary approval process and consideration to issue an Incidental Take Permit (ITP) for the proposed long-term operations of the State Water Project (SWP). The proposed project would continue DWR's ongoing long-term SWP operations. DWR was seeking to optimize water supply and improve operational flexibility while protecting fish and wildlife. The project area includes existing SWP service areas and storage and export facilities within the Sacramento and San Joaquin watersheds. Increased greenhouse gas emissions correlating with climate change trends were addressed in the EIR, including adverse effects on climate, sea level, water supply reliability, wildfire frequency, ecosystems, public health, and energy needs. The impacts are considered to be significant and unavoidable.

Project: Sacramento Municipal Utility District, New Slab Creek Powerhouse and Boating Flow Release Valve Project, Final Initial Study and Mitigated Negative Declaration (Sacramento, CA) September 2015

Beth was one of two primary editors of this document. The Sacramento Municipal Utility District (SMUD) proposed to construct and operate the proposed project as part of the existing Upper American River Project hydroelectric facilities in El Dorado County. This Final IS/MND provided an overview of the environmental review process. SMUD conducted a detailed review of the comments and prepared responses, presented in Section 2 of this document. In addition, SMUD determined that several changes to the IS/MND were warranted and incorporated minor edits and clarifications. In addition to preparing and implementing a Construction Fire Protection Plan, in compliance with FERC requirements, SMUD would comply with the UARP Fire Management and Response Plan and other applicable fire protection requirements as they relate to fire prevention, worker safety, hazardous materials, and wildfire management.

Project: El Dorado Irrigation District, Plume 30 IS/MND, Eldorado National Forest (Placerville Ranger District, CA) October 2019

Beth edited the Wildfire section of this IS/MND, among many others. Lands south, east, and west of the project area are within a State Responsibility Area (SRA) and are rated as a High Fire Hazard Severity Zone by CAL FIRE. An SRA is an area where the State is financially responsible for the prevention and suppression of wildfires. According to the CAL FIRE fire hazard severity zone map, because the project area is under federal jurisdiction, it has not been rated for fire hazard severity. USFS is responsible for fire prevention and suppression in the ENF and those privately owned lands within the forest boundaries.

Project: Caltrans District 4, San Francisco–Oakland Bay Bridge Project (San Francisco, CA) 2015 to 2020

Beth was senior technical editor with primary responsibility for all major documents related to dismantling and demolition of the original bridge piers. Edit reviews included bio-monitoring programs reports, all post-blast reports, the eelgrass habitat survey report, the marine mammal IHA, the pier retention project description, the NMFS Biological Assessment, and the CDFW ITP application. This project won the FHWA 2017 Environmental Excellence Award.

Project: Caltrans On-Call A&E Environmental Services (South Counties) Contract #04A4150 and #04A3375 (Santa Clara, San Mateo, and San Francisco Counties, CA) 2013 to 2016

Beth was primary technical editor for this on-call general environmental (biological resources) support contract. Among others, her editing reviews included: SCL Hwy 152 Widening HCP Application; SCL 130 NES; SR-9 2G960 BA, Construction Compliance Report, and other documents; TO36 Willits—Mitigation Monitor and multiple other documents; Lover's Lane—multiple documents; Highway 101 Gore Paving NESMI and other documents; Woodrat Relocation; Hecker Pass Tree Removal and HCP Application; Devil's Slide Tunnel Project; Smith River IS/ND; Doan Ranch—multiple documents; 1J630 NES; Doyle Drive—multiple documents; Pigeon Point Wetland Delineation and NES; San Jose Ave Pedestrian Project mini BA; EA 1G860 SCL 880 Concrete Med Barrier NESMI; 4G850 PedBridge Pacifica NESMI; Stevens Creek Bridge NESMI; and Caltrans Humboldt Bay Conceptual Restoration Design Report. Documents included environmental study reports required under NEPA and CEQA; support in obtaining environmental permits from resource agencies; long-term mitigation monitoring; public outreach support; and studies, surveys, and monitoring related to special-status species.



ROBERT STEERS/ BOTANIST

EDUCATION AND SPECIALIZATION

- Ph.D. Plant Biology (Ecology), University of California, Department of Botany and Plant Sciences
- B.S. Ecology & Systematic Biology, California Polytechnic State University, Biological Sciences Department
- Advanced Project Management Certificate #X350884
- Stanford University, Center for Professional Development

WORK EXPERIENCE

Technical Program Manager

- At Juniper Networks, I program manage both new program introductions (NPIs) and internal infrastructure (DevOps) enhancements to the engineering environment.
- 70% - As an NPI program manager, I lead globally distributed, cross-functional teams through Juniper's NPI process, from concept to first revenue shipment. I am responsible for each program's scope, schedule, and budget, and for the overall outcome. NPI teams consist of productmanagement, engineering (hardware and software), supply chain, manufacturing, customer service, technical documentation, beta, marketing, and other functions. I typically run three programs at a time, each with tens to hundreds of employees assigned to the program. My program budgets have ranged from \$2M to \$65M.
- 30% - As a DevOps program manager I led cloud infrastructure projects that improve the experience of Juniper's > 2000 engineers through better performing infrastructure, efficient workflows, and enhanced web services. I work with a team of about 15 engineers on continuousimprovements with a sustaining budget.
- Management follows waterfall, agile, or hybrid methodologies, depending on the program's nature. Communication of project status and key decisions are made to senior executives on aregular cadence (daily to weekly, depending on program's priority and status).

Biological Consultant

- 100% - Completed pre-construction rare plant surveys in Muir Woods in riparian and upland vegetation. Submitted summary report and GIS maps as final deliverables.

Ecologist; Series and Grade: GS-0408-11

- 35% - Design the plant community monitoring program. Duties consist of leading network vegetation staff during planning meetings, performing literature review, technical writing, data

collection, data management in Excel and Access, data analyses with statistical and geospatial techniques, pilot implementation of study design including supervision of field staff (1-6 persons depending on time of year and needs), and oral presentations.

- 30% - Manage the invasive plant monitoring program, which includes field crew supervision of (1-6 people). Analyze monitoring data, write technical reports, design and edit newsletters, attend stakeholder/partner meetings, serve as NPS representative/area expert, hold meetings for NPS park staff and partners about monitoring results, and engage public in program and volunteer opportunities.
- 15% - Provide technical assistance to network national park units on various ecological matters; mainly supporting them with statistical, experimental design, GIS modeling and analysis, and subject matter expertise.
- 15% - Perform data management functions relating to statistics, database design, and GIS.
- 5% - Perform network administrative duties such as leading staff meetings, conducting peer review, attending coordinator meetings, and attending Bay Area natural resources events to maintain NPS presence and involvement with partner organizations.

Staff Research Associate

- 65% - Write technical reports describing research findings pertaining to impacts of fire and invasive species on California ecosystems.
- 25% - Statistically analyze environmental data using univariate and multivariate techniques.
- 10% - Serve as a peer reviewer for ecological journals.

Consulting Biologist

- 30% - Biological inventories.
- 30% - Vegetation data analyses and report writing.
- 15% - Habitat restoration implementation and monitoring, including subcontractor management.
- 10% - Vegetation sampling design, restoration design, and proposal writing.
- 10% - Wildlife surveys and habitat assessments.
- 5% - Delineation of U.S. Army Corps and CA Dept. of Fish and Game jurisdiction.

Ph.D. and Postdoctoral Researcher

- 55% - Conducted plant ecology research related to fire disturbance, invasive species, and environmental gradients in a land management context. Developed vegetation sampling designs, protocols, and experimental treatments at various spatial and temporal scales. Managed staff and students (2 - 5 person groups) to conduct field work.
- 15% - Wrote technical reports and articles for peer-reviewed journals.
- 10% - Assisted other graduate students and faculty with experimental design and data collections specifically in regard to floristic surveys.
- 10% - Managed and statistically analyzed ecological data.
- 5% - Taught laboratory and field components of botanical and ecological courses.
- 5% - Presented results at various symposia.

Seasonal Positions prior to Ph.D. and Postdoctoral Researcher:

4-9/2003 **Wildlife Biology Technician** *University of California, Berkeley*
 3-4/2003 **Project Hire: Consulting Botanist** *Jones & Stokes Associates, Inc., CA (now ICF)*
 6-10/2002 **Plant Ecology Technician** *University of California, Berkeley*
 6-9/2001 **Plant Ecology Technician** *Integrated Training Area Mgmt, Ft. Hunter Liggett, CA*
 6-9/2000 **Biological Technician, GS-0404-04** *Modoc National Forest, CA*

Anna Buising, PhD, PG

Expert Geologist/Paleontologist

Licensure

California Professional Geologist (PG-7955)

Education

UC Santa Barbara, PhD Geological Sciences

UCLA, BS Geology

Affiliations

Association of Environmental Professionals

Association of Environmental and Engineering Geologists

Society of Vertebrate Paleontology

Anna Buising brings 20 years of experience in CEQA, NEPA, applied geology and paleontology, resource agency permitting, and related community outreach. In 2016 she founded **Redtail Consulting** with a mission to provide expert environmental and regulatory support, high-quality applied science, and effective, transparent communications services. Before founding Redtail Consulting, Anna established and led the environmental and outreach practices at IEC for 6 years, focusing on the water and wastewater sectors. Prior to that, she was with Jones & Stokes and later ICF International as a senior project manager responsible for

multiple challenging and high-visibility projects. **Anna's experience includes utilities, transportation, infrastructure, land development, flood protection, and habitat conservation and restoration projects throughout California.** She has extensive experience managing teams large and small, as well as coordinating work among teaming partners, and is appreciated for her ability to partner effectively with teaming partners and project owners. Anna is known for bringing outstanding quality and creativity coupled with highly responsive client service, and has been widely praised for her multi-disciplinary perspective and her ability to achieve constructive dialogue on complex projects with multiple stakeholder interests in play.

Among her projects, Anna was involved in paleontological resources support for the California High-Speed Rail Program from 2011 through 2017, including assisting the High-Speed Rail Authority with updates to their systemwide measures for paleontological resources protection. In 2014, she was the senior technical advisor responsible for shaping the Authority's current statewide paleontological resources methodology. A recognized expert on the Neogene stratigraphy of the San Francisco Bay Area and adjacent regions, she also regularly provides consulting services for Alquist-Priolo fault investigations. Anna has been an invited presenter on geologic and regulatory topics at numerous venues and has taught CEQA/NEPA compliance and mitigation development—including paleontological resources topics—for university, municipal, and private clients.

Selected Project Honors

Industrial Road Parallel Sanitary Sewer Project, *City of San Carlos* – ACEC Engineering Excellence Merit Award

San Elijo Hills Pump Station Project, *Vallecitos Water District* – ACEC Engineering Excellence Merit Award

Graham Reservoir and Athletic Fields Project, *City of Mountain View* – ACEC/APWA/ASCE/CELSOC/Helen Putnam Award

Guadalupe Creek Restoration Project, *Santa Clara Valley Water District* – CELSOC Engineering Excellence Merit Award

Recent Redtail Consulting Projects

- California High-Speed Train Program Central Valley Wye & San José to Merced Section Paleontological Resources Services – *IEC/ICF International/Parsons/California High-Speed Rail Authority*
- Capitol Corridor Newark to Santa Clara Capacity Improvements Project Paleontological Resources Services – *IEC/ICF International/Capitol Corridor Joint Powers Authority*
- Water Supply Projects Master Services Agreement (sole-source contract) – *Dublin San Ramon Services District*
- As-Needed Environmental Consulting Services – *Vollmar Natural Lands Consulting/Sonoma County Water Agency*
- California Water Projects Regulatory Advising Master Services Agreement (sole-source contract) – *Integrated Sustainability Consultants, Ltd.*
- Newman Community Conservation Area Master Plan, Program IS/MND, & Permitting – *City of Newman*
- South Bay Water Recycling Connection Pilot Project CEQA Due Diligence & Regulatory Advising – *MNS Engineers/City of San José*
- Annual Sanitary Sewer Repairs (2021 – 2023 Projects) Environmental Services – *Mott MacDonald/City of Santa Clara*
- San Juan Pump Station Landslide Repair (Laurel Creek) Emergency Permits Advising – *Geosphere Consultants/City of Belmont*

- Sanitary Sewer Cathodic Protection Improvement Project CEQA & Permits – *Mott MacDonald/City of Milpitas*
- Sanitary Sewer Main Replacement 2019 Project CEQA Due Diligence & Agency Coordination – *MNS Engineers/City of Sunnyvale*
- Cotati Residential Projects CEQA & Permitting Strategy Development – *Vollmar Natural Lands Consulting*
- Sanitary Sewer Condition Assessment Repairs Environmental Needs Assessment, Program IS/MND, & Resource Agency Permitting Services – *Mott MacDonald/City of Santa Clara*
- East Bay Greenway Trail Connection Alternatives Analysis & Outreach Services – *Orchard–Vallejo Mills Neighborhood Coalition*
- Shorebird & Charleston Recycled & Potable Water Improvements IS/MND – *Mott MacDonald/City of Mountain View*
- As-Needed Environmental/Regulatory Advising Services (sole-source contract) – *City of Sunnyvale*
- 838 Page Street Residential Project Cultural Resources & CEQA Advising Services, San Francisco – *Peters & Ross*
- Pre-Qualified Shortlist, Environmental Services – *Contra Costa County Public Works Department*
- On-Call Engineering Services, Category 5: Environmental – *City of East Palo Alto*
- On-Call Environmental Services – *City of Santa Rosa*
- On-Call Environmental Services – *City of Tulare*

Selected Prior Projects

Technical Studies for Environmental Reviews & Planning

- Extensive experience as expert stratigraphic consultant in Alquist-Priolo fault trenches – *Multiple engineering geologic and geotechnical industry clients since 1998*
- SR 237 Express Lanes, Phase 2 Project Caltrans Paleontological Reports – *David J. Powers & Associates*
- US 101 Highway Improvement Project Caltrans PER Addendum – *David J. Powers & Associates*
- Paleontology Technical Studies/Reports – *Caltrans and Municipal Clients*. Examples include:
 - DesertXpress Palmdale–Las Vegas High-Speed Rail Project
 - Corral Hollow Road Project, Lammers Road Project – *City of Tracy*
 - South Union Road/SR-120 Interchange Project, Silva Estates Project – *City of Manteca*
 - Shadowhawk Master Plan – *City of Ripon*
 - City of Redding Airport Road Widening Project – *Caltrans District 2*
 - I-5 Bus/Carpool Lanes Project, I-80/I-5 Interchange Improvement Project – *Caltrans District 3*
 - Crosstown Freeway Extension Project, I-80/I-680/SR-12 Interchange Project – *Caltrans Central Valley Environmental Management*
 - Hageman Road Extension Project – *Caltrans District 6*
 - Mitchell Road Interchange Reconstruction Project, SR-99 Improvements Project, Buena Vista Casino Project – *Caltrans District 10*
- Natural Resources Technical Studies for General Plan Update – *Dyett & Bhatia/City of Santa Clara*
- Geology, Soils, & Geohazards Technical Studies for General Plan Updates – *Cities of La Cañada Flintridge, Vista, and Lake Elsinore*

CEQA/NEPA & Permitting Project Management

Water & Wastewater

- Industrial Road Parallel Sanitary Sewer Project IS/MND & Resource Agency Liaison – *Mott MacDonald/City of San Carlos*
- Emergency Water Supply Program & Corporation Yard Emergency Backup Well No. 1 Planning, Community Outreach, Phase I ESA, & IS/MND – *City of Menlo Park*
- Olivenhain Trunk Sewer Improvements Project Planning, EIR/EA, Permitting, & Outreach – *City of Encinitas*
- Upas Street Pipeline Replacement Project CEQA Technical Studies, IS/MND, & Outreach – *City of San Diego*
- San Elijo Hills Pump Station Project PEIR Addendum & Resource Agency Outreach – *Vallecitos Water District*

- Wastewater Planning Projects Community & Elected Officials Outreach – *City of Chula Vista*
- La Jolla View Reservoir Replacement Project CEQA, CEQA-Plus, & Outreach – *City of San Diego*
- Oceanside Boulevard Sewer Lift Station Relocation Project Planning & IS/MND – *City of Oceanside*
- B2 Force Main Replacement Environmental Constraints Assessment & IS/MND – *Leucadia Wastewater District*
- E2 & F Reservoirs Demolition CEQA Needs Assessment & Notices of Exemption – *Vista Irrigation District*
- AB Pipeline, Meyers' Siphon, & Flume-Pressure Zone Loop Replacement CEQA/Permitting Constraints Evaluation – *Vista Irrigation District*
- Pipeline Projects Environmental Constraints Evaluations & CEQA Notices of Exemption – *Rincon del Diablo Municipal Water District*
- Water Infrastructure & Facilities Projects CEQA & Permitting – *Dublin San Ramon Services District*
- Shoreline Sailing Lake Water Supply Project IS/MND – *City of Mountain View*

Flood Protection, Habitat Restoration, & Natural Resources Management

- Permanente Creek Flood Protection Project EIR – *Santa Clara Valley Water District*
- PG&E San Joaquin Valley O&M Program HCP EIS/EIR – *USFWS and CDFW*
- Napa River Rutherford Reach Restoration Project IS/MND – *County of Napa*
- Quail Hollow Quarry Long-Term Maintenance & Management Plan – *Graniterock, Inc.*
- BART Warm Springs Extension Mitigation Design & Permitting – *Parsons Brinkerhoff/BART*
- Fairway 6 Channel Permitting & Restoration Design – *Los Altos Golf and Country Club*
- Clear Lake Integrated Aquatic Plant Management Plan Programmatic EIR – *County of Lake*
- Point Reyes Stream Restoration Projects EA – *National Park Service*
- Guadalupe Creek Restoration Project EIR – *Santa Clara Valley Water District*

Land Development & General CEQA/NEPA/Permitting

- On-Call Environmental Services – *City of Redwood City*
- River Islands at Lathrop EIS, CWA Section 404[b][1], & NHPA Section 106 – *USACE Sacramento District*
- Graham Middle School Reservoir & Playing Fields Project IS/MND – *City of Mountain View*
- Physical Resources Technical Studies & NEPA-Equivalent Impact Analysis for Runway Reconfiguration Mitigation, Site Planning, & Assessment – *San Francisco International Airport*
- Los Altos Treatment Plant Development Proposals Wetland Delineation & Permitting Approaches – *City of Palo Alto*



Profile

Charles Gardiner has more than 30 years of experience in program management, communications strategies, stakeholder facilitation, strategic planning, and team and organizational capacity building. He has managed, coordinated, and facilitated multi-organization plans and programs in water and natural resources management and infrastructure planning. He designs and manages stakeholder and public engagement strategies for environmental and infrastructure programs in water resources, environmental restoration, wastewater, energy, hazardous waste, rail, transportation, climate change, and emergency preparedness throughout the United States. In support of these programs he has developed and coordinated public information and education programs, community outreach and promotional projects, and social marketing and behavior change programs.

Mr. Gardiner is trained in conflict mediation, facilitation, and public decision-making techniques. He facilitates program management teams, multi-agency coordination, public meetings, stakeholder workshops, advisory committees, and independent review processes. His technical and policy training helps clients integrate diverse issues and improve organization capabilities to reach program, stakeholder, and community goals.

Expertise

- Stakeholder Facilitation and Public Engagement
- Strategic Planning and Program Management
- Board, Executive, and Team Decision-making
- Organizational Capacity Building
- Conflict Mediation
- Environmental Planning and Review

Education

- B.A., Chemistry and Political Science, University of North Carolina at Chapel Hill
- Mediation and Conflict Management Training, PennACCORD

Affiliations

- Water Environment Federation
- American Water Works Association
- Association of California Water Agencies

Work History

- 2010 to present, President, The Catalyst Group
- 1994 to 2010, Principal, CirclePoint
- 1989 to 1994, National Manager for Public Involvement, CH2M HILL
- 1986 to 1989, Project Manager, Regina Villa Associates

Selected Project Experience

Principal-in-Charge & Facilitator, 101-580 Connector, Transportation Authority Marin

The 101-580 Connector Project is planning a freeway-to-freeway connection between northbound 101 and eastbound 580 to address the long-standing problem of traffic backups on freeway off-ramps and local streets. Mr. Gardiner is lead facilitator for the multi-agency decision-making process, including an ad hoc committee of local elected officials, an executive steering committee including Caltrans, Metropolitan Transportation Commission, the County of Marin, and Cities of Larkspur and San Rafael, and a stakeholder working group. Mr. Gardiner and his team are planning and coordinating the community and stakeholder outreach activities for the project, including initial planning and consensus building on project alternatives, community capacity building in underserved neighborhoods, community workshops on local street improvements, and the environmental review process.

Lead Communications Strategist, Del Puerto Canyon Reservoir Project, San Joaquin River Exchange Contractors and Del Puerto Water District

Mr. Gardiner leads the communications team supporting development and environmental review for the Del Puerto Canyon Reservoir, an off-stream storage facility on the west side of the San Joaquin Valley near Patterson. The team has developed the outreach and communication strategies and tactics to reinforce support for the project and address community concerns about dam safety, natural resource impacts, local benefits, and recreation. Working with the project partners and program management team during the environmental review, Charles has designed and facilitated community workshops, information materials, online resources, and video communication before and during the shelter-in-place order.

Project Director, Long-term Water Supply Plan Communications Strategy, Marin Municipal Water District

Mr. Gardiner provided strategic counsel and communications guidance for the District's long-term water supply planning and decision-making, water conservation programs, and rate setting processes. He provided strategic direction on synthesizing and presenting more than 18 years of analysis and debate into a cohesive problem statement and package of potential solutions for consideration by the public and the District's Board of Directors. He and his team have developed a comprehensive communications program to inform and involve ratepayers and opinion leaders in the decision process and the Board's rate setting activities.

Principal-in-Charge, Wildfire Protection and Habitat Improvement Plan Communications Strategy, Marin Municipal Water District

Mr. Gardiner led a team of communications specialists assisting MMWD with its efforts to manage watershed lands for water supply, recreation, and biodiversity. The team is informing and engaging community members and opinion leaders about the value of the watershed, fire management, invasive species, biodiversity, and management options, including the potential use of herbicides.

Principal-in-Charge, Sea Change San Mateo County Communications Strategy, San Mateo County

Mr. Gardiner is the strategic leader for the Catalyst team support the San Mateo County Office of Sustainability sea level rise and climate adaptation strategies. The program has two primary components: (1) messaging strategies and communications training for county and city leaders and (2) design and support for collaborative leadership and management teams to organize and guide participation and action by government organizations, businesses, communities, non-governmental organizations, academia, and funders. The team is reviewing existing plans and communications materials, including the recent vulnerability assessment, to develop clear, concise, and engaging messaging, toolkits, and trainings as organizations seek to organize, integrate, and coordinate adaptation planning. Mr. Gardiner is providing strategic guidance and facilitation to the Office of Sustainability on how to coordinate multiple county departments to address the full spectrum of water management issues and how to establish a county-wide collaborative to coordinate and plan sea level rise and climate change adaptation across jurisdictions.

Project Coordinator and Facilitator, Russian River Pilot for Watershed Sustainability, Department of Water Resources

Mr. Gardiner served as the project coordinator and facilitator for the DWR Russian River Pilot for Watershed Sustainability. Charles worked with the California Water Plan team and Russian River stakeholders to identify and document how the State's developing Sustainability Outlook can be integrated with regional efforts to improve sustainability and resilience in the Russian River watershed. The team identified policy recommendations to align state and regional regulatory actions and funding and finance mechanisms to support initiatives that increase watershed sustainability and address the impacts of climate change. Charles synthesized watershed assessment approaches, convened regional stakeholders, identified and documented the history, lessons learned, and collaborative capacity in the Russian River, and framed initial concepts for sustainability assessment, regulatory alignment, and funding and financing approaches. He synthesized local understanding of watershed conditions and developed a collective action model and policy recommendations for advancing regional sustainability.

Lead Facilitator, Groundwater Sustainability Plans, Merced Subbasin Groundwater Sustainability Agencies and Cuyama Basin Groundwater Sustainability Agency

Mr. Gardiner managed outreach and facilitation for two groundwater sustainability plans (GSP) in two critically overdrafted basins—the Merced Subbasin in the Central Valley and the Cuyama Basin the Cuyama Valley. For both projects, Charles developed a planning roadmap that depicts the GSP planning process, Board and advisory committee decision milestones, and opportunities for community engagement. Charles also developed communications partnerships with local and regional organizations already engaged with the agricultural landowners, disadvantaged communities, and non-English speaking populations in both basins. Charles is facilitating the Advisory Committee and joint Board/Advisory Committee/community workshops.

Jason J. Moghaddas, MS, RPF

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Quincy, California 95971
j Moghaddas@sig-gis.com
(530) 927-8009



Areas of Expertise

- Fire ecology
- Fuel treatment planning and assessment
- Forestry

Education

University of California - 1999
MS, Environmental Science, Policy, and Management with an emphasis in fire ecology

Marlboro College - 1993
BS, Resource Management with an emphasis in wildlife management.

Professional Licenses

Registered Professional Forester (RPF) – State of California, License #2774

Locations of Experience

- United States
- Baja, Mexico
- Vietnam
- Japan

Recent Project Experience

Project: Midpeninsula Regional Open Space District Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA):

This comprehensive program covers over 64,000 acres of preserve wildlands managed by Midpen, including all 26 of the District's preserves. The program consists of several components, including a Vegetation Management Plan a Prescribed Fire Plan that defines prescribed fire units and methods; Resource Advisor Maps and Wildland Fire Pre-Plan; and a Monitoring Plan. For this project, Jason provided technical input on fuels management actions, field support, and lead preparation of the monitoring plan. More information on the the plan can be found here <https://www.openspace.org/our-work/projects/wfrp>

Project: San Lorenzo Valley Water District Fire Management Plan (Santa Cruz County, CA):

Spatial Informatics Group, in collaboration with Panorama Environmental, and Prometheus Fire Consulting is accounting and mapping San Lorenzo Valley Water District resources and assets in order to understand exposure to potential wildfire during critical fire weather. Jason provided pre fire evaluation of potential fuel treatments, and post fire (CZU Complex) of forest condition and potential hazard trees.

Project: California's 4th Climate Assessment: Fuel Treatments for Forest Resilience and Wildfire Mitigation:

For this report, SIG reviewed what is known about the effects of fuel treatments on stored forest carbon, wildfire risk and wildfire emissions in California's forests and summarized geo-spatial data gaps that need to be filled in order to make good fuel treatment decisions that both increase forest resilience and carbon sequestration. Jason was the lead author of the the report. The full report can be found here <http://www.climateassessment.ca.gov/techreports/forests-wildfire.html>

Project: UC Berkeley Vegetation Management Plan Review (Alameda County):

SIG worked with Ascent Environmental to provide a review for a detailed plan to remove eucalyptus, reduce fire hazard, and manage fuels on UC Berkeley owned property in the East Bay Hills. Jason provided technical review of the plan, including on issues such as chip and slash disposal. Learn more about the project here: <https://capitalstrategies.berkeley.edu/hill-campus>

Project: An assessment of fire hazard/risk in the Wildland Urban Interface (WUI) and Stream Environment Zones (SEZs) for the Lake Tahoe Basin:

SIG completed a fire hazard and risk assessment for the entire Lake Tahoe Basin, with an analysis focused on potential fire behavior in Stream Environment Zones (SEZs) and the wildland urban interface (WUI). The project covered all lands within the ~230,000 Lake Tahoe Basin Management Unit. Jason provided field expertise in fuel model inputs, which allowed accurate modeling of pre and post fuel treatment potential fire behavior.

Kathleen Baker

415-497-1500

kbaker@sig-gis.com



Skills and Expertise

- Fire origin and cause investigation
- Wildland Urban interface/ intermix assessment
- Report writing skills
- Verbal communication
- Public safety and security
- American Red Cross Volunteer Disaster Responder Coordinator, EOC
- EMS expertise
- Critical decision-making skills
- Rescue operations

Certifications

- Firefighter I, Firefighter II
- California State Fire Officer I California State Fire investigator I
- FI-210 Wildland Fire Origin and Cause Determination

Experience

- 1993-2019 **Retired Firefighter/Engineer, EMT-D** - Santa Clara County Fire Protection District, Los Altos Hills, CA
- Served as a fire investigator for over 20 years, investigating structure and wildland fires, used a methodic approach in determining the origin and fire cause.
 - Trained new firefighters how to implement skills taught in the academy, such as fire ground tactics, driving apparatus, topography assessment and evaluation, fuel loads, and structures that affect firefighting efforts, and pre-plan safe egress for the residents.
 - Trained CERT (Community Emergency Response Teams) members in effective rapid emergency response procedures to be utilized in the event of a major wildfire, earthquake.
 - Deployed out of county to devastating wildfires, including, not limited to:
 - Butte Fire - September 2015: 2 fatalities, 475 homes destroyed and 70,900 acres scorched;
 - Pier Fire - August 2017: 36,550 acres of old growth Giant Sequoias and many small communities threatened;
 - Delta Fire - September 5, 2018: Interstate 5 was compromised and shut down for days.
 - These are just examples of the deployments I have responded on.
 - Responded to over 800 emergency incidents per year, utilized size up, assessed each situation, and mitigated the situation on every dispatch.
- 2018-Present **American Red Cross (Volunteer)** - Disaster Coordinator/responder for Marin County, Alameda and San Francisco
Respond to natural disasters, fires, storms affecting families.
Provide immediate support post disaster in these communities.
- 2020-Present **Fire Consultant Spatial Informatics Group** - worked on the Wildland Fire Resiliency Program for Mid Pen OSP, Santa Clara County
Wildfire risk reduction, vegetation management, maintenance of fuel breaks, accessibility to fire apparatus, existing water sources, document findings in reports to SIG.



Education

**University of California,
Berkeley - 2018-2020**
Master of Forestry

**University of California,
Berkeley - 2011-2015**
B.S. in Forestry and Natural
Resources
Minor in Conservation and
Resource Studies

Related Coursework

- Fire Ecology
- Geographic Information Systems (ArcGIS)
- Statistical Analysis
- Wildland Fire Science
- Natural Resource Sampling and Assessment
- Forest Management
- Ecology (Aquatic, Terrestrial, Wildlife, Ecosystem)

Certifications

- Incident Commander Type 5
- Type I Wildland Firefighter
- Prescribed Burn Boss 3 Trainee

Recent Project Experience

Project: Post Wildfire Monitoring of Redwood Forests (Santa Cruz County):

SIG is working with Save the Redwoods League to assess, map, and monitor effects of the 2020 CZU Complex on redwood forest mortality, stand structure, and post fire recovery. Ian is leading protocol development and implementation in the field with a team of field staff and licensed UAV Pilots.

Project: Pyregence-Creating the Next Generation of Wildfire Forecast Models (State of California):

The state of California at a critical inflection point. In order to mitigate the devastating effects of wildfires, in 2019, SIG helped form The Pyregence Consortium. The mission of the consortium is to better equip everyone effected by wildfires, from concerned citizens, to utility companies and state agencies, with the information they need to reduce wildfire risk. Funded by a grant from the California Energy Commission, the consortium is comprised of experts in wildfire, forestry, weather and climate change from 18 institutions across academic, private consultancy and government sectors. On this project, Ian is working with UC Berkeley to assess fuel characteristics in the field, including in burned and unburned areas. More information is available at <https://pyregence.org/>

Project: Midpeninsula Regional Open Space District Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA):

This comprehensive program covers over 64,000 acres of preserve wildlands managed by Midpen, including all 26 of the District's preserves. The program consists of several components, including a Vegetation Management Plan a Prescribed Fire Plan that defines prescribed fire units and methods; Resource Advisor Maps and Wildland Fire Pre-Plan; and a Monitoring Plan. For this project, Ian is providing technical input on prescribed fire planning, including, potential burn unit location, field support, and prescribed fire staffing, training, and equipment needs.

Carl E. Rudeen

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crudeen@sig-gis.com



Project Experience

13 years of geospatial analysis for the U.S. Air Force as a Biologist and Natural Resources Program Manager. Wrote and edited Environmental Assessments and performed Section 7 Consultation.

Education

Idaho State University - 2012
M.S. Geographic Information Science

Penn State University – 2007
Post baccalaureate Certificate in GIS

University of Idaho – 2001
B.S. Wildlife Resources & Rangeland Ecology and Management

Areas of Expertise

- Environmental Contracting
- New Approaches to Studies of Home Range, Habitat Selection and Space Use
- Geostatistical Spatial Data Analysis and Modeling
- Remote Sensing
- Geostatistical Analysis
- GIS Programming and Customization
- GIS Database Development
- Systematic Botany
- GIS Applications for Natural Resources
- Wildland Vegetation Management/Restoration
- Integrated Rangeland Management
- Interdisciplinary Natural Resource Planning
- Rangeland/Riparian Habitat Assessment
- Fish and Wildlife Population Ecology
- Fluvial Geomorphology, Rosgen 2002
- How to Manage the EIA/NEPA Process: Air Force Specific

Recent Project Experience

Project: Midpeninsula Regional Open Space District Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA):

This comprehensive program covers over 64,000 acres of preserve wildlands managed by Midpen, including all 26 of the District's preserves. The program consists of several components, including a Vegetation Management Plan a Prescribed Fire Plan that defines prescribed fire units and methods; Resource Advisor Maps and Wildland Fire Pre-Plan; and a Monitoring Plan. For this project, Carl provided tall GIS data support, working with MidPen and Panorama Environmental Staff to create, share, and revise online and document maps.

Project: San Lorenzo Valley Water District Fire Management Plan (Santa Cruz County, CA):

Spatial Informatics Group, in collaboration with Panorama Environmental, and Prometheus Fire Consulting is accounting and mapping San Lorenzo Valley Water District resources and assets in order to understand exposure to potential wildfire during critical fire weather. Carl provided GIS support and analytics for the project, including supporting clients GIS needs during the CZU Fire, which directly impacted clients lands and infrastructure.

Project: Community Wildfire Risk Pilot Project for Paradise, Auburn, Nevada City, and Grass Valley, CA:

Spatial Informatics Group is working for CALFIRE's Forest Health Program on a Community Wildfire Risk Pilot Project for multiple cities in California. This project is currently on-going and seeks to reduce wildfire risk by providing better analytical methods and information for planning fuel treatments and implementing defensible space in the Wildland Urban Interface (WUI) and intermix. The study involves developing an analytical framework that can be implemented to provide improved information for prioritizing fuel treatments in the WUI and defensible space within the community context. The study is also exploring options for evaluating carbon co-benefits of fuels reduction treatments within the project area. Carl is managing all GIS data, including developing an online map comment system, which allows stakeholders to comment on areas of concern in easy to use online maps.

Project: GIS Support for Community Collaboratives in Modoc and Lassen Counties:

Spatial Informatics Group (SIG) and 34 North to help California Climate Initiative (CCI) funded Collaborative Forest Landscape Restoration Programs (CFLRP) project prioritize treatments across ownership boundaries in the Hat Creek Watershed (Lassen County) and the Pitt River Watershed (Modoc County). Carl is providing GIS data management and support for this project..



Phillip Dye, Fire Consultant



Mr. Dye is the found and owner of Prometheus Fire Consulting, LLC. He has over 20 years of experience working in fire management and prescribed burn planning. Phil has also served as Incident Commander for several NorCal Training Exchanges (TREX) as well as the inaugural Cascadia TREX. Phillip began his career in wildland fire in 1997 with a local government fire agency. Over the span of his 20 year career, he progressed through the ranks to

become a Fire Captain. In 2017, he retired from the fire agency, but remained active as a volunteer. He is a member of a number of associations, including the Association of Fire Ecology, the International Association of Wildland Fire, and the National Wildfire Suppression Association. He is qualified as a National Wildfire Coordinating Group (NWCG) Prescribed Fire Burn Boss. He has led over 50 prescribed fires across the nation. Currently, Phil is helping on a range of projects in the San Francisco Bay Area, including pre-fire planning for Midpen.

Midpen Open Space District Wildland Fire Resiliency Program, CA

Phil is assisting in the development of wildfire response plans including an assessment of current conditions and infrastructure and have made recommendations for safe and effective response to wildfire. In addition, he is providing recommendations for fuel treatments.

2019 Klamath River Training Exchange (TREX), Klamath, CA

The TREX was operated using the Incident Command System and Phil provided technical expertise to support the project. Phil's support of the project helped to maintain community and landscape fire resiliency.

Spanish Language Training Exchange—The Forest Stewards Guild

Phil provided a qualified Burn Boss to lead a diverse group of Spanish language participants from around the world. The project helped build the participants' proficiency in fire management with the goal of returning to their home countries to augment or start their own programs. In addition Phil's work helped to enhance the safety and resiliency of the youth camp where the project was conducted.

North Orinda Shaded Fuel Break, Orinda County CA

The NOSFB is one of CAL FIRE's 35 top priority projects in the state. Phil is helping the District by designing prescribed fire projects that would complement and reinforce the shaded fuel break to augment its ability to slow fire spread and protect communities

S-212, Wildland Power Saws Class, Santa Clara County Parks, CA

In this 4-day hands-on class, Phil provided training to the department's ranger and maintenance staff to enhance their ability to complete fuel reduction work in order to reduce the impact of fire on agency lands.

Cocking Prescribed Fire—David and Penny Crocking

The Cockings have lived on their land for almost 40 years. During that time, they have been threatened by wildfire on several occasions. Phil designed and implemented a prescribed fire on their property to reduce the threat to their home as well as to enhance the biodiversity on their land.

HIGHLIGHTS

- An experienced prescribed burn planner and wildland fire manager, with over 20 years of work in the wildland fire industry
- Experience recommending pre-wildfire mitigation measures as well as the use of fire as a resource management tool, fire control line placement and design, infrastructure defense strategies, and proposed locations of fuels reduction work.

EMPLOYMENT

Firm: Prometheus Fire Consulting, LLC.

Title: Founder & CEO

Years with Firm: 5, 2014– present

Past Employment:

Fire Captain, Spring Valley

Volunteer Fire Department: 2017– present

Fire Captain/Paramedic, City of Milpitas: 1997–2017

Instructor, Sacred Heart

Preparatory: 1996–1997

Phone: 408 807 1963

E-Mail Address:

phil@prometheusfireconsulting.com

EDUCATION

- M.Sc., Biochemistry, University of Hawaii, 1988
- B.S., Psychology, University of Wyoming, 1985

PROFESSIONAL QUALIFICATIONS

- NWCG Prescribed Fire Burn Boss, Type 2
- Chief Fire Officer—California State Fire Marshal
- Wildland Fire Manager—Association for Fire Ecology
- Fire Prevention Officer I—California State Fire Marshal

Debie Montana, M.S., Certified Project Manager

President and Principal Biologist

Debie Montana is a Project Management Professional and the President of Sequoia Ecological Consulting, a small, woman-owned business enterprise. As President she is responsible for the corporate operation and fulfillment of contractual obligations for the firm. Since founding Sequoia in 2011, Mrs. Montana has grown her Company to a full-time staff of 35 qualified biologists, planners, project managers and regulatory specialists providing large-scale program support, project management, regulatory compliance at the state and federal levels, Biological Assessments, special-status species surveys, cultural resource assessments, Section 404/401, Section 7 and Section 106 consultations, CDFW 1602, CEQA and NEPA document preparation, wetland delineations, and other various environmental project management services for planning, restoration, fuels management, development, transportation, utilities and flood management projects.

With more than 20 years of experience in the environmental industry, Mrs. Montana has developed a resume with extensive program management experience within both the private and public sectors. She oversees complex environmental compliance efforts that apply her conservation and organismal biology and fisheries background with her strong understanding of all aspects of environmental analysis, and her extensive knowledge of environmental permitting through federal, state and local agency processes. During her time working as Program Manager for Pacific Gas & Electric's Electric and Gas Transmission Division, Mrs. Montana managed a portfolio of over 300 capital and expense projects, 43 environmental consulting firms, and projects totaling more than \$180M in annual budgets.

As a wildlife biologist, Mrs. Montana has worked on projects and with technical scientific experts throughout California. Her duties have ranged from authoring biological assessments and Natural Environmental Studies, to performing resource management and mitigation plans, to overseeing large-scale fuels treatment, utility, and development projects spanning regions, a variety of habitats, and numerous permitting agencies. Mrs. Montana's main strength is providing oversight, quality assurance, budget control, schedule adherence, and technical review on large-scale projects. She has built and managed multi-disciplinary teams of technical experts, to successfully complete projects across the state. Mrs. Montana is certified in Project Management by the University of California at Davis.



Areas of Specialty

- Program and Project Management
- Stakeholder Engagement
- Technical Team Development and Management
- FERC License Compliance
- NERC Compliance
- Stakeholder Engagement
- Strategic & Business Planning
- Leadership Development

Education

- M.S., Biological Sciences with Concentration in Organismal Biology, Conservation and Ecology, San Jose State University
- B.S., Biological Sciences with Concentration in Conservation and Organismal Biology, San Jose State University
- Certificate, Project Management, University of California, Davis

Training

- CEQA/NEPA Workshop
- Habitat Conservation Planning and Implementation
- Land Use in California
- Mitigation Negotiation and Development
- Wetlands Regulations
- Riparian Restoration
- Project Management Certificate, UC Davis
- Partnership CTS & CRLF Workshop

Professional Affiliations

- Wildlife Society, Western Section Member
- Association of Environmental Planners, Member
- Ecological Society of America

Representative Experience

North Orinda Shaded Fuel Break Project

Divided into a total of 55 “treatment units”, this 1,900-acre fuel break project employed a variety of specific fuel management techniques including understory clearing, tree pruning, brush clearing, chipping, mowing, and select tree removal. Mrs. Montana participated in a series of meetings with Moraga-Orinda Fire Department, members of the public, and agencies including CAL FIRE, EBMUD, EBRPD, CDFW, and CNPS. Sequoia compiled BMPs to satisfy the requirements of existing habitat conservation plans, incidental take permits, and biological opinions which had already undergone the CEQA process for projects nearby. Sequoia identified suitable Avoidance and Minimization Measures that would satisfy the existing Habitat Conservation Plan for Fuel Reduction Projects, and the EIR, Biological Opinion and Wildfire Hazard Mitigation Plan. Mrs. Montana collaborated with CDFW and USFWS on field methods, crew training, and biological monitoring that would be implemented. Sequoia collaborated closely with fire crews to develop fire prescriptions and performed permit interpretation and recommendations for communication with USFWS and CDFW. Sequoia also helped determine the appropriate treatment type (hand tools vs mastication) for various work areas based on quality of habitat for AWS, legal restrictions of the site (private vs EBMUD vs EBRPD property) and safety/slope concerns.

East Bay Regional Park District’s Fuels Reduction Project

Since 2014, Mrs. Montana has worked with the East Bay Regional Park District (EBRPD) on planning and implementation of their FEMA-funded Wildfire Hazard Reduction and Resource Management Plan. The program extends throughout more than 40 sites on EBRPD property in Alameda and Contra Costa Counties. Sequoia’s work includes interpretation of their Biological Opinion, Incidental Take Permit, and Environmental Impact Report. Sequoia worked with the District to create standard operating procedures for programmatic work, submitting annual reports to USFWS and CDFW, and coordinates communication and meetings with the District, manages and supervises field activities, performs focused surveys, conducts environmental training for field and Park personnel, and provides biological monitoring services for implementation of Avoidance and Minimization Measures during fuels treatment activities.

PG&E’s Wildfire Safety Inspection Program Throughout PG&E Territory

Following the 2017 and 2018 wildfires, PG&E’s Wildfire Safety Inspection Program (WSIP) has been implemented in addition to routine inspection and maintenance programs, to further reduce wildfire risk. As part of this program, Mrs. Montana is overseeing permit compliance support, technical studies, endangered and sensitive species studies, surveys, and data collection, and project reviews at various sites throughout PG&E’s service territory, from Humboldt to Bakersfield.

CAL FIRE's Kings Mountain Road and Quarry Park Fuel Reduction Projects

Mrs. Montana oversaw biological support efforts on CAL FIRE's King's Mountain Road Fuel Break project in San Mateo County Parks Department's Huddart County Park. Sequoia's technical specialists provided focused endangered species and botanical surveys ensure AMM compliance in advance of fuel reduction activities and adherence to CAL FIRE's Fuel Reduction Avoidance and Minimization Measures. Work included pre-treatment assessments were conducted, collecting data regarding species cover, composition, and invasive species present. Post-treatment assessments will be conducted within a year to treatment to determine maintenance intervals for the fuel break.

Sequoia also provided environmental consulting services to the San Mateo Santa Cruz unit of CAL FIRE for the Quarry Park Emergency Shaded Fuel Break Project. Sequoia assisted CAL FIRE with special protection measures and potential operational (biological) constraints. Sequoia's biologists conducted preliminary surveys of proposed work areas focusing on the presence of nesting birds, sensitive species and their habitat, existing erosion or signs of other work already completed, and safety hazards such as wasp nests or access issues.

El Dorado Resource Conservation District, Fire Adapted 50 Phase 1B Wildland Fire Protection Program, El Dorado County, CA

This program is a series of projects identified by CAL FIRE, the U.S. Forest Service, El Dorado Resource Conservation District, and the Georgetown Divide Resource Conservation District, developed to strengthen and expand existing fuel breaks along the Highway 50 corridor and within El Dorado National Forest. The project will conduct vegetation treatments designed to interrupt potential wildfire behavior by reducing the rate of spread and intensity of fire. Sequoia is providing environmental consulting services to ensure Project compliance with all Federal, State, and local regulations and project permits; including but not limited CEQA/NEPA compliance.

Brett Alan Hanshew, M.S.*Principal Biologist*

Brett Hanshew is a senior biologist and project manager with over 15 years of experience. Mr. Hanshew manages a variety of programmatic work and on-call biological services contracts, with focused expertise in regulatory compliance. He is particularly skilled at preparing baseline environmental documents in support of the California Environmental Quality Act (CEQA) and state and federal Endangered Species Acts, providing permit support, and developing resource management plans, mitigation monitoring plans, conducting focused surveys. He has extensive experience managing large-scale field efforts involving biological monitoring and pre-construction surveys for nesting birds and other sensitive species. He holds a United States Fish and Wildlife Service (USFWS) 10(a)(1)(A) recovery permit and California Department of Fish and Wildlife (CDFW) Scientific Collecting Permit/Memorandum of Understanding (SCP/MOU) for California red-legged frog, California tiger salamander, San Francisco garter snake, and vernal pool branchiopods. Brett is a Certified Inspector of Sediment and Erosion Control (CISEC), and a Qualified SWPPP Practitioner (QSP) through the California Stormwater Quality Association (CASQA).

In addition, Mr. Hanshew has extensive experience with giant garter snake, Yosemite toad, Sierra Nevada yellow-legged frog, foothill yellow-legged frog, Alameda whipsnake, arroyo toad, Cascades frog, Santa Cruz long-toed salamander, western pond turtle, coast horned lizard, Bay checkerspot butterfly, Ridgway's rail, California black rail, salt marsh harvest mouse, nesting birds, burrowing owl, and San Francisco dusky-footed woodrat. He is trained in a wide variety of survey techniques, including visual encounter, snorkel, seine, dip net, PIT tagging, trap-line, mist netting, Sherman traps, and Anabat. Mr. Hanshew consistently develops strong working relationships with clients, and is frequently requested to lead teams working in habitats occupied by special-status species.

Representative Experience***U.S. Bureau of Reclamation (USBR) Battle Creek Salmon and Steelhead Restoration Project, Tehama County, CA***

2020 - present

Sequoia is currently leading the environmental compliance support team for the Bureau of Reclamation's Battle Creek Salmon and Steelhead Restoration Project, which will restore approximately 48 miles of cool-water salmonid spawning and rearing habitat for multiple threatened and endangered runs. Sequoia is providing technical expertise, permitting support, preconstruction surveys, revegetation plan design and implementation, runtime compliance, and mitigation monitoring for the remaining life cycle of the project. Planning and implementation includes extensive terrestrial and aquatic surveys, permit reviews and applications,

**Areas of Specialty**

- USFWS Recovery Permit and CDFW SCP/MOU for San Francisco Garter Snake, California Red-legged Frog, California Tiger Salamander, and Vernal Pool Branchiopods
- Qualified SWPPP Practitioner
- Certified Inspector of Sediment and Erosion Control
- Biological Surveys and Assessments
- Project Management

Education

- M.S., Fisheries Science, Oregon State University
- B.S., Environmental Biology & Management, University of California, Davis

Training

- OSHA 40-Hour HAZWOPER and 10-Hour Construction Safety
- ETIC 8-Hour Storm Water Training for PG&E Projects
- Desert Tortoise Workshop (Desert Tortoise Council)
- California Rare Pond Species Workshop (California Tiger Salamander, California Red-legged Frog, and Western Pond Turtle)
- California Red-legged Frog Workshop (Alameda RCD)
- Santa Cruz Long-toed Salamander Workshop (Elkhorn Slough)
- Vernal Pool Branchiopod Field Training & Identification Workshops
- Bullfrog Control Workshop (The Wildlife Project)

agency negotiation to respond to regulatory changes, vegetation plans, fish and other resource management plans, and environmental compliance monitoring and reporting during construction. As Program Manager and Senior Technical Specialist, Mr. Hanshew's role includes:

- Internal and external project management, oversight, and budget controls;
- Safety plan management and implementation;
- Regulatory permitting support and coordination;
- Fish and wildlife study plan design and implementation;
- Ensuring schedule and quality for deliverables and field work; and
- Providing program-level support for field efforts.

El Dorado Resource Conservation District-Fire Adapted 50 Phase 1B – Wildland Fire Protection Program, El Dorado County, CA

August 2020-Present

The Fire Adapted 50 Phase IB - Wildland Fire Protection Program is Phase B of a series of projects identified by CAL FIRE, the U.S. Forest Service, El Dorado Resource Conservation District, and the Georgetown Divide Resource Conservation District. The project will conduct vegetation treatments designed to interrupt potential wildfire behavior by reducing the rate of spread and intensity of fire. Sequoia is providing environmental consulting services to ensure Project compliance with all Federal, State, and local regulations and project permits; including but not limited CEQA/NEPA compliance (evaluation, surveys, consultations, communications, information exchange, reporting, monitoring, mapping and document management, etc.). Mr. Hanshew's role includes:

- Providing project management and oversight
- Ensuring project activities comply with permits
- Creating detailed maps in ArcGIS
- Creating and implementing a work plan to be approved by U.S. Forest Service

PG&E Electrical Transmission Access Road Maintenance (ET-ARM) Project; Various Locations throughout PG&E Territory, CA

2016 - present

Sequoia provides biological support for PG&E as they clear vegetation along access roads. To improve access conditions for maintenance and repair activities, PG&E is repairing and upgrading access roads throughout their service territory. Mr. Hanshew's responsibilities include:

- Conducting nesting bird surveys prior to vegetation maintenance
- Conducting pre-construction surveys for sensitive species, including California red-legged frog, California tiger salamander, Santa Cruz manzanita, and Santa Cruz tarplant
- Conducting habitat assessment surveys to determine habitat quality for sensitive species, including Alameda whipsnake, California red-legged frog and California tiger salamander
- Mapping project-related impacts requiring mitigation under PG&E's Bay Area HCP
- Environmental training
- Performing biological monitoring for O&M access road maintenance and vegetation removal

PG&E 70Y Pole Replacement Assessment; Various Locations, CA

On this project, Mr. Hanshew was responsible for:

- Performing site assessments and preparing written reports for pole replacement work in various habitats throughout the state, with a large portion of assessment areas in giant garter snake habitat in the Sacramento River Valley

- Conducting assessments, included evaluating access routes, vegetation removal, wetlands impacts, terrestrial and aquatic species impact potential, and permit compliance

PG&E Gas Transmission Support; Various Locations throughout PG&E Territory, CA

Mr. Hanshew has managed work and performed biological monitoring, desktop review, and constraints analyses for various PG&E Gas Transmission O&M programs throughout their service territory, such as Pipeline Pathways Survey and Vegetation Management, E-Screen, and PSEP Shorts. The projects' broad geographic range utilized Mr. Hanshew's thorough knowledge of California communities and his strong fundamentals as a biological monitor, as work areas and access routes were in nearly every habitat type imaginable. Some of Brett's responsibilities on these projects included:

- Performing biological monitoring
- Providing desktop reviews
- Conducting constraints analyses
- Coordinating the proper monitor with the proper crew, on short timeframes, based on the habitat crews would work
- Directing monitors in the implementation of Avoidance and Minimization Measures (AMMs) to avoid impacts to sensitive species and habitats (the work was conducted without permits)
- Working closely with field crews to keep them informed of applicable project changes and ensure that the project was running on schedule and in compliance

PG&E North American Electric Reliability Corporation (NERC) Alert O&M Upgrades; Various Locations, CA

Mr. Hanshew managed Sequoia's efforts in support of the PG&E North American Electric Reliability Corporation (NERC) Alert project, which spanned PG&E's service territory, from Barstow to Eureka. PG&E conducted Operations and Maintenance (O&M) work including extensive vegetation management activities on various electrical transmission lines to maintain regulatory compliance, and Brett's responsibilities in support of this work included:

- Identifying the best subject-matter experts to deploy to a given location throughout California based on habitat type (this on-call project was conducted without permitting)
- Monitoring for special-status species with potential to occur, including Alameda whipsnake, California red-legged frog, arroyo toad, Swainson's hawk, blunt-nosed leopard lizard, San Joaquin kit fox, nesting birds, and bald eagle
- Preparing Release-to-Construction notices for projects
- Training and biological compliance support during NERC-related construction
- Performing field verification visits
- Conducting constraints analyses
- Preparing daily reporting
- Overseeing surveys within San Joaquin Valley HCP Boundary for Tipton kangaroo rat and blunt-nosed lizard
- Performing rare plant surveys
- Conducting bald eagle nest monitoring during active construction via helicopter

Grace Mannell

Project Biologist

Grace Mannell has 8 years of experience in terrestrial field biology and environmental consulting. She regularly monitors for environmental compliance, provides environmental training, conducts protocol-level surveys and habitat assessments, writes biological constraints reports, analyzes complex data sets, and coordinates fieldwork. Ms. Mannell has hands-on experience with numerous special-status species, including California red-legged frog, San Francisco garter snake, Alameda whipsnake, California tiger salamander, Morro Bay kangaroo rat, Monterey dusky-footed woodrat, San Francisco dusky-footed woodrat, burrowing owl, California condor, golden eagle, bald eagle, Swainson's hawk, peregrine falcon, American kestrel, vernal pool fairy shrimp, vernal pool tadpole shrimp, and alkali fairy shrimp. She has handled one adult San Francisco garter snake, three adult Alameda whipsnakes, 18 adult California tiger salamanders, 13 California tiger salamander eggs, one larval California red-legged frog, 60 California red-legged frog eggs, 17 vernal pool tadpole shrimp, five vernal pool fairy shrimp, and one western pond turtle. Grace Mannell is a USFWS/CDFW-approved biologist for California red-legged frog, Alameda whipsnake, pallid manzanita, burrowing owl, and California tiger salamander. She also has experience handling wild birds, including an American kestrel, western screech owl, red-tailed hawk, and golden eagle. Grace has also trained under Julie Woodruff, USGS Master bander (USGS-24106) to band burrowing owls and northern saw-whet owls.

Ms. Mannell has four years' experience managing projects and schedules. She is a strong writer and has completed many Biological constraints reports for Pacific Gas and Electric Company (PG&E). She also has experience writing reports in compliance with the California Environmental Quality Act (CEQA). Ms. Mannell assists Sequoia's marketing team by regularly writing scopes of work, cost estimates, searching for RFPs, and attending meetings with clients and agency personnel. She is comfortable working in physically demanding field conditions, and is proficient using ArcGIS, Spectra submeter GPS technology, radio telemetry, and motion-activated camera traps to monitor wildlife.

Representative Experience

East Bay Regional Park District Fuels Reduction Project; Alameda and Contra Costa Counties, CA
November 2016 – Present

Sequoia is assisting the East Bay Regional Park District with implementation of their Wildfire Hazard Reduction and Resource Management Plan (BO-81420-2010-F-0849-3, 1600-2016-0269-R3). Ms. Mannell is the primary



Areas of Specialty

- Nesting Bird and Raptor Surveys; Protocol-Level Surveys
- Species Identification of Birds, Mammals, Reptiles, Amphibians, Plants, and sensitive insects
- Habitat Assessment, Trapping, Handling, and Surveying for Species of Concern
- Environmental Training for Construction Crews
- Analysis of Impacts to Riparian Resources
- CEQA/NEPA Analysis and Report Preparation

Education

- B.S. Environmental Management and Protection, Minor in Biology; California Polytechnic University, San Luis Obispo

Training

- California Ridgway's Rail and Black Rail (J. Evens/Sequoia)
- Handling Wild Raptors (UC Davis/Nextera Energy, Inc.)
- California Red-legged Frog – Level II (The Wildlife Project)
- California Red-legged Frog (Alameda County Resource Conservation District)
- Western Pond Turtle: Ecology & Conservation (The Wildlife Society)
- Giant Garter Snake Symposium (The Wildlife Society)
- Pond Species Workshop - California Tiger Salamander, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp, California Red-legged Frogs (J. Alvarez/Transcon Environmental Inc.)
- Rare Shoreline Species (The Wildlife Society/EBRPD, 2019)

Professional Affiliations

- Wildlife Society, Western Section Member, 2011-Present
- Golden Gate Audubon Society Member, 2012-Present

manager and client contact for Sequoia's biological consultation with East Bay Regional Park District's Wildfire Hazard Reduction and Resource Management Plan. As a USFWS- and CDFW-approved biologist for California red-legged frog, Alameda whipsnake, and pallid manzanita on this project Ms. Mannell has been tasked with managing and supervising field staff, as well as the following tasks:

- Surveying, monitoring, and conducting environmental training for special-status species, including California red-legged frog (*Rana draytonii*), western pond turtle (*Actinemys marmorata*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), California tiger salamander (*Ambystoma californiense*), Alameda whipsnake (*Masticophis lateralis euryxanthus*), pallid manzanita (*Arctostaphylos pallida*), and western leatherwood (*Dirca occidentalis*)
- Assessing habitat quality for Alameda whipsnake
- Identifying signs of infection by *Phytophthora cinnamomi*
- Documenting baseline vegetation condition and cover prior to and following fuels treatments
- Providing biological monitoring services as needed for implementation of Avoidance and Minimization Measures during fuels treatment activities
- Assisting EBRPD Resource Analyst team in complex permit interpretation questions, including those related to Alameda whipsnake primary constituent element impacts, implications of pile burning on whipsnake habitat, annual reporting requirements to agencies, and addressing risks to woodrats

Ms. Mannell is USFWS and CDFW approved to handle, conduct surveys for, monitor for, and present environmental trainings for California red-legged frog, Alameda whipsnake, and pallid manzanita as part of this project (USFWS ITP 1600-2016-0269-R3, BO 81420-2010-F-0849-3).

North Orinda Shaded Fuel Break, Lafayette and Orinda, CA

June 2019 – December 2019

The Moraga-Orinda Fire District received a grant to create a shaded fuel break on 1,429 acres across 19.3 miles of land in the East Bay hills. As the primary project manager for the biology portion of the North Orinda Shaded Fuel Break, Grace was responsible for:

- Direct consultation with agencies, public interests, and landowners including California Department of Fish and Wildlife (CDFW), East Bay Regional Parks District (EBRPD), East Bay Municipal Utility District (EBMUD), Audubon society, California native plant society (CNPS), Sierra Club, the Diablo Firesafe council, Friends of Wagner Ranch, and private property owners
- Development of Avoidance and Minimization Measures by consulting relevant existing permits
- Development and implementation of Environmental Training for all new crew members with emphasis on sensitive species and decontamination methods to stop the spread of sudden oak death and other *Phytophthora* species
- Performing pre-construction surveys for special status species including Alameda whipsnake, California red-legged frog, San Francisco dusky-footed woodrat, western pond turtle, Diablo helianthella, western leatherwood, Santa Cruz tarplant, bent-flowered fiddleneck, and Oregon meconella
- Assessing habitat quality for Alameda whipsnake and California red-legged frog

- Conducting nesting bird surveys
- Establishing and maintaining nest buffers for San Francisco dusky-footed woodrat
- Monitoring fuels reduction work including low-impact hand work and high-risk mastication
- Providing environmental training for sensitive species for crews
- Documenting baseline vegetation condition and cover prior to and following fuels treatment
- Providing additional services as needed for implementation of Avoidance and Minimization Measures during fuels treatment activities
- Annual reporting, managing schedules, and ensuring that biologists were present as needed

El Dorado Resource Conservation District, Fire Adapted 50 Phase 1B Wildland Fire Protection Program, El Dorado County, CA

September 2020 – Present

This program is a series of projects identified by CAL FIRE, the U.S. Forest Service, El Dorado Resource Conservation District, and the Georgetown Divide Resource Conservation District, developed to strengthen and expand existing fuel breaks along the Highway 50 corridor and within El Dorado National Forest. The project will conduct vegetation treatments designed to interrupt potential wildfire behavior by reducing the rate of spread and intensity of fire. Sequoia is providing environmental consulting services to ensure Project compliance with all Federal, State, and local regulations and project permits; including but not limited CEQA/NEPA compliance. As Project Manager on the project, Grace's responsibilities include:

- Coordinating a team of biologists, botanists, foresters, archeologists, and CEQA specialists to conduct and synthesize data from resource surveys for project development and planning
- Preparing a work plan for the project for agency review
- Coordinating meetings and taking meeting notes for all involved parties
- Using ArcGIS to map project areas and nearby sensitive resources

PG&E Vegetation Management Program; Various Locations, CA

November 2015 – May 2017

In her various roles as field biologist, assistant project manager, writer, fieldwork coordinator, and riparian review specialist, Ms. Mannell worked on vegetation removal projects on various agency lands, including the Federal Energy Regulatory Commission (FERC), Golden Gate National Recreation Area, Point Reyes National Seashore, the East Bay Municipal Utility District (EBMUD), various county coastal zones, and the U.S. Forest Service (USFS). Her responsibilities on these projects included:

- Conducting nesting bird surveys and reviewing riparian records through the PG&E Incident tracking system (ITS)
- Conducting species surveys, habitat analyses, and construction monitoring for vegetation removal projects throughout California. Focal species included California red-legged frog, California tiger salamander, Alameda whipsnake, San Francisco garter snake, burrowing owl, bank swallow, Swainson's hawk, white-tailed kite, northern spotted owl, California spotted owl, marbled murrelet, California black rail, Ridgway's rail, southwestern willow flycatcher, Point Arena mountain beaver, salt-marsh harvest mouse, San Francisco dusky-footed woodrat, California freshwater shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp

Andrew Ford, Certified Consulting Botanist

Staff Botanist / Staff Wildlife Biologist

Andrew Ford has 11 years of experience in Wildlife Conservation and Management, where he has performed extensive rare plant surveys; herpetofaunal identification and surveys; birds, mammals, waterfowl, raptor, and songbird surveys; point counts; and banding; and small mammal trapping. Mr. Ford specializes in performing rare plant surveys, vegetation surveys, and floristic mapping, and he applies his ArcGIS skills to produce professional maps that document the results of these investigations. He has performed rare plant surveys for many species including: Diablo helianthella, Mt. Diablo fairy lantern, Monterey spineflower, Monterey gilia, canyon clarkia, Brewer's western flax, Mason's lilaeopsis, and big tarplant. Over the course of his work, Mr. Ford regularly performs California Natural Diversity Database (CNDDB) searches to determine presence of rare plants. Andrew is a USFWS Section 10(a)(1)(A) Recovery Permit holder for California red-legged frog and California tiger salamander.

Mr. Ford's project experience includes handling, banding, and locating nests for multiple species of waterfowl, and handling and monitoring for numerous special-status species, including burrowing owl, Swainson's hawk, Ridgway's rail, black rail, golden eagle, giant garter snake, California tiger salamander, California red-legged frog, and western pond turtle. He has also conducted hundreds of nesting bird surveys and completed hundreds of hours of nesting bird monitoring. Andrew is a USFWS/CDFW-approved biologist for California red-legged frog, California tiger salamander, giant garter snake, and Swainson's hawk. Mr. Ford recently participated in a USGS demographic study, during which he trapped and handled 10 giant garter snakes in the Central Valley of California and accumulated 45+ survey hours.

Representative Experience

North Orinda Shaded Fuel Break, Lafayette and Orinda, CA

June 2019 – December 2019

The Moraga-Orinda Fire District received a grant to create a shaded fuel break on 1,429 acres across 19.3 miles of land in the East Bay hills. Mr. Ford was responsible for:

- Monitoring fuels reduction work including low-impact hand work and high-risk mastication
- Found one population of Michael's rein orchid (CNPS 4.2) during surveys
- Facilitating Environmental Training for all new crew members with emphasis on sensitive species and decontamination methods to stop the spread of sudden oak death and other *Phytophthora* species



Areas of Specialty

- *Focused Species Surveys*
- *Construction Monitoring*
- *Vegetation Surveys*
- *Rare Plant Surveys*
- *Floristic Mapping*

Education

- *B.S. Wildlife Conservation and Management, Humboldt State University*

Training & Certifications

- *Certified Consulting Botanist*
- *OSHA-HAZWOPER certified (40-hour training and 8-hour refresher (2016, 2017, 2018))*
- *Botanical and Rare Plant Identification*
- *Rare Pond Species Workshop (March 2018)*
- *Identification of Mammal Track, Sign, and Capture (August 2016)*
- *Amphibians of the Bay Area Workshop (November 2016)*
- *Alameda whipsnake training (Sequoia Ecological Consulting, Inc.; compiled by Mandy Murphy)*
- *Pallid Manzanita: Individual Identification, Ecology and Habitat Preferences (Sequoia Ecological Consulting)*

Professional Affiliations

- *California Native Plant Society*
- *USGS*

- Performing pre-construction surveys for special status species including Alameda whipsnake, California red-legged frog, San Francisco dusky-footed woodrat, western pond turtle, Diablo helianthella, western leatherwood, Santa Cruz tarplant, bent-flowered fiddleneck, and Oregon meconella
- Assessing habitat quality for Alameda whipsnake and California red-legged frog
- Conducting nesting bird surveys
- Establishing and maintaining nest buffers for San Francisco dusky-footed woodrat
- Documenting baseline vegetation condition and cover prior to and following fuels treatment
- Providing additional services as needed for implementation of Avoidance and Minimization Measures during fuels treatment activities
- Annual reporting, managing schedules, and ensuring that biologists were present as needed

East Bay Regional Park District Fuel Reduction Project; Alameda and Contra Costa Counties, CA
2018 - Present

In support of the East Bay Regional Park District's fuels reduction program, Mr. Ford supported removal crews at numerous East Bay park locations, and was responsible for:

- Surveying the entire work area for Alameda whipsnake, California red-legged frog, San Francisco dusky-footed woodrat, western leatherwood, pallid manzanita, and nesting birds
- Monitoring tree removal and mastication work
- Performing botanical inventories for the project site for crew avoidance
- Providing pre- and post-assessment surveys and ground truthing habitat types in the work areas
- Surveying tree species and documenting occurrences of all animal species
- Monitoring vegetation removal and mastication efforts and helped crews avoid core scrub habitat and other habitat associated with Alameda whipsnake
- Providing pre-construction assessments of the work site
- Surveying for California red-legged frog during night time eyeshine surveys

El Dorado Resource Conservation District Fire Adapted 50 Phase 1B Wildland Fire Protection Program; El Dorado County, CA
September 2020 - Present

This program is a series of projects identified by CAL FIRE, the US Forest Service, the El Dorado Resource Conservation District (RCD), and the Georgetown Divide RCD, developed to strengthen and expand existing fuel breaks along the Highway 50 corridor and within El Dorado National Forest. The project will conduct vegetation treatments designed to interrupt potential wildfire behavior by reducing the rate of spread and intensity of fire. Sequoia is providing environmental consulting services to ensure project compliance with all federal, state, and local regulations and project permits, including California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA) compliance. As a staff biologist on the project, Mr. Ford's responsibilities include:

- Observing the site for special-status plants and marking off Sierran lava cap locations
- Surveying more than 20 units for vegetation removal
- Assisting in a habitat assessment
- Working with foresters and RCD staff to assess special habitat types, spotted owl habitat, riparian zones and water bodies, and other vegetation types

- Performing special status plant surveys in special marked habitats for special status plants
- Providing guidance for CEQA documents and exemptions

San Mateo County Parks Department Botanical Surveys for High Priority Fuels Reduction Project at Huddart and Wunderlich Parks; San Mateo County, CA

June 2020 and February 2021

As a botanist supporting the San Mateo County Parks Department's fuels reduction projects in Huddart and Wunderlich County Parks, Mr. Ford's responsibilities included:

- Performing protocol-level special-status plant surveys in both parks during times of the year when species would be most easily identifiable (species found included Anderson's manzanita and King's Mountain manzanita)
- Writing a full report documenting findings on-site

Kings Mountain Road Fuels Reduction Project at Huddart County Park; San Mateo County, CA

June-August 2019

As a staff botanist for this CAL FIRE project, Mr. Ford conducted target special status plant surveys for a fuels removal project in Huddart Park. As part of his work he:

- Performed target rare plant surveys for King's Mountain manzanita for a fuels reduction project requested by San Mateo County Parks and CalFire (Surveys occurred in June and August 2019)
- Surveyed previously flagged manzanita groves for special status manzanita species. Flagged all manzanitas onsite for avoidance
- Provided documentation to San Mateo County Parks and CalFire for the locations for manzanita species

ET-ARM Ignacio-Bolinas #1 60 kV Tower Vegetation Removal Project; Marin County, CA

October 2018-November 2018

During his time as a staff biologist/botanist on this project, Mr. Ford's responsibilities included:

- Flagged populations of previously located rare plants for avoidance during vegetation removal activities around PG&E towers
- Used pin flags and flagging tape to mark the perimeter of the populations and advised crew to avoid these areas
- Filled out a PG&E impact report for the areas that were disturbed for potential California red-legged frog habitat. Species Found included the Tamalpais manzanita, Tiburon buckwheat, and Tamalpais lessingia

Julie Woodruff, M.S.

Project Biologist

Julie Woodruff is a biologist, herpetologist, and avian ecologist with over eleven years of experience working with a variety of special-status species, including yellow-billed cuckoo, California and northern spotted owl, northern goshawk, tri-colored blackbird, foothill yellow-legged frog, Sierra Nevada yellow-legged frog, California red-legged frog, and California tiger salamander. She has managed and coordinated many of Sequoia's wildfire mitigation support efforts. She has also worked as a contractor-supplied biologist and Lead Environmental Investigator (LEI) at active construction sites, providing environmental training and monitoring to avoid sensitive species and their habitats, and has contributed to a range of technical documents and reports, including Biological Opinions and Assessments and Natural Environmental Surveys. Ms. Woodruff has also used sub-meter GPS units for wetland delineations and stream mapping. Additionally, Ms. Woodruff trained and managed 8 field assistants for her MS thesis fieldwork conducting radio-telemetry and vegetation surveys, and has lead recent field efforts for spotted owl and burrowing owl surveys, and coordinating pond sampling survey efforts on a private ranch.

Ms. Woodruff has monitored for numerous sensitive species, including salt marsh harvest mouse, California black rail, Ridgway's rail, California red-legged frog, burrowing owl, dusky-footed woodrat, and nesting birds. Additionally, she holds a US Fish and Wildlife Service (USFWS) 10(a)(1)(A) recovery permit (#TE-71409C-0), for California red-legged frog, California tiger salamander, and Sierra Nevada yellow-legged frog, and a California Department of Fish and Wildlife (CDFW) MOU (SC-013782) for foothill yellow-legged frog, California tiger salamander, and Sierra Nevada yellow-legged frog. Ms. Woodruff is a USGS Master Bander (USGS-24106), permitted to band burrowing owl, western screech owl, and northern saw-whet owls. Her handling experience includes the following listed species:

- California red-legged frog: 30+ adult and 500+ larval individuals; 95+ hours positive survey experience
- California tiger salamander: 120 sub-adult and adult and 100+ larval individuals; 220+ hours survey experience
- Foothill yellow-legged frog: 500+ larval and 20+ adult individuals; 150+ hours survey experience
- Sierra Nevada yellow-legged frog: 5 larval and 15+ adult individuals; 150 hours survey experience
- Burrowing owl: 58 individuals



Areas of Specialty

- USFWS 10(a)(1)(A) Recovery Permit for California Tiger Salamander, **California red-legged frog**, and Sierra Nevada Yellow-legged Frog
- CDFW-MOUs for Foothill Yellow-legged Frog, California Tiger Salamander, Sierra Nevada Yellow-legged Frog
- Construction Monitoring
- Vegetation Surveys
- Nesting Bird Surveys
- Raptor and Waterfowl Surveys
- Amphibian Surveys
- Bird Banding

Education

- M.S., Biological Sciences, California State University, Chico
- B.S., Biological Sciences, California State University, Chico

Training

- Amphibians of the San Francisco Bay Area (Laguna de Santa Rosa Foundation, 2014)
- Biology and Management of the **California red-legged frog** (Alameda County Conservation Partnership, 2015)
- Bird Banding Workshop (Klamath Bird Observatory, 2017)
- Wilderness First Aid and CPR (USDA Forest Service-Sierra Rescue International, 2017)
- **Alameda whipsnake** Training (M. Murphy/Sequoia, 2018)
- **Pallid manzanita**: Identification, Ecology and Habitat Preferences (Sequoia, 2018)
- California Ridgway's and California Black Rail Training (J. Evens/Sequoia, 2018)
- Rare Shoreline Species (The Wildlife Society/EBRPD, 2019)
- UC Davis CEQA Basics Workshop 2020

Representative Experience

East Bay Regional Park District Fuels Reduction Project; Alameda and Contra Costa Counties, CA December 2017 - Present

Ms. Woodruff has provided support for fuels management projects throughout the Bay Area in several East Bay Regional Parks. Some of these tasks included:

- Providing project field coordination and backup support, including of review of Daily Monitoring Reports, coordination with Parks Fuels Coordinators, and submittal of deliverables to Parks
- Surveying, monitoring, and conducting environmental training for special-status species, including California red-legged frog, San Francisco dusky-footed woodrat, California tiger salamander, Alameda whipsnake, pallid manzanita, and western leatherwood
- Assessing habitat quality for Alameda whipsnake
- Documenting baseline vegetation condition and cover prior to and following fuels treatments
- Performing nesting bird surveys in advance of fuels treatments
- Providing biological monitoring services as needed for implementation of AMMs during fuels treatment activities

North Orinda Shaded Fuel Break, Lafayette and Orinda, CA June 2019 – December 2019

The Moraga-Orinda Fire District received a grant to create a shaded fuel break on 1,429 acres across 19.3 miles of land in the East Bay hills. As the primary project manager for the biology portion of the North Orinda Shaded Fuel Break, Grace was responsible for:

- Direct consultation with agencies, public interests, and landowners including California Department of Fish and Wildlife (CDFW), East Bay Regional Parks District (EBRPD), East Bay Municipal Utility District (EBMUD), Audobon society, California native plant society (CNPS), Sierra Club, the Diablo Firesafe council, Friends of Wagner Ranch, and private property owners.
- Implementation of Environmental Training for all new crew members with emphasis on sensitive species and decontamination methods to stop the spread of sudden oak death and other *Phytophthora* species
- Performing pre-construction surveys for special status species including Alameda whipsnake, California red-legged frog, San Francisco dusky-footed woodrat, western pond turtle, Diablo helianthella, western leatherwood, Santa Cruz tarplant, bent-flowered fiddleneck, and Oregon meconella
- Assessing habitat quality for Alameda whipsnake and California red-legged frog
- Conducting nesting bird surveys
- Establishing and maintaining nest buffers for San Francisco dusky-footed woodrat
- Monitoring fuels reduction work including low-impact hand work and high-risk mastication
- Documenting baseline vegetation condition and cover prior to and following fuels treatment
- Providing additional services as needed for implementation of Avoidance and Minimization Measures during fuels treatment activities

San Mateo County Parks Rare Plant Surveys Huddart and Wunderlich County Park Fuel Reduction Projects, San Mateo Co., CA

May 2020 - Present

Under contract with San Mateo County Parks District, Sequoia is providing support by conducting rare plant surveys for an upcoming fuels reduction project in two San Mateo County parks. Ms. Woodruff was the project coordinator supporting this project. Duties included:

- Coordinating field work between San Mateo County Parks staff and Sequoia staff
- Ensuring daily deliverables and safety documentation were collected
- Oversight of project budget
- Providing additional desktop support to in-field biologists
- Submission and quality assurance of field results

Sugarloaf Ridge State Park Post-Wildfire Northern Spotted Owl Surveys; Santa Rosa, CA

April 2018 - October 2018

Following the October 2017 wildfires, northern spotted owl surveys were requested at Sugarloaf Ridge State Park to document owl presence within the park during the 2018 field season. These surveys satisfied the USFWS 1-year protocol requirement. As the field lead on this project, Ms. Woodruff was responsible for:

- Conducting a desktop review of prior northern spotted owl territories and habitat within the park
- Mapping suitable habitat and placing survey points
- Conducting protocol-level northern spotted owl surveys
- Coordinating survey efforts
- Preparing the year-end survey report and submitting it to State Parks

Bothe-Napa State Park Northern Spotted Owl Survey; Calistoga, CA

September 2018

A fish barrier removal project to replace a blocked culvert is slated to occur within a known northern spotted owl territory. Ms. Woodruff performed a northern spotted owl survey in accordance with the USFWS Section 7 Consultation dated June 14, 2018 and satisfied the requirements of the project. Other tasks Ms. Woodruff was responsible for include:

- Conducting a northern spotted owl survey around the project footprint and a 100-foot buffer
- Preparing the survey report and submitting it to California State Parks

Stadtler Ranch Conservation Vetting, Merced County, CA

June 2019 - Present

A private landowner is considering utilizing his land as a conservation easement for mitigatory purposes. Sequoia is supporting this request by conducting habitat analysis and conducting protocol-level surveys for California red-legged frog, California tiger salamander, burrowing owl, and San Joaquin kit fox. Ms. Woodruff's role included:

- Acting as the field lead and coordinating field efforts for surveys
- Conducting USFWS and CDFW-approved surveys for California red-legged frog and California tiger salamander under her recovery permit
- Conducting protocol-level burrowing owl surveys and mapping suitable habitat
- Assessing habitat and camera-trapping for San Joaquin kit fox presence
- Observing in the field: 50+ adult California red-legged frogs, documenting California tiger salamander breeding in four of 12 ponds onsite, 3 burrowing owl nests, and an active American badger den with two juveniles present

Midpeninsula Regional Open Space District Bear Creek Redwood Preserve Biological Support; Los Gatos, CA

May 2018 - Present

Sequoia is assisting the Midpeninsula Regional Open Space District with their construction and maintenance projects at Bear Creek Redwood Preserve in preparation for opening the park for public use. Ms. Woodruff's responsibilities on this project include:

- Conducting environmental awareness trainings and biomonitoring for construction crews
- Monitoring construction crews for compliance with environmental commitments and avoidance and mitigation measures
- Surveying for California red-legged frog, Santa Cruz black salamander, Pacific giant salamander, western pond turtle, and San Francisco dusky-footed woodrat during work activities
- Preparing a Mitigation and Monitoring Plan and RWQCB 401 permit application for the Bear Creek Redwoods Phase II Trails project
- Mapping stream features with a sub-meter GPS

PG&E Community Pipeline Safety Initiative Program and Pipeline Replacement Projects; Various Locations, CA

April 2018 - Present

In support of PG&E's Community Pipeline Safety Initiative (CPSI), a state-wide gas line vegetation management program, and a variety of other pipeline replacement projects, Ms. Woodruff has been tasked with:

- Performing pre-construction clearance surveys and providing crew environmental trainings for burrowing owl, bank swallow, California red-legged frog, Bay checkerspot butterfly and host-species, California tiger salamander, San Francisco garter snake, Alameda whipsnake, least Bell's vireo, tri-colored blackbird Swainson's hawk, white-tailed kite, San Francisco dusky-footed woodrat, nesting birds, and other special status species
- Ensuring compliance with the Migratory Bird Treaty Act (MBTA)
- Performing construction monitoring during pipeline replacement activities
- Surveying for and identifying nesting behavior of passerines and raptors
- Conducting environmental training for crew members on nearby sensitive species and habitats
- Conducting small mammal burrow clearance with use of borescope
- Providing daily reporting and task management

Jessica Ma
Staff Biologist

Jessica Ma is a wildlife biologist with 9 years of professional experience in California. She has conducted habitat assessments and surveys for various special status species in Coastal mountain ranges, oak woodland, riparian, grassland, and wetland habitats. Ms. Ma has performed extensive habitat assessments, special-status species surveys, and biological monitoring in support of vegetation/fuels management efforts that involved a variety of treatment types. She regularly performs pre-clearance surveys and identifies and establishes avoidance buffers for sensitive biological resources, including riparian areas, active nests, potential denning locations, and roost habitat.

Most of Ms. Ma's experience is in surveying and monitoring for nesting birds and special-status species throughout central and northern California, and primarily in Sierra Nevada and Coastal mountain range, oak woodland, riparian, and wetland habitats. Her extensive experience in spotted owl work with the two subspecies in California is detailed below:

- **Northern spotted owl:**
 - Conducted 40+ hours of observation and protocol surveys with positive detections
 - Determined nesting status and reproductive success for all positive detections
 - Assisted with banding 1 adult and 2 juveniles
 - Assisted in the fitting of a tail-mounted radio tag
 - Provided pre-activity surveys and biological compliance monitoring for tree work near PACs
 - Performed visual habitat assessments, including potential roost site and pellet investigation and identification
- **California spotted owl:**
 - Spent two full seasons and five partial seasons conducting protocol surveys and full protected activity center (PAC) monitoring, with 2,000+ hours of observation and surveys with positive detections
 - Monitored 120+ PACs, 80 of which were occupied, and determined nesting status and reproductive success
 - Banded and assisted with banding 15+ individuals
 - Performed radio telemetry and assisted US Forest Service in tag retrieval
 - Provided pre-activity surveys and biological compliance monitoring for tree work near PACs
 - Performed visual habitat assessments, including potential roost site and pellet investigation and identification



Areas of Specialty

- *Special-status Species Surveys*
- *Nesting Bird Surveys*
- *Habitat Assessments*
- *Biological Compliance Monitoring*
- *Endangered Species Act Section 10 Native Threatened Species Recovery Permit for Mexican Spotted Owl (Permit Number: TE78625C-0)*

Education

- *B.S., Wildlife, Fish, & Conservation Biology, Specializing in Behavioral Ecology, University of California, Davis*

Training & Certifications

- *eDNA Training (Genidaqs, 2020)*
- *Alameda Whipsnake: Individual Identification, Ecology, and Habitat Preferences (Ricka Stoelting – Sequoia Ecological Consulting, 2020)*
- *Marin Manzanita Training (Transcon Environmental, 2019)*
- *Mexican Spotted Owl Surveyor Training - Utah, (USFWS/USFS, 2018)*
- *Mexican Spotted Owl Surveyor Training - Arizona, (USFWS, 2018)*
- *CPR/AED and First Aid (2018)*
- *Lake Tahoe Basin Invasive Weeds Workshop (Lake Tahoe Basin Weed Coordinating Group, 2018)*
- *Wilderness First Aid and CPR (2017)*
- *Mesocarnivore/Ringtail Workshop (D. Wyatt, 2017)*
- *Bloodborne Pathogens Training (2017)*
- *Giant Garter Snake Identification, Biology, and Trapping/Handling Methods (CDFW, 2016)*
- *California Tiger Salamander Workshop (UC Davis, 2010)*

Professional Affiliations

- *The Wildlife Society, Sacramento-Shasta Chapter*

Additionally, she has conducted protocol surveys for burrowing owl, bald eagle, California Ridgway's rail, Sandhill crane, waterfowl, shorebirds, San Joaquin kit fox, and foothill yellow-legged frog. Field observations include mountain beaver, golden eagle, tricolored blackbird, loggerhead shrike, California giant salamander, and California newt. Under the supervision of permitted individuals, she has handled the following listed species:

- Salt marsh harvest mouse (northern subspecies): 7 individuals
- Ringtail: 2 individuals
- Steller's sea lion: 1 individual
- Bald eagle: 4 individuals; 30+ hours positive survey experience
- Peregrine falcon: 7 individuals
- White-tailed kite: 2 individuals
- Northern harrier: 1 individual
- California red-legged frog: 3 adults
- California tiger salamander: 2 adults
- Foothill yellow-legged frog: 10+ adults and subadults
- Coast horned lizard: 7 adults
- Western pond turtle: 3 adults

In addition to providing biological expertise on projects, Ms. Ma is also skilled in data input, management, and analysis. She has worked with the California Natural Diversity Database (CNDDB) and has managed both inter-agency and internal databases.

Representative Experience

El Dorado Resource Conservation District, Fire Adapted 50 Phase 1B Wildland Fire Protection Program, El Dorado County, CA

September 2020 – Present

This program is a series of projects identified by CAL FIRE, the U.S. Forest Service (USFS), and El Dorado Resource Conservation District (RCD), developed to strengthen and expand existing fuel breaks along the Highway 50 corridor and within El Dorado National Forest. The project will conduct vegetation treatments designed to interrupt potential wildfire behavior by reducing the rate of spread and intensity of fire. Sequoia is providing environmental consulting services to ensure Project compliance with all Federal, State, and local regulations and project permits; including but not limited CEQA/NEPA compliance, Forestry Practice Rules, and Sierra Nevada Forest Plan. As the project's lead field biologist, Jessica performed the following tasks:

- Understanding project goals and design, regulatory framework, associated sensitive resources, and preparing a work plan to identify and describe specific resource protection methods for specific treatment units
- Working in close communication with the USFS, RCD, and consulting Registered Professional Foresters (RPFs) to prepare resource protection strategies for project implementation
- Preparing an environmental training for all project personnel
- Coordinating and scheduling all field efforts, including site visits, trainings, and biological surveys
- Conducting a site visit and desktop review to identify all sensitive resources and potential to occur in the different treatment units throughout the project area

East Bay Regional Park District Fuels Management Support; Alameda and Contra Costa Counties, CA

October 2019 – Present

Sequoia is assisting the East Bay Regional Park District with implementation of their Wildfire Hazard Reduction and Resource Management Plan (BO-81420-2010-F-0849-3, 1600-2016-0269-R3). Jessica has performed the following tasks at numerous sites throughout Alameda and Contra Costa Counties in support of a variety of fuels management treatments:

- Surveying and monitoring work for special-status species, including California red-legged frog, western pond turtle, San Francisco dusky-footed woodrat, California tiger salamander, Alameda whipsnake, pallid manzanita, and western leatherwood
- Providing biological monitoring services as needed for implementation of Avoidance and Minimization Measures during fuels treatment activities
- Performing a site walk with the fire department in preparation for a controlled burn

Moraga-Orinda Fire District North Orinda Shaded Fuel Break Project; Contra Costa County, CA
June 2019 - September 2019

The Moraga-Orinda Fire District received a grant to create a shaded fuel break on 1,500 acres of land in the East Bay hills. Ms. Ma supported this project by:

- Performing pre-construction surveys for special-status species, including Alameda whipsnake, California red-legged frog, and San Francisco dusky-footed woodrat
- Assessing habitat quality for Alameda whipsnake and California red-legged frog
- Conducting nesting bird surveys
- Monitoring fuels reduction work, including low-impact hand work
- Providing environmental crew training for sensitive species
- Documenting baseline vegetation condition and cover prior to and following fuels treatment
- Providing additional services as needed for implementation of Avoidance and Minimization Measures during fuels treatment activities

- Reviewing and compiling daily monitoring reports

San Francisco Public Utilities Commission Routine Vegetation Management Program; Marin and Alameda Counties, CA

March 2019 - June 2019

While Ms. Ma supported the San Francisco Public Utilities Commission (SFPUC) Routine Vegetation Management Program, her responsibilities included:

- Conducting Marin manzanita surveys and enforcing decontamination protocol at Point Reyes National Seashore
- Performing training, surveys, and monitoring for California red-legged frog, Alameda whipsnake, Monterey dusky-footed woodrat, San Francisco dusky-footed woodrat, foothill yellow-legged frog, and Sierra Nevada yellow-legged frog
- Conducting nesting bird surveys
- Coordinating with biologists, cultural monitors, and tree crews to determine trees to be cleared for work and schedule work accordingly
- Conducting environmental crew trainings on Avoidance and Minimization Measures under the Bay Area Habitat Conservation Plan
- Monitoring vegetation removal work and ensuring compliance with the Bay Area Habitat Conservation Plan and SFPUC requirements
- Documenting and reporting compliance concerns and issues

PG&E Accelerated Wildfire Rapid Response/Fuel Reduction Projects; Tuolumne and Madera Counties, CA

2018 – 2019

As a field biologist for wildfire rapid response/fuel reduction projects, Ms. Ma's duties included:

- Conducting environmental trainings for crews
- Spot-checking and monitoring work activities
- Assessing habitat for limestone salamander
- Providing recommendations on work near sensitive resources such as riparian areas
- Identifying, documenting, and reporting compliance issues

PG&E Vegetation Management Routine Maintenance Project and Incident Tracking System Nest Checks; Various Counties, CA

August 2015 – July 2019

While she supported this project, Ms. Ma was responsible for:

- Surveying for nesting migratory birds and raptors
- Routinely checking on potential raptor bird nests at specific span locations in residential areas to determine their status and activity

PG&E Vegetation Management Program: Bridgeville-Cottonwood 115kV Shasta-Trinity National Forest Emergency Project; Shasta, Trinity, and Tehama Counties, CA
January 2017 - August 2017

While she worked as the lead field biologist on this project, Ms. Ma's responsibilities included:

- Conducting nesting bird surveys, pre-clearance biological surveys, and biological and riparian compliance monitoring along the Bridgeville-Cottonwood transmission line, working under a USFS Emergency Permit
- Surveying for northern spotted owl, steelhead, and Chinook salmon throughout Critical Habitat
- Surveying for and tracking fisher, southern torrent salamander, foothill yellow-legged frog, western pond turtle, bald eagle, and listed snails
- Examining each hazard tree and work site to identify potential impacts during removal
- Working closely with contracted tree crews and providing recommendations for removal strategies
- Monitoring the removal of hundreds of tree and brush units
- Training other biologists on project details, surveying efforts, and deliverable reports and logs

PG&E Vegetation Management Program (Multiple Projects); Amador, Placer, Madera, Mariposa, Mendocino, El Dorado, San Joaquin, Yuba, Humboldt, Nevada, Sonoma, Napa, and Marin Counties, CA
2015 - 2019

In support of PG&E's electrical distribution and transmission line routine maintenance and facility protection, Ms. Ma served as a wildlife biologist. Ms. Ma responsibilities included:

- Conducting surveys for northern and California spotted owl, Swainson's hawk, great grey owl, bald eagle, white-tailed kite, nesting birds, California red-legged frog, Sierra Nevada and foothill yellow-legged frogs, and ringtail
- Performing pre-clearance biological surveys
- Conducting environmental training for crew members removing vegetation
- Monitoring vegetation removal and providing recommendations for removal strategies to avoid sensitive resources, such as riparian areas and nests
- Verifying reports and preparing memoranda regarding California Natural Diversity Database (CNDDDB) occurrences
- Identifying potential habitat for great grey owl both on-site and remotely

Sierra Pacific Industries Northern and California Spotted Owl Occupancy and Reproductive Dynamics Study; Plumas, Sierra, Nevada, Placer, El Dorado, Amador, and Calaveras Counties, CA
May 2014 – November 2015

- Performing protocol northern and California spotted owl broadcast surveys in the central Sierra Nevada to locate and establish protected activity centers (PACs) and nest locations
- Monitoring known owl PACs establish reproductive and nesting statuses
- Banding California spotted owl with USFWS bands and color bands
- Tracking and managing spotted owl band colors and combinations
- Fashioning spotted owl color bands, mousing equipment and housing
- Collecting dendrological data, including tree age, diameter at breast-height (DBH), and height of nest trees and dominant trees within the study plot
- Took slope, tree height, and canopy cover measurements using a clinometer and densiometer
- Measured abiotic factors and ground cover characteristics for nest habitat studies
- Inputting and managing data for internal databases, interagency databases, and the California Natural Diversity Database
- Preparing data for analysis

Private Ranch Conservation Vetting, Merced County, CA

July 2020

A private landowner is considering utilizing his land as a conservation easement for mitigatory purposes. Sequoia is supporting this request by conducting habitat analysis and conducting protocol-level surveys for California red-legged frog, California tiger salamander, burrowing owl, and San Joaquin kit fox. Ms. Ma's responsibilities included:

- Conducting protocol-level burrowing owl surveys
- Assessing habitat and camera-trapping for San Joaquin kit fox presence
- Collecting eDNA samples to test for presence of CRLF and CTS in several selected ponds throughout the property

PG&E Community Pipeline Safety Initiative; Tehama, Yolo, and Sacramento Counties, CA

March 2018 - present

In support of PG&E's Community Pipeline Safety Initiative (CPSI), a state-wide gas line vegetation management program, Ms. Ma has been tasked with:

- Conducting nesting bird surveys and biological monitoring for sensitive species and resources
- Performing pre-construction clearance surveys and providing crew environmental training for California red-legged frog, California tiger salamander, San Francisco garter snake, Alameda whipsnake, burrowing owl, Swainson's hawk, white-tailed kite, San Francisco dusky-footed woodrat, ringtail, nesting birds, and other species
- Ensuring compliance with the Migratory Bird Treaty Act (MBTA)
- Working directly with foresters and crews to identify sensitive resources prior to vegetation trimming and removal

Bradford K. Gallup

Expertise

- Wildland fuels assessments and site treatment recommendations.
- Vegetation management project planning and implementation.
- Development of fuels prescriptions in the wildland urban interface.
- Fuels management program organization and funding strategies.
- Wildfire hazard mitigation grant scoping.

Education

- Master of Science in Forestry, UC Berkeley, California. Geographic Information Systems and remote sensing. Forest type classifications using satellite imagery.
- Bachelor of Science in Forestry, Pennsylvania State University, University Park, Pennsylvania. Forest practices, ecology, and natural resource management.

Brad Gallup has 26 years of experience in wildland fire and fuels management. He recently served as the Assistant Fire Chief and director of the fuels management program for the East Bay Regional Park District in Oakland, California. He provided technical oversight and planning for 1,000 acres of fuels treatments each year, managed a \$3.5M annual budget, and led a team of twelve staff members conducting vegetation management. He has implemented several large fuel reduction projects in a variety of habitat types, led the District's prescribed fire program, and is experienced and well-versed in wildland firefighting strategies and tactics. He has coordinated and supervised fuels and fire crews, conservation crews, and vegetation and tree removal contractors.

Mr. Gallup has been the project manager for several FEMA and CALFIRE pre-disaster and fire mitigation grants on over 60 different sites in 10 parks. He drafted the original scope of work, wrote detailed plans and fuels prescriptions, performed fuels assessments, prepared RFPs, selected and hired contractors, administered the contracts, managed budgets, coordinated with biologists, and prepared final reports. He has successfully converted several hundred acres of dense eucalyptus, pine, and brush stands to shaded fuel breaks characterized by healthy native woodlands and brush habitat. Many of his projects were located along strategic ridgeline fuel breaks in the East Bay Hills wildland-urban interface and on steep slopes and close to homes, facilities, and major commute corridors.

Mr. Gallup helped lead and organize the fire department's fuels program from its beginning in 2003, developing protocols and systems to streamline contracting and fuels assessment procedures, and recruiting the entire fuels team. He has undergraduate and graduate degrees in forestry and an extensive background in GIS and remote sensing. He has studied wildland fire behavior during course work and live fire experiences. He designed and led fuels management training classes for inhouse staff and a seminar about assessing, prioritizing, and implementing fuel reduction projects.

Mr. Gallup has led several fuel break tours for FEMA representatives, CALFIRE chiefs, members of the Park District board of directors, and public officials. He has presented for the Northern California Prescribed Fire Council, the Society of American Foresters, the California-Nevada-Hawaii Forest Fire Conference, El Cerrito Community Fire Meeting, Oakland Wildfire Prevention Assessment District, Berkeley Fire Department Vegetation Management Forum, numerous other public meetings and associations, and 25+ East Bay Regional Park District board and committee meetings. He served on the Diablo Fire Safe Council board for three years and has been an active participant of the Hills Emergency Forum.

Mr. Gallup is passionate about working within a team to create effective, natural, and resilient wildland fuel breaks to protect lives, homes, and natural resources.

PROFESSIONAL EXPERIENCE

Assistant Fire Chief, East Bay Regional Park District, 2018-2020

The Park District's Fire Department plans and implements the fuels management program according to the Wildfire Hazard Reduction and Resource Management Plan. Over 1,000 acres of wildland fuels are treated each year in the wildland-urban interface of the East Bay Hills. Mr. Gallup's primary responsibility was to direct this program and lead the team. His contributions included:

- Drafting and presenting the fire department's re-organization plan, which was used as a basis for creating, funding, and filling ten new positions within the department to assist with fuel reduction efforts.
- Recruiting the entire team of twelve staff: two fire/fuels captains, two fuels reduction coordinators, and eight fuels crew members.
- Preparing annual workplans that include descriptions, budgets, scheduling, and work force selection for 75 projects in 10 different parks.
- Managing an annual budget of \$3.5M for staffing, equipment, crews, and contractors.
- Drafting scope of work to help the Park District secure \$1.6M of fuel reduction grant funding.
- Upholding the core tenets of the program: reducing fire hazard, enhancing resource values, ensuring aesthetic quality, and maintaining long lasting resiliency.
- Presenting the annual work plan and program updates to the Park District board of directors.
- Representing the Park District at public community events and recurring agency cooperator meetings.
- Leading fuel break tours for several public officials, including Oakland Mayor Libby Shaaf, Assemblywoman Buffy Wicks, and U.S. Senator Kamala Harris.

Fire/Fuels Captain, East Bay Regional Park District, 2005-2017

Mr. Gallup was promoted from firefighter in 2005 and served as the department's first fire/fuels captain, during the initial development of the Park District's fuels management program. His responsibilities included:

- Preparing fuels management prescriptions and plans, assessing fuel loading and site conditions, and inventorying invasive plant populations on several fuel reduction project sites.
- Drafting RFPs and specifications for large scale tree and brush removal contracts, leading bid walks and evaluating proposals, laying out and mapping skid trails, installing erosion control measures, administering contracts, inspecting/monitoring work progress, and performing post-treatment assessments.
- Leading and completing the Park District's first two FEMA fire hazard mitigation grants by scoping and implementing 50+ projects and preparing final reports.
- Coordinating with staff and consulting biologists to ensure sensitive plant and animal species were protected and sites were converted to recommended habitats through appropriate best management practices.
- Leading the Park District's prescribed fire program and preparing smoke management plans, coordinating with multiple agencies, and serving as incident commander on 50+ control burns.
- Using ESRI's ArcGis software to create fuels treatment layers and produce maps.
- Responding as engine company officer and incident commander on several wildland fires each year.
- Supervising youth crews, such as the California Conservation Corps to conduct brush and ladder fuel reduction projects throughout many project areas in the East Bay Hills.
- Supervising firefighters in creating and burning piles on steep slopes and near homes within the wildland-urban interface.

Firefighter, various positions, 1995-2005

Mr. Gallup has been in various firefighter roles prior to promotion to fire captain. He was a forestry technician/firefighter with at Mendocino National Forest, an on-call firefighter for the Park District while his primary duty was the Park District's GIS Coordinator, and as a full-time firefighter/engineer at the Park District. His responsibilities included:

- Responding to wildland fires as part of an engine company.
- Participating in live fire training exercises.
- Serving on the Park District's helitack crew.
- Reducing wildland fuels with saws and hand tools.
- Constructing and burning piles.

PROJECTS

Anthony Chabot Campground Eucalyptus Removal, 2011-2018

Mr. Gallup was the Park District's project manager for implementation of a large-scale eucalyptus forest thinning operation surrounding a popular 140-acre family campground. He wrote the fuels management prescription including vegetation management goals, project objectives, fuels treatment recommendations, and resource protection measures. The prescription made recommendations for reducing fuel volumes and the intensity of wildland fires by thinning undesirable understory species through mastication and hand work. Planned mitigation for crown fire potential and ember dissemination involved selective thinning of the multi-aged eucalyptus forest and spacing of residual trees. Mr. Gallup designed and prepared the contract specifications and the RFP that was used to select the helicopter logging contractor. He divided the site into three units, each with distinct requirements for targeted removals, material disposal, and treatment timing based on camping use patterns. During the second year, a pair of bald eagles built a nest in a eucalyptus stand adjacent to the project site. Biologists observed eggs in the nest and recommended postponement of the project. Mr. Gallup helped develop a procedure to allow the project to continue while biologists monitored the nest until the eaglets had fledged.

Alameda Whipsnake Research Study Fuels Management Support, 2016-2018

Mr. Gallup designed and managed a wildland fuels treatment effort in support of FEMA-funded research for determining the effects of brush reduction on federally threatened Alameda whipsnakes (AWS). He prepared maps and specific fuel reduction goals for each of the 60 trapline sites and coordinated with Oakland's Civicorps young-adult program to schedule crews to perform the work over a three-year period, with spring trappings between treatments. He coordinated with USFWS-approved biologists to ensure treatments were conducted at the appropriate time of year and per protocol to minimize potential for accidental AWS take. The results of the study show that fuels treatments enhance the quality of AWS habitat.

Consulting Projects, 1988-present

Mr. Gallup has provided the following consulting services related to forestry, fire/fuels, GIS, and natural resource mapping:

- Wildland Resource Management – Developed weather station data extraction procedure to help develop inputs for fire behavior modeling.
- Ohlone Preserve – Created GIS listed species habitat layers and overlay analysis of Alameda whipsnake, California red-legged frog, and California tiger salamander for conservation land bank.
- Lawrence Berkeley National Laboratory – Developed GIS suitability maps for future development; compiled fire response, geophysical, environmental, utility, and infrastructure layers; prepared wall map of Lab for emergency response center.
- Pacific Gas & Electric – Produced commercial forest land timber-type maps; developed GPS-based field mapping process for canal feature data collection.
- Albany Hill - Partnered with landscape architect to map management units in the city of Albany's wildland-urban interface and write recommended action plans.

Tilden Park Wildfire Hazard Reduction, 2012-2020

Mr. Gallup was the lead for a multi-phased wildfire hazard reduction project across several sites near homes, ridgelines, and along a busy commute/evacuation route in Tilden Park in the East Bay Hills. He assessed hazards related to wildfires and falling trees along the public roadway and near park facilities and structures, using the East Bay photo series to help assess fuels conditions. He inventoried and marked for removal more than 1,000 pine, eucalyptus, and acacia trees, basing stem selection on the fuels management treatment prescriptions he prepared that included recommendations for thinning understory and overstory to encourage the future growth of the native hardwoods and minimize the spread of sudden oak death. He administered three separate contracts for tree removal and fuels treatments using climbers, cranes, excavators/skidlers, brush masticators, and feller-bunchers. He supervised firefighters, fuels crews, park rangers, CCC crews, and local young-adult crews from Civicorps to perform annual maintenance of the site after initial treatments were completed. The sites have been used as demonstration areas for fuel break tours that Mr. Gallup led for the Park District's general manager, board of directors, FEMA grant representatives, and various public officials.

Cassidy DeBaker

CURRENT POSITION

- 2018-Present *Principal Investigator/Historical Archaeologist.* Far Western Anthropological Research Group, Inc.
- 2018-Present *Project Manager.* Far Western Anthropological Research Group, Inc.

EDUCATION

- 2012 M.A. in Cultural Resources Management, Sonoma State University, Rohnert Park, California
- 2001 B.A. in Archaeology, University of Oregon, Eugene

PROFESSIONAL ORGANIZATIONS

- Society for California Archaeology
- Society for Historical Archaeology
- California Mission Foundation
- Register of Professional Archaeologists

PROFESSIONAL EXPERIENCE (SELECTED)

- 2019 *Principal Investigator.* Far Western. Cultural Resources Survey and Site Documentation within Whiskeytown National Recreation Area for PG&E's Carr Fire Emergency Response, Shasta County, California. Far Western conducted site assessments and site record updates within PG&E's asset corridor in the Whiskeytown National Recreation Area. DeBaker oversaw and co-authored the technical report and site record documentation for approximately 9 archaeological resources.
- 2019 *Principal Investigator.* Far Western. Cultural Resources Survey and Site Documentation within Plumas National Forest for PG&E's Camp Fire Emergency Response, Butte and Plumas Counties, California. DeBaker oversaw the archaeological data, survey efforts, and coordination with USFS and PG&E staff to ensure compliance with Section 106 of the National Historic Preservation Act. Far Western revisited over 50 archaeological sites and prepared site record updates and newly identified ten sites. The work is currently underway and a technical report will be prepared describing the results of the survey work and resource documentation.
- 2019 *Principal Investigator/Historical Archaeologist.* Far Western. Stockton Channel Viaduct Bridge Rehabilitation Project, San Joaquin County, California. DeBaker prepared the Archaeological Survey Report (ASR) as per Caltrans compliance and contributed to the Extended Phase I Testing Proposal. DeBaker, in coordination with JRP Historical Consulting, prepared the historic context and assessed the sensitivity of the project area for subsurface historic-era deposits. The ASR has been approved by Caltrans and the testing proposal and fieldwork are pending.
- 2019 *Project Manager/Principal Investigator.* Far Western. West Peak Restoration Project, Mount Tamalpais, Marin County, California. Far Western is a subconsultant to Aspen for archaeological resources and AB52 compliance. DeBaker is currently managing the project

and overseeing the review of background information and the identification and evaluation of archaeological and tribal resources to inform on-going CEQA compliance. Compliance tasks include consultation with the Federated Indians of Graton Rancheria, an archaeological survey, impacts analysis, assistance with identification of alternatives that could avoid a significant impact, and development or revision of mitigation planning for historic properties within the study area. This work is currently underway.

- 2018-2019 *Principal Investigator and Co-Author*. Far Western. Daryl Drive Storm Improvements Project, Orinda, Contra Costa County, California. Client: Harris & Associates for City of Orinda, California. Ms. DeBaker conducted a cultural resources constraints analysis for the Daryl Drive Storm Improvements Project in preparation of the construction of two new culverts at the Daryl Drive crossing and the removal of accumulated sediment from the drainage channel. This study included a literature review and records search, a buried sites sensitivity potential assessment, and pedestrian survey.
- 2018-2019 *Principal Investigator*. Far Western. 101-280 Managed Lanes Project, San Francisco and San Mateo Counties, California. Client: Circlepoint. Agency Review: San Francisco County Transportation Authority and San Mateo Transportation Authority. Preparation of an Archaeological Resources Preliminary Analysis Memorandum to assist in the development of a Preliminary Environmental Analysis Report. Ms. DeBaker assisted in preliminary analysis of archaeological sensitivity based on a records search, in-house literature review, and a geoarchaeological buried and submerged site sensitivity assessment.
- 2018-2019 *Principal Investigator*. Far Western. Chalk Hill Road Bridge, Sonoma County, California. Client: WRA Environmental Consultants, Inc. Agency Review: California Department of Transportation, District 4. Refit of the Chalk Hill Road Bridge over Maacama Creek as a pedestrian and bike bridge and construction of a new vehicular bridge upstream that meets modern seismic and safety standards. Ms. DeBaker will prepare an Archaeological Survey Report (ASR), Historic Properties Survey Report and Historic Resources Evaluation Report to fulfill Section 106 requirements.
- 2008-2018 *Senior Archaeologist and Project Manager*. Garcia and Associates, San Rafael, California.
- DeBaker was responsible for the managing cultural resources planning projects and investigations throughout California, for compliance with Section 106 of the NHPA, NEPA, and CEQA. DeBaker conducted, coordinated, and managed both small and large scale, technically complex cultural resources projects requiring regulatory expertise and the ability to collaborate with project managers, subconsultants, Native American tribal representatives, clients, agencies, and SHPO.
- 2017-2018 *Principal Investigator*. Garcia and Associates. Tubbs, Nuns, and Pocket Fire- PG&E's Archaeological Site Impact Assessment, Emergency Fire Response, Sonoma and Napa Counties, California. DeBaker oversaw the cultural resources efforts to ensure compliance with PG&E requests to avoid and minimize impacts to cultural resources during restoration activities. DeBaker oversaw several months of monitoring and field survey that required daily communication with the client, tribal groups, and archaeological monitors. This project required the review of an intensive level records search as the Northwest Information Center, the assessment of impacts to resources within the PG&E assets corridor, the establishment of environmentally sensitive areas, and detailed site updates, including the preparation of DPR forms and maps.
- 2016 *Principal Investigator*. Garcia and Associates. Documenting the Alice Eastwood Campsites, Van Wyck Campsites, and Pantoll Refuse Dump, Mount Tamalpais State Park, Marin County. Client: California State Park. In 2016, three historic-era sites were studied

that reflect the history of land use and park management by the Tamalpais Conservation Corps, the California Conservation Corps, and California State Parks. From scenic railroads and inns to hiking trails and campgrounds, DeBaker and team recorded and evaluated the historic-era sites.

- 2015 *Principal Investigator.* Garcia and Associates. Cultural Resources Management Report for the Redwood Creek Trail Improvement Project, Marin County, California. Client: Golden Gate Parks Conservancy. A Cultural Resources Inventory and Evaluation Report was prepared and a large-scale recording effort to document the Ponte Dairy Ranch archaeological remains, including a household refuse deposit dating to the 1940s which was documented along the existing trail. This study represented the first archaeological excavation at a dairy ranch in Southern Marin.
- 2015 *Senior Archaeologist.* Garcia and Associates. Cultural Resources Management Report for the Union Valley Reservoir Bike Trail Extension Project, El Dorado County, California. Client: EN2 on behalf of SMUD. DeBaker prepared a Section 106 Cultural Resources Management Report at the request of EN2 for the final trail route for the Union Valley Reservoir Bike Trail Extension Project. The Project is located on properties, which are owned by SMUD and ENF. This Project was completed in compliance with Section 106 of the NHPA and its implementing regulations, 36 CFR 800. The study included the methods and results of the literature review, pedestrian survey, records search, and consultation ENF archaeologist. Resources were recorded adjacent to the Area of Potential Effects (APE). DeBaker developed protection measures in accordance with the UARP Historic Property Management Plan (HPMP) to ensure the avoidance of these resources during project construction and submitted a Cultural Resources Management Report and prepared Department of Parks and Recreation forms (DPR 523).
- 2011-2016 *Senior Archaeologist.* Garcia and Associates. Sonoma Marin Area Rail Transit (SMART) Project, Sonoma and Marin Counties. Prepared archaeological and architectural inventory report and the Supplemental Environmental Impact Report for CEQA compliance. Compliance with NEPA and Section 106 is currently underway for the entire 70-mile project alignment, which involves extensive involvement with the Federated Indians of the Graton Rancheria, SHPO, and analysis of archaeological and architectural sites throughout the corridor, as well as sensitivity for the presence of additional sites. Section 106 compliance conducting inventory and evaluation reports for various portions subject to United States Army Corps of Engineers permitting and developing complex and mitigation for adverse effects to NRHP eligible historic properties. DeBaker participated in test excavations at CA-SON-2152, a prehistoric archaeological site, in order to complete identification of historic properties within the Area of Potential Effects as per 36 CFR 800.4 and to assess the effects of the project on the site. DeBaker oversaw the three-year monitoring program, including the submittal of multiple technical reports.
- 2013-2018 *Senior Archaeologist.* Garcia and Associates. Tolay Lake Regional Park Master Plan, Petaluma, Sonoma County, CA. Prepared the cultural resources section of the Master Plan for this Sonoma County Regional Park. This work consisted of meetings with the Park personnel, tribal representatives from the Federated Indians of the Graton Rancheria (FIGR), and other Master Plan technical experts. This work required a strong understanding of the diverse and abundant documented archaeological resources, and close coordination with Park staff and members of FIGR sacred sites committee.

Michael Ratte

Senior Air Quality Scientist, Environmental Services

Michael Ratte is a Senior Air Quality Scientist at RCH Group. Mike has been a practicing meteorologist and air quality specialist within the consulting business for over 30 years. Mike's technical expertise includes CEQA/NEPA environmental planning, air emissions inventories, ambient air monitoring, atmospheric dispersion modeling, General Conformity determinations, CO/PM roadway intersection hot-spot analysis, air quality permitting, health risk assessments, and climate change analyses. Mike is well versed in a wide array of air emission models including, EMFAC, OFFROAD, NONROAD, MOVES, CALEEMod, and AP-42; dispersion models such as AERMOD, CAL2QHC, EDMS/AEDT, and HARP; with strong data management and ACCESS programming skills. Mike has worked extensively for local, state, and federal agencies, as well as a wide array of commercial businesses and industries. His recent projects involved transportation facilities (airports, roadways, and marine ports), land development (residential/commercial/institutional), landfills, and quarry operations.

CEQA/NEPA Project Experience

- **Energy/Transmission CEQA/NEPA documents:** Bureau of Land Management Gemini Solar EIS, California Public Utilities Commission Bakersfield Power Connect 230 kV Project, California Public Utilities Commission Fulton-Fitch Mountain Reconductoring Project, California Public Utilities Commission Riverside Transmission Reliability Project, Eagle Mountain Pumped Storage Hydroelectric EIR/EIS, SDG&E TL 695, TL 6971 Reconductoring Project, Santa Paula Battery Energy Storage System IS/MND
- **Restoration/Recreational CEQA/NEPA documents:** Alameda Creek North Levee Improvements IS/MND, Bay Point Restoration and Public Access IS/MND, Lower Berryessa Creek EIR, Lower Yolo Restoration EIR, Black Diamond Mines Regional Preserve Land Use Plan Amendment EIR, Inglewood Transit Connector EIR, Irwindale Kincaid Pit IS/MND, Marin Municipal Water District Biodiversity Fire and Fuels Integrated Plan EIR, Midpeninsula Regional Open Space District Wildland Fire Resiliency Program, Moss Landing Desalination Plant EIR, Oasis Area Irrigation System Expansion EIR, Phillips 66 Oil Spill Remediation IS/MND, Putah Creek Restoration Project IS/MND, Reclamation District 2091 Levee Repair EA, Rockville Trails Preserve IS/MND
- **Quarrying/Mining CEQA/NEPA documents:** Irwindale Kincaid Pit IS/MND, Olive Pit Mine EIR, Permanente Quarry Reclamation Plan Amendment EIR, Pilarcitos Quarry Expansion EIR, R&J Aggregate Mine EIR, Roblar Road Quarry EIR, San Rafael Rock Quarry EIR, Vernalis Quarry EIR, Ward Lake Pit EIR
- **Residential/Commercial/Educational Development CEQA/NEPA documents:** American Canyon Green Road Wine Warehouse IS/MND, American Canyon Middle School EIR, Bayview Residential EIR, Belmont 2 Davis Drive, Belmont 815 Old County Road Townhouses, Belmont Hill Street Townhouses, Blythe Green Complex (Cannabis Cultivation) IS/MND, Blythe Palo Verde (Cannabis Distribution) IS/MND, Brisbane Baylands EIR, Broadway Plaza EIR, Campbell Residences at Railway IS/MND, Campbell Pruneyard Shopping Center, Campbell South Winchester Apartments, Centennial Towers IS/MND, Centennial Hotel IS/MND, Central Amador Water Pioneer Water Rehabilitation IS/MND, Crystal Springs Upland School IS/MND, Colfax Sierra Oaks Estates and Village Oaks Apartments IS/MND, Dutton Meadows Residential EIR Addendum, East Bay Regional Park District Public Safety Modernization IS/MND, First and Campbell Retail IS/MND,

Folsom Bidwell Pointe CEQA Exemption, Folsom Parkway Parcel A Apartment Complex IS/MND, Fox Studios Master Plan EIR, Gimbals Candies Expansion IS/MND, Inglewood Transit Connector EIR, Lafayette Town Center IS/MND, Lakeside Fire Station IS/MND, Life Sciences Campus IS/MND, Lincoln Northeast Quad Specific Plan, Linden Commuter Bus Facility IS/MND, Marin Alta Way Extension IS/MND, Masonic Homes Union City EIR, Morgan Knolls IS/MND, Napa Junction Elementary School EIR, Nevin Avenue Apartments IS/MND, Novato High School Expansion IS/MND, Park SFO IS/MND, Oak Knoll Mixed Use Community Plan EIR, Oakland T12 Office Tower, Port of Richmond Honda Port of Entry EIR, Port of Richmond Terminal 3 Log Export Facility IS/MND, Osgood Heights IS/MND, Richmond 830 Marina Way South (Bay Walk) IS/MND, Richmond Quarry Residential IS/MND, Richmond John Henry High School Peer Review, Richmond Parkway Commence Center IS/MND, Richmond South Shoreline Specific Plan HRA, Rocklin Sunset & Pacific IS/MND, San Marin High School Expansion IS/MND, Sea Ranch Fiber Optic Cable Project IS/MND, South San Francisco 127 West Harris Avenue Hotel IS/MND, South San Francisco 150 Airport Blvd IS/MND, Santa Clara 1525 Alviso Street IS/MND, South San Francisco 2117 Carlmont Drive IS/MND, South San Francisco 255 Cypress Avenue IS/MND, South San Francisco 418 Linden Ave IS/MND, South San Francisco 428 Baden Avenue IS/MND, South San Francisco 488 Linden Avenue IS/MND, South San Francisco 550 Gateway Blvd Hotel IS/MND, South San Francisco 699 Ralston Avenue IS/MND, Sunnyvale Atria on El Camino Real IS/MND, The Oaks Assisted Living EIR Addendum, Treasure Island EIR, UCSF Long Term Development Plan EIR, UCSF Research Building and Parking Garage Expansion EIR, Ukiah Walmart EIR, Union City Mid-Pen Housing IS/MND, Union City Seven Hills Florence Street Subdivision IS/MND, Westborough Shopping Center Redevelopment IS/MND, William Jenkins Medical Center CEQA Exemption

- **Material Recovery Facility/Transfer Station/Landfill CEQA/NEPA documents:** Fair Deal Waste Recycling and Transfer Station IS/MND, Forward Landfill Expansion EIR, Glenn County Landfill EIR, Irwindale Athens Services Materials Recovery Facility/Transfer Station EIR, Keller Canyon Landfill EIR, Milpitas Odor Assessment, San Luis Obispo Anaerobic Digester IS/MND, San Luis Obispo Anaerobic Digester Authority to Construct Permit, Sonoma Compost EIR, Ukiah Landfill Closure EIR
- **Airport CEQA/NEPA documents:** Baltimore International Airport Improvement Program EA, Baltimore International Airport Proposed Hotel EA, Burbank Airport Terminal Relocation EIR, Chicago O'Hare International Modernization Program EIS, Chicago O'Hare International 2015 Re-Evaluation EIS, Chicago O'Hare International Interim Fly Quiet Re-Evaluation EIS, Chicago O'Hare International Terminal Area Plan EA, Coronado Naval Air Station North Island Land Use Plan, East Hampton Airport Control Tower EA, Fresno Yosemite International Airport Runway Safety Area EA, Gooding (Idaho) Municipal Airport EA, Houston Hobby Airport International Service EA, Kaiser Air Oakland Airport North Field EIR, LaGuardia International Airport Runway Safety Area EA, Louis Armstrong New Orleans International Airport Terminal Relocation EA, Manchester-Boston Regional Airport Emission Inventory, March Inland Port General Aviation Development EA/EIR, Minneapolis-St. Paul International Airport 2020 Improvements EA, Nut Tree Airport Master Plan EIR, Oakland International Airport Runway Safety Area EA, Palm Springs International Airport Master Plan Update EA, Philadelphia International Airport Capacity Enhancement Program General Conformity Determination, Philadelphia International Airport Capacity Enhancement Program EIS, Portland International Airport Runway Extension EA, Providence Airport Runway Extension EIS, Riverside Airport Master Plan EA, Sacramento International Airport Terminal Expansion EIR, San Diego International Airport Master Plan EIR,

San Francisco International Airport Runway Safety Area EA, Santa Maria Airport Master Plan Update EA, Southern Nevada Supplemental Airport EIS

Education

1989 BS Meteorology, Lyndon State College – Lyndonville, Vermont

Professional Affiliations

- Member, Association of Environmental Professionals
- Member, Air and Waste Management Association

30 Years Consulting Experience

- TRC
- Radian/URS
- Environmental Science Associates
- KB Environmental Sciences

Dan Jones

Air Quality/Noise Technical Associate, Environmental Services

Dan Jones is an environmental professional with six years of experience in providing environmental services and products to government agencies and private sector corporations. Dan's technical areas of expertise include CEQA project management and document preparation and technical analyses in the areas of air quality, greenhouse gases/climate change, health risk assessment, and noise. Dan has been integral in the preparation of over 150 CEQA documents and technical studies supporting such documents. Dan's technical noise experience includes short-term and long-term noise monitoring and noise modeling with the Federal Highway Administration's Roadway Construction Noise Model and Highway Traffic Noise Prediction Model. Dan is proficient in a variety of air emissions models including California Air Pollution Control Officers Association's CalEEMod, California Air Resource Board's EMFAC and OFFROAD, and Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model.

CEQA/NEPA Project Experience:

- **Energy Projects:** Castor Solar Noise Study, California Public Utilities Commission Fulton-Fitch Mountain Reconductoring Project, California Public Utilities Commission Central Valley Power Connect 230 kV Project, California Public Utilities Commission Riverside Transmission Reliability Project, San Diego Gas & Electric TL 695, TL 6971 Reconductoring Project and Santa Paula Battery Energy Storage System IS/MND, PG&E Wheeler Ridge Junction Project, Gemini Solar EIS.
- **Water Conveyance Projects:** Buena Outfall Force Main Phase III IS/MND, Oasis Irrigation System Expansion Project EIR, The People's Moss Landing Water Desalination Project EIR, Central Amador Water Project Pioneer Water Rehabilitation Project IS/MND, Cuesta Heights Water Storage and Distribution Improvements Project IS/MND and Christian Valley Park Community Service District Water Storage Tank Project IS/MND.
- **Restoration/Recreational Projects:** Rockville Trails IS/MND, High Plains Shooting Sports Center Noise Analysis, Alameda Creek Levee Improvement IS/MND, Putah Creek Restoration Projects Program EIR, Lower Putah Creek Restoration Project IS/MND, Lake Chabot Campus Modernization IS/MND, Phillips 66 Company Line 200 Release Remediation Project IS/MND, Bay Point Restoration and Public Access IS/MND, University of California Santa Barbara Sea Wall IS/MND and Black Diamond Mines Preserve EIR.
- **Mining Projects:** Olive Pit Mine and Reclamation Project EIR, R&J Aggregate Mines EIR, Olive Pit Mine and Reclamation Project EIR Addendum, and Irwindale Kincaid Pit Remediation and Reclamation Project.
- **Waste Management Projects:** Glenn County Solid Waste Conversion Facility EIR, Blue Line Biogenic CNG Facility CEQA Addendum, Recology Vallejo Permit Revisions IS/MND, Valley Springs Recycling Center IS/MND, Irwindale Materials Recovery Facility/Transfer Station EIR, Sierra Waste Transfer Station Permitting, Forward Landfill SEIR, North Richmond Chip & Grind GHG Analysis, San Luis Obispo Anaerobic Digester IS/MND, Fair Deal Recycling Facility IS/MND & Transfer Processing Report, Ukiah Landfill Closure EIR, San Luis Obispo Anaerobic Digester Odor Impact Minimization Plan, Irwindale Materials Recovery Facility/Transfer Station EIR Addendum, and San Luis Obispo Anaerobic Digester Authority to Construct Permit.
- **Residential/Commercial/Industrial Development Projects:** Colfax Maidu Village Commercial Center IS/MND, City of Sacramento Fruitridge Shopping Center Redevelopment IS/MND, City of Sacramento River Oaks (The Cove) EIR Addendum, Colfax Corporation Yard and RV/Boat Storage IS/MND, Colfax Auburn Street Hotel IS/MND, Colfax Sierra Oaks Estates Residential Development IS/MND, Shasta 10 Noise/AQ/CAP Consistency Analysis, Morgan Knolls Subdivision IS/MND,

Rocklin Meadows Subdivision AQ/GHG Analysis, Wildcat Subdivision AQ/GHG Analysis, Winding Creek Subdivision Noise Analysis, Rancho Vista Subdivision AQ Analysis, Riolo Vineyards Specific Plan IS/MND, Nevin Avenue Apartments IS/MND, Calistoga Subdivision Noise/AQ/CAP Consistency Analysis, Residences at Railway AQ/GHG Analysis, Centennial Towers North Tower AQ/GHG/HRA Analysis, 488 Linden Avenue AQ/HRA Analysis, 255 Cypress Avenue AQ/HRA Analysis, Centennial Towers R&D Project AQ/GHG/HRA Analysis, Whitehawk I & Whitehawk II AQ/GHG Analysis, Viri Estates Skilled Nursing Facility IS/MND, Alviso Village AQ/GHG/HRA Analysis, Lakeside Fire Protection District IS/MND, Green Island Road Wine Warehouse AQ/GHG/HRA Analysis, Pruneyard Shopping Center AQ/GHG/HRA Analysis, Richmond Terminal 3 Timber Export Facility IS/MND, 901 Larch Avenue IS/MND, 52 Franklin Avenue IS/MND, UCSF Research Building and Parking Garage Expansion EIR, 150 Airport Blvd IS/MND, Oak Knoll Mixed Use Community Plan EIR, Lincoln Northeast Quad Specific Plan HRA, Oakland T12 Office Tower, Sonora Food Service Building IS/MND, Osgood Heights IS/MND, 550 Gateway Blvd Hotel IS/MND, Justin Vineyards & Winery Permit Application, Sunnyvale Atria on El Camino Real AQ/GHG/HRA Analysis, Quarry Place Mixed Use Development AQ/GHG/Noise Analysis, First and Campbell AQ Analysis, Roseville Junction Crossing Noise Analysis, William Jenkins Health Center Noise Analysis, John Henry High School AQ/Noise Peer Review, Sierra Oaks Estates and Village Oaks IS/MND, The Parkway Apartments IS/MND, Cal Expo Rock & Brews CEQA Categorical Exemption, Solana Beach Skyline Elementary School Reconstruction Peer Review, Folsom Bidwell Pointe CEQA Infill Exemption, Marin County Alta Way IS/MND, Granite Bay Joe Rodgers Subdivision AQ/GHG/Noise Analysis, Monarch Vista Apartments IS/MND, Double S Ranch Subdivision AQ/GHG Analysis, Vista Self Storage IS/ND, San Marin High School Turf Field Categorical Exemption, Novato High School Turf Field Categorical Exemption, San Marin High School Expansion IS/MND, Novato High School Expansion IS/MND, Colfax Sierra Oaks Estates and Village Oaks CEQA Addendum, Bayview Health Risk Assessment, The Oaks Assisted Living CEQA Addendum, Dutton Meadows CEQA Addendum, and Rocklin Tractor Supply Company AQ/GHG Analysis.

Education

BS, Environmental Policy Analysis and Planning, University of California, Davis, CA

Professional Affiliations

Member, Association of Environmental Professionals

RESUME: WILLIAM VANDIVERE, M.S., P.E, PRINCIPAL

CLEARWATER HYDROLOGY- HYDROLOGY AND WATER QUALITY SUB-CONSULTANT

William B. Vandivere, M.S., P.E., QSD/QSP is a CA.-registered civil engineer (#35613) and has been consulting in the fields of hydrology and water resources engineering in the SF Bay area since 1980. His areas of expertise reflect the broad interdisciplinary approach he has taken during his professional career and include hydrologic and hydraulic analyses; hydrologic and hydraulic modeling (HEC-HMS, HEC-RAS, SWMM, other hydraulic programs); water quality assessments; stream-groundwater interaction and hillslope groundwater assessments; fluvial geomorphic assessment and design; watershed and sediment management plan development; stream and wetland restoration planning and design; stormwater low-impact development (LID) and mitigation design; stormwater bioretention facilities design, stormwater control plans and SWPPPs; and preparation of engineering construction plans and specifications, field oversight of restoration construction, preparation of mitigation and monitoring plans, and post-construction monitoring for stream and wetland restoration projects.

Mr. Vandivere has prepared hydrology and water quality sections for dozens of EIRs, including those for resource management plans. He is also familiar with state and federal regulatory and resource agency permitting, having secured permits for numerous stream stabilization and restoration projects designed by CH.

EDUCATION

- M.S. Watershed Management, University of Arizona, Tucson
- B.S. Civil Engineering, Water Resources, University of Illinois, Urbana

AWARDS

- Outstanding Environmental Analysis Document by the Association of Environmental Professionals: Marin Countywide Plan EIR 2008 (CH prepared Hydrology and Water Quality section for the EIR)

SPECIALIZED TRAINING

- River Mechanics, Colorado State University, Dept. of Civil Engineering, Ft. Collins, CO
- Hydric Soils and Hydrology, Wetland Training Institute, Seattle, WA
- Applied Fluvial Geomorphology, Wildland Hydrology Consultants, Pagosa Springs, CO
- USACE Adaptive Hydraulics (AdH) Two-Dimensional Flood Modeling, US Army Engineer Research and Development Center, Coastal and Hydraulics Laboratory, Vicksburg, MS
- California Construction General Permit (SWRCB) Training, Global Environmental Network, Inc., Oakland, CA

KEY PROJECTS

SELECTED ENVIRONMENTAL IMPACT REPORTS

Client: Panorama Environmental, Inc. for University of California, San Francisco
Project Mount Sutro Open Space Reserve Management Plan EIR, UCSF
Role: Project Manager and Principal Author

William Vandivere, acted as the principal investigator, and CH prepared the Hydrology and Water Quality section of the EIR. The Hydrology and Water Quality assessment included site drainage, stormwater runoff and peak flows, hillslope erosion and sedimentation impacts and related water quality impacts due to clearing of non-native species by mechanical means, nuisance flooding impacts from changes in vegetal cover and trail amendments, and impacts on downstream storm drain capacities and channel stability on Woodland Creek. The EIR was approved in March of 2017 and the Plan is currently being implemented.

Client: Nichols Berman, Environmental Planners, for the Marin County Open Space District
Project: MCOSD Vegetation and Biodiversity Management Plan TPEIR
Role: Project Manager and Principal Author

William Vandivere, as principal investigator, and CH prepared the Hydrology and Water Quality section of the VBMP TPEIR. The Hydrology and Water Quality assessment focused on the potential water quality impacts of herbicide, mechanical and burn removal of invasive plant infestations on the open space lands throughout Marin County. The TPEIR is currently in the administrative response to comments phase and is expected to move to the Final TPEIR phase by the end of summer or fall of 2016.

Client: University of California, San Francisco, Campus Planning
Project: Mount Sutro Open Space Reserve Management Plan EIR
Role: Project Manager and Principal Author

William and CH prepared the Hydrology and Water Quality section of the DEIR in 2012, which following the initial responses to comments, was the last phase completed for that iteration of the project. CH assessed the hydrologic and water quality impacts of a proposed suite of mechanical and chemical treatments to convert portions of the non-native eucalyptus forest and other non-native species to native wildland species. William worked closely with the team arborist and hazardous materials consultants to evaluate the potential project impacts on hydrology and water quality, in particular, on watershed peak flows, erosion and sediment yield and water quality due to targeted herbicide treatments.

Client: Nichols Berman for the City of Larkspur, Planning Dept.
Project City of Larkspur General Plan Update
Role: Project Manager and Principal Author

William and CH prepared the Hydrology and Water Quality section of the DEIR for the General Plan Update. The DEIR was prepared in 2013, however, the City postponed further work toward

finalizing the project in order to address other planning issues, including the Station Area Plan for the upcoming implementation of the regional SMART train project. Important components of the assessment included the stability, preservation and enhancement of Larkspur Creek and its tributaries and the impacts of infill development within the downtown area.

Client: Nichols Berman for the Marin County Community Development Agency

Project: Marin Countywide Plan and EIR

Role: Project Manager and Principal Author

William and CH prepared the Technical Background Reports for Environmental Hazards-Flooding and Hydrology and Water Quality which served as the basis for the County's update of the 2007 Countywide Plan. William then guided CH's preparation of the Hydrology and Water Quality section of the Countywide Plan EIR, as well as a follow-up assessment of the Draft Housing Plan update to the EIR. The Hydrology and Water Quality impact assessment for the Draft Housing Plan update included an extensive evaluation of the current projections of sea level rise and the developing regulatory prescriptions on the County's flood control planning and infrastructure, as well as the specific implications for proposed housing development sites within the County's jurisdiction.

Client: Leonard Charles & Associates for the Marin Municipal Water District and Marin County Open Space District

Project: Mt. Tamalpais Vegetation Management Study and EIR

Role: Principal Investigator and Author

William assessed the hydrologic effects of wildfires, mechanical treatments and prescribed burns in wildland and urban fringe watersheds. He analyzed existing hydrologic and erosion conditions in the Mt. Tamalpais Watershed, closely collaborating with the project geologist, and prepared a hydrologic evaluation of the potential impacts of fire control and mechanical treatments on watershed soil moisture, revegetation and soil erosion potential, and reservoir sedimentation. William prepared an EIR section assessing potential project impacts and recommending appropriate mitigation measures.

RESOURCE MANAGEMENT PLANS AND ASSESSMENTS

Client: Marin Country Day School (MCDS), Corte Madera, CA

Project: MCDS Phases 1 and 2 Campus Facilities Improvements/Expansion

Role: Supervising Principal for Preparation of the Stream Restoration Plans

The Marin Country Day School (MCDS) facilities expansion included the restoration of an intermittent creek along the eastern site boundary which had historically been stabilized using a mix of structural solutions (e.g. concrete lining, grouted boulder crossings and non-degradable geotextiles). The client design team's vision of the creek component was to create a more natural creek corridor and to fully integrate the creek as an educational asset for the students. This approach indicated maximum use of geomorphically-appropriate channel design and biotechnical stabilization techniques, while maintaining an acceptable degree of flood protection for the new school grounds. The creek design involved restoration of 930 ft. of intermittent

channel in two phases to facilitate the MCDS's plan for a phased facilities improvement and expansion program. The Phase 1 channel reaches were successfully constructed in 2009; the Phase 2 project, including the final channel restoration segment, was completed in summer 2019.

Client: Bavaro Farming Company

Project: Cooperstown Ranch Remediation and Dry Creek Tributary Restoration and Stormwater Pollution Prevention Plan (SWPPP) and Monitoring Program

Role: Principal Investigator and Designer, SWPPP Developer and Monitoring Program Supervisor

William Vandivere and CH assisted Bavaro Farming Company of Escalon, CA in designing a remediation plan for the restoration of a tributary of Dry Creek which had been illegally modified to remove several tortuous meanders. William oversaw the conduct of an on-site topographic survey to define the extent of the channel damage as well as the design of a channel remediation to return the tributary to an enhanced version of its pre-disturbance condition and acquired the necessary regulatory permits. He then prepared the project SWPPP, supervised the construction of the channel remediation/restoration, supervised Bavaro Farming Company staff in their on-site water quality monitoring of storm runoff during winter 2015-2016, and has conducted agency mandated monitoring of restoration performance through 2020.

Client: City of San Jose, Dept. of Transportation

Project: Water Quality Assessment and Lakes Management Plans for Communities Facilities District 2/3, San Jose, CA

Role: Principal Investigator and Plan/Report Author

William acted as lead investigator and supervised CH engineering staff in conducting lake water quality assessments for Vineyard, Ruby and Verona Lakes which are maintained by the DOT's Special Districts Landscape Division. CH compiled and reviewed background data on the design, development and maintenance of the three ornamental lakes that were initially conceived as dual ornamental and stormwater detention features. Over time, the unplanned release of non-native fish and reptiles into the lakes by members of the community and similarly unforeseen explosions of Canadian geese and duck populations had substantially degraded lake water quality. A maintenance contractor was retained by the DOT to manage the water quality conditions at the lakes. The intensive, chemically-focused management program enacted by the contractor created a web of interdependent chemical interventions that were implicated in a fish kill event in the summer of 2014. CH took monthly and storm-event water quality samples and had them lab-tested for several critical water quality indicators, including DO, pH, temperature, fecal coliform, BOD and other contaminants. CH then evaluated lake watershed land use, physical maintenance and chemical treatment histories, and water quality trends, and prepared a summary water quality assessment report and lake management plan for each lake. The water quality reports and management plans included evaluations of past maintenance and treatment actions for efficacy in minimizing the impact of nuisance lake species on water quality, reducing the dependence on chemical treatment and increasing DOT's reliance on more sustainable, non-chemical measures to accomplish their water quality goals.

Client: The Vedanta Society of San Francisco (2012-2013)
Project: Sediment Management Plan for the Vedanta Retreat Property, Olema, CA
Role: Principal Investigator and Plan/Report Author

William Vandivere and CH performed field hydrologic and geomorphic surveys of the 545-ac. retreat property, focusing on Gravel Creek (tributary to Olema Creek) and its tributaries. CH also conducted a total station topographic survey of roughly 800 ft. of an alluvial valley that included a significant expanse of freshwater wetland. CH evaluated watershed erosion source areas, geomorphic processes of sediment delivery and transport, quantified historic sediment yields, and prepared a sediment management plan for the property, including a conceptual creek restoration to allow for an agency-mandated removal of an instream sediment pond. Conceptual restoration design plans were prepared, including grading plan with realigned stream channel, reach longitudinal profile and typical restoration channel cross-sections. CH also investigated grant funding opportunities for Plan implementation.

Client: Zen Center of San Francisco
Project: Green Gulch Farm Flooding and Water Supply Assessment
Role: Principal/Lead Investigator, Principal Author

In 2007, William and CH prepared a flooding and water supply assessment for Green Gulch Farm (GGF) in Marin County, CA. Flooding characteristics for the complex, existing conditions at the farm were analyzed for the 10-yr., 50-yr. and 100-yr. rainstorms. The assessment included a field inspection of channel hydrologic and hydraulic conditions; companion geotechnical evaluations of detention pond embankment stability; structural evaluations of channel modifications; and an extensive topographic survey of Green Gulch Creek, its southern tributary and the valley floor. The topographic survey was organized to generate a site map, including the location, relative elevations, and interconnections of the stream/conveyance system and the adjoining floodplain.

Client: Leonard Charles & Associates for the Marin County Open Space District
Erosion and Sediment Yield Assessment for the Cascade Canyon and White Hill Open Space Preserves
Role: Principal Investigator and Lead Author

William Vandivere acted as CH's principal investigator and the lead author for the erosion and sediment yield assessment which involved significant field reconnaissance of hydrologic and geologic conditions along the existing trail network in the adjoining preserve lands. CH analyzed expected the sediment budget and sediment sources within the Corte Madera Creek Watershed and erosion rates and sediment yields for existing and proposed trail segments within the preserves using the Universal Soil Loss Equation and field-derived observations. Michael Dwyer, C.E.G., collaborated with CH on the field assessment and report preparation. The 2003 report included recommendations for retirement of specific erosion-prone trail segments and construction of new trail segments to enhance watershed health and serve the preserves' hiking, biking and equestrian users.

CHI-HSIN SHAO TE, AICP
Principal



Years of Experience:

39

Education:

M.S., Infrastructure Planning and Management, Stanford University

B.E., Architecture, Chung Yuan University, Taiwan

Professional Registration:

Registered Traffic Engineer, State of California (#TR 2150)

American Institute of Certified Planners

Past Positions:

Vice President, Kolve Engineering

Principal, Cambridge Systematics

Deputy Commissioner of Policy and Planning, Boston Transportation Department

Head of the Transportation Section, San Francisco Planning Department

Chi-Hsin Shao has 40 years of experience in transportation planning and traffic engineering, specializing in multimodal transportation planning and systems. He is a visionary transportation planner noted for his ability to understand and articulate needs and to forge consensus among diverse groups using creative strategies and approaches.

Mr. Shao has long been involved in complete street design projects, including several award-winning projects such as the Redwood City Broadway and Theater Square Project. Chi-Hsin has also been leading development of VMT to meet the SB 743 requirement. He was one of a handful of experts hired by the SF Planning for the development of the first VMT methodology in California.

Downtown Novato Grant Avenue Improvements, Novato, CA

Conducted technical analyses of traffic, parking, and pedestrian crossing conditions, and a feasibility study for a roundabout on Grand Avenue in Novato; assisted in the phasing discussion due to the lack of full funding for the entire project. He led the final design of traffic engineering tasks, including signal modifications, signing and striping design, and preparation of a traffic control plans for the construction period.

SMART South Segment Corridor Project, Sonoma and Marin County, CA

Developed traffic engineering design, including traffic signal preemption, traffic signal coordination and adaptive control, and railroad-highway grade crossing safety design.

Novato Transit Center Backup Power Supply, Novato, CA

Analyzed the viability of various backup options based on the number of days the temporary power supply would function before the electric supply is restored, environmental considerations (diesel fuel, clean fuel, and solar options), location(s) for the equipment and security, and cost).

MTC Smart Growth Parking Policy, San Francisco Bay Area, CA

Determined the viability and applicability of potential smart parking policies in the nine-county Bay Area. Chi-Hsin facilitated stakeholder outreach interviews for six Cities participating in the project (Vallejo, Morgan Hill, Menlo Park, Hercules, San Rafael, and San Francisco's Mission Bay neighborhood) and oversaw a technical report summarizing their perspectives on key parking issues, current zoning requirements, parking goals, and creative parking concepts. He also managed a parking demand survey of residents in the Mission Bay development to understand parking demand, costs, and usage for a high density TOD project.

LA Metro Countywide Bus Rapid Transit Systems Study, Los Angeles, CA

CHI-HSIN SHAO TE, AICP
Principal



Led a technical assessment of 43 candidate corridors for future BRT implementation. The criteria used to assess corridors included transportation connectivity, ridership potentials, and existing ridership. Based on these criteria, 12 corridors were placed on an early shortlist of potentially viable BRT corridors.

MIGI LEE

Senior Transportation Planner



Years of Experience:

15

Education:

M.S., Urban Planning,
Columbia University, New York

B.A., Architecture, University of
California at Berkeley,
Berkeley, CA

Migi Lee has 15 years of experience in transportation planning, transit service planning, and traffic analysis. She has extensive experience as a Project Manager for transportation projects, and is very well versed with the analyses and preparation of the Transportation Sections for California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA) documents, including data analysis and developing Transportation Demand Management (TDM) plans and Transportation Management Plan (TMP)s.

SELECTED EXPERIENCE

SFPUC, Ocean Beach Climate Change Adaptation Project Traffic Operations Study, San Francisco, CA

Conducted traffic diversion and intersection operations analyses for the closure of Great Highway. Assessed five project variants involving different vehicle access changes for the neighboring San Francisco Zoo. Delivered a traffic operations report in support of the EIR.

SFPW Islais Creek Bridge Rehabilitation Transportation Impact Study, San Francisco, CA, Project Manager

Rehabilitation and seismic repair of the Islais Creek Bridge in San Francisco and would temporarily close the bridge for approximately four months. Migi worked with SFPW and SFMTA staff to prepare a Muni T-Third Bus Bridge Plan to transport passengers from T-Third light rail vehicles to buses when the bridge would be fully closed. She analyzed potential traffic, transit, bicycle, pedestrian, loading, and emergency access impacts, and prepared a preliminary traffic management plan in collaboration with SFPW and SFMTA. She produced a Transportation Impact Study summarizing the data collection and analyses results.

EBMUD Leland Reservoir Replacement Project EIR, Lafayette, CA

Migi worked with EBMUD and public stakeholders to identify truck and worker access routes around the residential neighborhood that would minimize vehicle/pedestrian/bicycle conflicts during the replacement of the existing reservoir and pipelines. She estimated construction period truck traffic volumes and parking demand, prepared a preliminary traffic management plan in collaboration with EBMUD staff and meetings with residents along the affected corridors. She produced a Transportation Technical Report and a transportation section of the DEIR EIR.

UCSF Mount Sutro Open Space Reserve Management Plan EIR, San Francisco, CA

Migi estimated truck volumes and parking demand during the construction period, analyzed transportation impacts during the project construction, and prepared the transportation section of EIR. She worked with UCSF to identify management truck and worker access routes to and from the Mt. Sutro Reserve that would minimize

MIGI LEE

Senior Transportation Planner

vehicle/ pedestrian/ bicycle conflicts in the area. She conducted truck turning analysis to assess potential safety impacts along the truck routes.



Appendix B: Sample Work Products

Summary of Work Samples

The sample work products for Panorama Environmental and Sequoia Ecological Consulting available to download from the following sharepoint site:

<https://panoramaenv.sharepoint.com/:f:/s/Panorama-Main/ErcpMxto8CdCpxniJfR-FgQBZh2cnfBIDQS9cjEXR4CJw?e=JvSqEI>

Several of these projects have been described in our proposal. Below is a brief description of each document that we have made available as a sample.

Panorama Environmental

Marin Municipal Water District Biodiversity, Fire, and Fuel Integrated Plan

The final Biodiversity, Fire, and Fuel Integrated Plan approved October 2019.

Marin Municipal Water District Biodiversity, Fire, and Fuel Integrated Plan, Program EIR

The Draft Program EIR for the Biodiversity, Fire, and Fuel Integrated Plan circulated March 2019 and the Final Program EIR certified October 2019 that present the:

- analysis of environmental effects and mitigation
- air quality modeling assumptions and calculations
- biological resources assessment report
- cultural resources assessment report
- public comments and responses to comments
- mitigation, monitoring, and reporting program

Midpeninsula Regional Open Space District Wildland Fire Resiliency Program

The draft Wildland Fire Resiliency Program prepared January 2021, which includes the:

- revisions to the Resource Management Policies to support the program
- Vegetation Management Plan
- Prescribed Fire Plan
- Wildland Fire Pre-Plans/Resource Advisor Maps
- Monitoring Plan

Midpeninsula Regional Open Space District Wildland Fire Resiliency Program, Program EIR

The Draft Program EIR for the Wildland Fire Resiliency Program circulated January 2021 that presents the:

- analysis of environmental effects and mitigation
- air quality modeling assumptions and calculations

- biological resources supporting information

Alpine County Wildfire Hazard Mitigation Plan

The final Wildfire Risk Mitigation Plan approved February 2021.

Alpine County Wildfire Hazard Mitigation Plan IS/MND

The Final IS/MND prepared February 2021 that presents the:

- analysis of environmental effects and mitigation
- biological resources assessment report
- cultural resources assessment report
- public comments and responses to comments
- mitigation, monitoring, and reporting program

Marin Municipal Water District Ross Reservoir Slide Repair, Notice of Exemption, with Attachments

The Notice of Exemption for the Ross Reservoir Landslide Repair Project filed January 2020 that presents the:

- description of the project
- justification for why the project is exempt from CEQA

UCSF Mount Sutro Vegetation Management Plan Technical Studies and EIR

The Final EIR for the Vegetation Management Plan for the Mount Sutro Open Space Reserve certified March 2018 and select technical studies that presents the:

- analysis of environmental effects and mitigation
- public comments and responses to comments
- mitigation, monitoring, and reporting program
- air quality, greenhouse gases, and carbon sequestration modeling assumptions and calculations
- traffic hazards report
- fire hazards report
- hydrology and water quality support information

Sequoia Ecological Consulting

EBRPD Post-Treatment Assessment Survey, Claremont Canyon Regional Preserve

A 1-year post-treatment assessment survey of Claremont Canyon Regional Preserve conducted February 4, 2020 that documents the:

- vegetation types and cover data and maps
- area of change post-treatment
- invasive species and cover

- habitat quality for special-status species
- wildlife species

EBRPD Fuels Management Daily Monitoring Form, Tilden Regional Park

A daily biological monitoring form for activities conducted at TI012, Grizzly Peak Boulevard in Berkeley on March 1, 2021 that documents the:

- treatment activities and timing
- any issues encountered
- wildlife species
- worker training confirmation

EBRPD Fuels Management Daily Field Job Safety Analysis

A daily field job safety analysis for activities conducted at Wildcat 9-Rifle Range Road in El Cerrito on January 7, 2021 that documents the:

- safety topics
- job safety analysis
- meeting attendees

North Orinda Shaded Fuel Break Project Environmental Awareness Training- Alameda Whipsnake

The North Orinda Shaded Fuel Break Project Environmental Awareness Training document prepared for Alameda Whipsnake that describes:

- distribution and habitat of the species
- avoidance and minimization measures
- species identification

North Orinda Shaded Fuel Break Project Environmental Awareness Training- California Red-legged Frog

The North Orinda Shaded Fuel Break Project Environmental Awareness Training document prepared for California red-legged frog that describes:

- distribution and habitat of the species
- avoidance and minimization measures
- species identification

THE MARIN WILDFIRE PREVENTION AUTHORITY
EXECUTIVE COMMITTEE MEETING
10:00 a.m. Thursday, April 1, 2021
Via teleconference due to Coronavirus (COVID-19)
MINUTES

1. Call to Order. President Goines called the meeting to order at 10:00 a.m.

2. Roll Call.

Directors – In Attendance: Bruce Goines (Novato Fire), Dennis Rodoni (County of Marin), Sashi McEntee (Mill Valley), Julie McMillan (Ross), Rachel Kertz (San Rafael)
Staff in Attendance: Executive Officer Mark Brown, Legal Counsel Megan Acevedo

3. Agenda Adjustments.

There were no adjustments.

4. Open Time for Public Expression.

There were no comments.

5. Executive Officer's Report

Executive Officer Brown presented a staff report that included the following: 1) He wished everyone Happy "Opening Day" of Major League Baseball ! 2) He gave a presentation of "North Ops, 2021 Fire Season Outlook, Early Analysis"; 3) The Operations Committee and Advisory/Technical Committee are hard at work but have not recently held a public meeting; 4) Preparation of Draft Project Proposal and Notification Form; 5) Individual agencies working on local mitigation projects and submissions for Core Projects; 6) Citizens' Oversight Committee meeting and desire to understand relationship between MWPA and Ecologically Sound Practices (ESP); 7) Brown Act Training for all committees; 8) Final draft of Goals and Objectives; 9) Adjustments to meeting minutes; 10) Deadline for Request for Proposal (RFP) for environmental consulting firms closed yesterday; 11) Possible Executive Committee meeting to receive presentation from two firms; 12) Award of two positions from Grizzly Corp; 13) Background checks for Planning and Program Manager position with possible conditional offer of employment by end of next week; 14) Southern Marin Fire Department tour of Shaded Fuel Brake Project.

Director McEntee referred to the presentation and had a question about readiness and how to not get "behind". Executive Officer Brown stated it will take years to catch up since they have no control over some of the variables such as the weather. He discussed factors such as moderate vs. extreme fire behavior conditions.

Director McMillan suggested that FIRESafe Marin use this presentation as an educational tool for the public. Each member agency should also receive a copy of the presentation.

Director Kurtz noted this report is predictive and she asked if it gets updated. Executive Officer Brown stated “yes, it gets updated every three months”. Another forecast will come out the end of May or beginning of June.

President Goines asked for clarification on the “1,000 hour” vs. the “100 hour” fuel slide. Director Rodoni asked Executive Officer Brown to come up with a simpler way to explain the information in this slide.

President Goines asked about the status the ESP product. Executive Officer Brown discussed the three work groups and their focus on carbon sequestration, vegetation management, and defensible space. They worked on best management practices and merged the work into one large document. The Advisory/Technical Committee and Operations (OPS) Committee will review and make recommendations to the Board.

President Goines opened the meeting to public comments.

There were no comments.

President Goines closed the meeting to public comments.

6. Citizens’ Oversight Committee Bylaws

Executive Officer Brown presented a staff report. He noted the Board has no authority on approving or amending the Citizens’ Oversight Committee (COC) Bylaws as long as they are in alignment with the founding documents. He discussed the importance of transparency.

Legal Counsel Acevedo stated she worked on several versions of the bylaws with the COC and tried to adhere to the intent of the founding documents. The report they develop and the committee’s oversight will focus on the financial components of the MWPA and whether everything is in alignment with the intent of the ordinance. The Joint Powers Agreement (JPA) mentions a “monitoring” role in terms of public meetings. It also mentions a “recruiting process” which would allow them to vet candidates and make recommendations to the Board.

Director Rodoni asked if it has been determined which founding document would supersede the other. The ballot language seems to have more authority than the JPA. Legal Counsel Acevedo agreed that the ordinance would take precedence.

Director Kurtz stated the value of the COC is critical to this organization. She referred to Article #6, the monitoring piece, and stated the JPA Agreement is in retrospect and Article #6 is current. She would like to see the following language in the last clause: “... in review of the COC’s committees and documented as part of their reporting...”. Executive Officer Brown agreed and stated the COC goal is to not have a retrospective report. Director Kurtz stated they could get “in a knot” with the current language.

Director McEntee agreed with Director Kurtz's concerns. The COC is there to make sure the MWPA does what the voters asked them to do. She referred to candidates for the COC and asked if the suggestion is to delegate the review process to the COC or that they make suggestions that are folded into the Board's review process. Executive Officer Brown stated "the former".

Director McMillan referred to Article 34, #7, and the wording "monitoring deliberations to assess transparency" and stated transparency is implicit. She was not sure this is necessary. She noted the memorandum from COC member Cole to Chair Minikes and ESP member Belle Cole seemed a bit adversarial. Legal Counsel Acevedo stated the recommendation about the removal of the wording about transparency would be brought to the COC.

Director Rodoni asked for clarification on whether the COC would make recommendations to the Board but not handle the recruitment. Recruitment and advertising is the role of the agency. Executive Officer Brown stated the term "evaluation" could be interpreted as "recruitment". Legal Counsel Acevedo stated they could add clarifying language to specify that the MWPA does the upfront work of advertising and recruitment.

President Goines opened the meeting to public comments.

Mr. Bruce Bartel stated he was disappointed in the process used to develop the bylaws. A key provision of the ballot measure was the development of a strong citizen oversight committee. The COC should be free to decide its own processes with oversight over the entire organization of the agency.

Mr. Larry Minikes stated the COC's purpose is oversight and making sure the funds are spent as they were meant to be spent. The purpose of the Board is to oversee the other committees.

President Goines closed the meeting to public comments.

Director McEntee stated it was not a good idea to have the COC evaluate its own applications. They are certainly able to give feedback like other member of the public. The first vetting of COC candidates is the Board's responsibility.

Director Rodoni agreed with Director McEntee and stated the agency should advertise and control the applications. The applications would be shared with the COC who could make recommendations for Board approval.

Director McMillan stated the COC could help with the identification and recruitment of people concurrently with the Board.

Director Kurtz agreed with the comments made about the recruitment and management process for the COC. These committees tend to change frequently and the Board will need to come up with a standardized process and procedure of recruitment. The bylaws should come back to the Board with some modifications based on the Board's comments.

Executive Officer Brown recommended that this item be placed on the next COC meeting agenda and ask them to work on the modifications including the following issues: 1) The transparency piece; 2) Selection of COC members; 3) Concerns about real time feedback.

Director McEntee asked if leaving the language as is would it bind them to anything. Legal Counsel Acevedo stated the bylaws are intended to be a guide on how the COC operates and if there is an issue then it could be addressed by the Board. Director McEntee stated she would like to move forward.

Director McMillan asked how they could “reel things back in” if things go sideways. Legal Counsel Acevedo stated the Board would bring it to the attention of Executive Officer Brown and the COC. It would be fairly straightforward.

Director Kurtz stated there are pieces of this document that are up for interpretation that could raise questions the future. The composition of the Board and COC will change.

Director McMillan agreed and wanted to make things more clear. She asked if the COC would be open to providing better definition and clarity.

Director McEntee reiterated the desire to kick it back to the COC with some recommended modifications.

Director Rodoni is in favor of delaying this and having more discussion. He asked if it would be possible for the COC to develop bylaws based on their authority and have a side procedural agreement. Executive Officer Brown stated the COC formed a Rules and Policies Ad Hoc Subcommittee that could look at this.

President Goines stated he could support the bylaws as they currently exist. They are designed to facilitate communication and early problem identification. They could revisit the document in six months or a year. He would like to move forward.

Executive Officer Brown stated the COC Bylaws and Policies and Procedures could come to the Executive Committee as a package with clarification on Article 4, Sections 4.6, 4.7, and 4.8

7. Draft MWPA Communications Strategy

Executive Officer Brown presented a brief report and stated he is working with the Communications Strategy Ad Hoc Committee that consists of Directors Katherine Donohue, Gabe Paulson, Steve Berto, and Paul Jeschke. Mr. Pam Kuhn is assisting them.

Ms. Kuhn stated she has worked on communications and public outreach for various agencies including Marin County Parks. She gave a PowerPoint presentation that included: 1) Identity- clear and concise core message; 2) MWPA Mission; 3) Audience- who do we need to reach?; 4) Goals- what should the communication accomplish?; 5) MWPA Vision; 6) Phase 1- Foundational elements; 7) Spring- Summer 2021 deliverables; 8) Phase 2- Foundational elements and implementation; 9) Fall 2021- Winter 2022 deliverables.

Executive Officer Brown noted Phase 1 and Phase 2 are very aggressive and have a lot of content items. He was cautious about overcommitting and underperforming.

Director Kurtz stated there seemed to be a lot of work and she asked if they could narrow this down and break it down into priorities. The risk management piece should be moved up. Residents might not know about the MWPA or FIRESafe Marin but they know about their local fire department. She suggested adding on some surveys or focus groups.

Director McMillan had a question about the reference to the “public outreach budget”. Executive Officer Brown stated this is the amount allocated to FIRESafe Marin for outreach in the amount of \$540,000.

President Goines stated he, along with fire chiefs in the County, are frustrated with the unresponsiveness by the public in terms of recommendations. He would like to focus on how to compel action. It is critical to get the metrics down sooner rather than later.

Director McMillan and President Goines noted they have several minor edits.

President Goines opened the meeting to public comments.

There were no comments.

President Goines closed the meeting to public comments.

Executive Officer Brown stated residents need to hear from local fire departments and the MWPA is not trying to supplant that “voice” but rather support the message of local fire department. The Advisory/Technical Committee and the Operations (OPS) Committee will be instrumental in creating the metrics. He would like to bring the draft document to the Board on April 15th.

8. Legislative Support Process

Executive Officer Brown presented a staff report. He noted they have to be careful using funds for legislation and lobbying or putting member agencies in an awkward position. Staff is asking for assistance in drafting a policy on how to deal with legislative issues.

Director Kurtz stated the Marin Clean Energy (MCE) model was very helpful. She asked if they could bring some expertise to the table the way the Marin County Council of Mayors and Councilmembers (MCCMC) does.

President Goines opened the meeting to public comments

There were no comments.

President Goines closed the meeting to public comments.

Director McEntee stated they need a process and thought that member agencies are going to look to the MWPA for guidance in the area of fire prevention. She supported the idea of a category of things that can be approved by staff. They could create a Legislative Committee that meets several times a year or matters could go to the Executive Committee.

Director Rodini stated it is important to have a mechanism to comment on legislation. He described the County's method.

Director McMillan wanted it to be clear that they would not be using taxpayers' money for lobbying.

President Goines stated he would like to identify their allies and mine their data. He did not want to "reinvent the wheel".

Director McEntee left the meeting at 12:01 p.m.

9. Agency Partnerships/Coordination and Grant Funding Efforts

Mr. Bill Keene gave a PowerPoint presentation that included the following: 1) Grant Funding, Partnerships, and Collaboration; 2) Overview; 3) CalFire Programs; 4) Resource Agency Programs; 5) Other State Opportunities/Partnerships; 6) Regional and Local Partnerships; 7) CalFire Grant Opportunities; 8) Future Actions/Considerations.

Director Kurtz asked if the three areas of funding were on the same cycle. Mr. Keene stated the two related to fire prevention and forest health were. Director Kurtz stated it would be helpful for the Board to know the "nuts and bolts" framework of the grants.

Director McMillan asked staff to substitute the word "leverage" with "enhance" or "augment".

President Goines stated there is a group called Avoided Wildfire Emissions (AWE) that will reward entities for doing work to reduce carbon and wildfire emissions. He asked staff to begin to study the organizational component related to this effort. There will be grant administration, and fiscal, administration work that will need to be done. Personnel, equipment, supplies, and contracts are the typical line items. Executive Officer Brown stated most grants allow 10% for administrative costs.

President Goines opened the meeting to public comments.

There were no public comments

President Goines closed the meeting to public comments.

10. MWPA Regular Board Meeting Agenda Planning for April 15, 2021

Executive Officer Brown presented a staff report.

Legal Counsel Acevedo stated the discussion about the legislative process should go back to the Executive Committee for review and go to the Board in May.

President Goines referred to Consent Calendar item #6(d) and asked if it would be postponed. Executive Officer Brown stated "yes".

Director McMillan asked if the new hire could be announced at the April 15th Board meeting. Executive Officer Brown stated he would make a placeholder in the agenda for this item.

President Goines opened the meeting to public comments.

There were no public comments

President Goines closed the meeting to public comments.

11. Informational Items

There were no informational items.

12. Committee Member Request Future Agenda Items

President Goines noted the status of the ESP product should be on a future agenda.

13. Adjournment- President Goines adjourned the meeting at 12:23 p.m.

Respectfully submitted,

Toni DeFrancis,
Recording Secretary

THE MARIN WILDFIRE PREVENTION AUTHORITY
EXECUTIVE COMMITTEE SPECIAL MEETING
11:30 p.m. Thursday, April 7, 2021
Via teleconference due to Coronavirus (COVID-19)
MINUTES

1. Call to Order- President Goines called the meeting to order at 11:30 p.m.

2. Roll Call and Introductions

Directors – In Attendance: Bruce Goines (Novato Fire), Sashi McEntee (Mill Valley), Julie McMillan (Ross), Rachel Kertz (San Rafael), Dennis Rodoni (County of Marin).

Staff in Attendance: Executive Officer Mark Brown, Legal Counsel Megan Acevedo,

3. Agenda Adjustments

There were no adjustments.

4. Open Time for Public Expression

There were public speakers.

The Executive Committee went into Closed Session Pursuant to Government Code Section 54957: Public Employee Appointment (Planning and Program Manager)

5. Closed Session – Public Employee Appointment (Planning and Program Manager)

The Executive Committee returned to Open Session and reported the Executive Committee adjusted the compensation package for the Planning and Program Manager.

6. Adjournment- President Goines adjourned the meeting at 12:30 p.m. The next meeting would be held on May 6, 2021



MARIN WILDFIRE PREVENTION AUTHORITY

STAFF REPORT

For the Meeting of Thursday, May 6, 2021

To: Marin Wildfire Prevention Authority Executive Committee
From: Mark Brown, Executive Officer
Subject: MWPA Legislative and Agency Policy Support Guidelines

RECOMMENDATION:

Receive a report from staff on the draft Legislative and Agency Policy Support Guidelines and provide feedback and input.

BACKGROUND:

At the April 1, 2021 Executive Committee meeting, staff was directed to draft proposed Legislative and Agency guidelines for the Committee's consideration.

ANALYSIS:

Staff reviewed legislative support policies from other public agencies and used the MWPA's Mission and Vision statements as a foundation to draft a policy. These guidelines provide direction on the areas of legislative and agency engagement, and the role of MWPA staff, member agencies, and the Executive Committee in guiding staff in these activities. Under the guidelines, MWPA may support State and Federal legislation, and State and Federal Agency programs and policies that help MWPA achieve wildfire prevention results on the ground. Specific focus areas are also identified, including vegetation management, public education and local wildfire prevention mitigation. There is also a provision related to conditions when opposing legislation or policies may be appropriate.

Finally, the draft guidelines identify a process to follow when support or opposition to legislation or policies could result in a conflict with a position taken by MWPA member agencies.



FISCAL IMPACT:

None. Paid lobbying is not permitted under these guidelines.

ENVIRONMENTAL IMPACT:

Providing feedback for a legislative and policy support is not a “project” under the California Environmental Quality Act, because it does not involve an activity which has the potential to cause a direct or reasonably foreseeable indirect physical change in the environment. (Cal. Pub. Res. Code § 21065).

Respectfully submitted,

Mark Brown, Executive Officer

Attachment: Draft MWPA Legislative and Agency Policy Support Guidelines



Marin Wildfire Prevention Authority Legislative and Agency Policy Guidelines (Drafted April 27, 2021)

On March 18, 2021, the Marin Wildfire Prevention Authority (MWPA) Board adopted the following mission and vision statements to guide all MWPA work.

Vision Statement: Marin Wildfire Prevention Authority communities are informed, prepared, fire adapted, resilient and capable of withstanding a major fire limiting loss of life and major property damage while protecting our rich environmental diversity.

Mission Statement: The Marin Wildfire Prevention Authority leads the development of fire adapted communities using sound scientific, financial, programmatic, ecological practices, vegetation management, community education, evacuation and warning systems with the support of its member and partner agencies.

On a yearly basis, to effectively implement the Vision and Mission, the MWPA Board, as recommended by the Operations Committee, adopts a Work Plan for all program areas. To strategically implement the organization's Mission and Vision, and Board adopted Work Plan, MWPA developed these Legislative and Agency Policy Guidelines to provide MWPA staff authority to take action on legislative and agency matters that relate to furthering MWPA's Mission, Vision, and Work Plan. These guidelines provide direction on the areas of legislative and agency engagement, and the role of MWPA staff, member agencies, and the Executive Committee in guiding staff in these activities.

Wildfire Prevention Legislation

To achieve organizational goals, MWPA may support State and Federal legislation, and State and Federal Agency programs and policies that help MWPA achieve wildfire prevention results on the ground. MWPA may support State and Federal legislation and Agency policies and programs in the following areas in support of Measure C:

Vegetation Management – Efforts to reduce fuels within the MWPA service area.

Wildfire Detection & Evacuation Program Improvements – Programs and projects to implement safety measures that will improve early wildfire detection, warning and alerts as well as improve disaster evacuation routes for organized evacuation.



Grants – Creation of a local grant program ensuring residents with access and functional needs, seniors, and financially disadvantaged reduce fire risk of their properties and the greater surrounding community; and seek grants to augment local investments for wildfire prevention and disaster preparedness programs.

Public Education - Provide expert information and assistance to help the public reduce wildfire risk, prevent wildfires and be prepared for potential disasters; support FIREsafe MARIN community outreach efforts.

Defensible Space Evaluations – Seek support and funding to augment MWPA resources allocated to expand and enhance defensible space home evaluations to ensure homes meet fire and building codes, as well as education to reduce the vulnerability of homes.

Local Wildfire Prevention Mitigation – Support and augment local funding to MWPA members for specific local wildfire mitigation needs specific to their service area.

Federal and State Legislation, and Agency Programs and Policies – Support Federal and State legislation, programs and policies that further the activities of MWPA or facilitate MWPA's ability to effectively complete work under the Work Plan.

MWPA staff may oppose Federal and State legislation or agency programs and policies under the following conditions: (1) where there is a direct conflict with Measure C, (2) where there is a conflict or inconsistency with MWPA Board-adopted policies and programs, and/or (3) where the legislation, program or policy is inconsistent with the Board's adopted Work Plan.

Addressing Potential Conflict with Member Agencies

Under these guidelines, it is assumed that all legislative or agency program and policy advocacy will be supported by all MWPA member agencies. If MWPA staff believe there is a potential conflict with a legislative or policy position with any MWPA member agency, the issue will be first brought to the Executive Committee for discussion and resolution, and if deemed necessary by the Executive Committee, to the full Board for consideration.



MARIN WILDFIRE PREVENTION AUTHORITY

STAFF REPORT

For the Meeting of Thursday, May 6, 2021

To: Marin Wildfire Prevention Authority Executive Committee
From: Mark Brown, Executive Officer
Subject: Parcel Tax Levy Inflation Adjustment

RECOMMENDATION:

Receive a report from staff recommending that MWPA not impose an inflation adjustment for the 21/22 fiscal year and provide feedback and input.

BACKGROUND:

Marin County Ordinance Number 3716 provides for an inflation of the tax levy to fund the MWPA. Section 3 of the ordinance specifies:

Before the beginning of each fiscal year, the Board of Directors for the Marin Wildfire Prevention Authority shall adjust the maximum parcel tax to be levied upon the parcels for the upcoming fiscal year as adjusted by inflation. The Board of Directors for the Marin Wildfire Prevention Authority may direct the County of Marin to set a parcel tax not to exceed the maximum parcel tax as adjusted by inflation. Annually, the Board of Directors may set a lower parcel tax rate at its discretion.

The maximum tax per year for each property type shall be adjusted to reflect any increase in the Consumer Price Index beyond the first fiscal year the parcel tax is levied. Change in the Consumer Price Index shall be calculated from February of the immediately preceding year to February of the current year, or 3%, whichever is less.

ANALYSIS:

The MWPA was unable to expend all tax funds during its inaugural year due to the timing of the formation of the JPA and lack of staff to perform the necessary work to implement projects.

28 Liberty Ship Way, Suite 2800, Sausalito, CA 94965 • 415-539-MWPA (6972) • marinwildfire.org



Additionally, many taxpayers in MWPA’s jurisdiction have experienced financial difficulties due to the current financial climate created by the COVID-19 pandemic. Based on these circumstances, staff recommends that the MWPA not increase the tax levy based on the Consumer Price Index.

FISCAL IMPACT:

The February 2021 San Francisco Bay Area Consumer Price Index was announced to be 1.6%. Increasing the MWPA tax levy by 1.6% would create an additional \$315,2000 in revenue.

ENVIRONMENTAL IMPACT:

Considering an increase in the MWPA tax levy is not a “project” under the California Environmental Quality Act, because it does not involve an activity which has the potential to cause a direct or reasonably foreseeable indirect physical change in the environment. (Cal. Pub. Res. Code § 21065).

Respectfully submitted,

Mark Brown, Executive Officer



MARIN WILDFIRE PREVENTION AUTHORITY

STAFF REPORT

For the Meeting of Thursday, May 6, 2021

To: Marin Wildfire Prevention Authority Executive Committee
From: Mark Brown, Executive Officer
Subject: Low-Income Senior Tax Exemption - Positive Contact of Receipt of Application

RECOMMENDATION:

Receive a report regarding a request to provide feedback to applicants for the Low-Income Senior Tax Exemption and provide direction to staff.

BACKGROUND:

MWPA staff received correspondence from the Coalition of Sensible Taxpayers (CO\$T) requesting positive contact to applicants upon receipt of an application requesting a low-income senior tax exemption (Attachment 1). Additionally, during public expression at the Board of Directors meeting on April 22, 2021, CO\$T requested this matter to be taken up by the Board of Directors.

CO\$T explained that there is frustration on the part of applicants who do not receive notice when their application has been received and approved. Furthermore, CO\$T requests contact with applicants whose applications are not approved.

MWPA utilizes a third-party administrator, NBS Government Finance Group (NBS), to manage our tax levy and low-income senior tax exemptions. As per standard practice, NBS has not provided positive contact when applications have been received or approved. NBS does notify applicants if their application is not approved and provides the reason for the denial. MWPA has an appeals process for taxpayers who were not informed of the low-income senior tax exemption or who felt their application should have been approved.



ANALYSIS:

NBS processed 2,146 applications during 2020. Of those applications, 213 applications were denied. Of the 213 applications that were not approved, the MWPA is aware of only 1 applicant who was not notified of the denial of their application.

MWPA received 12 appeals. 11 appeals were approved and reimbursement checks were issued to each approved appeal applicant. One appeal was not approved because the applicant's income was too high to qualify for the exemption. Only one appeal applicant stated they were appealing due to their application not being received by NBS.

Staff explored the option of a written acknowledgement of approval for applicants sent via USPS. Mailed notices were chosen due to the high number of applicants who do not have access to email. NBS anticipates approximately 3,000 applications for 2021 due to increased awareness of the availability of the low-income senior tax exemption. Postage costs are estimated at \$1,500 with a nominal increase in required staff time.

Staff acknowledges the frustration experienced by applicants in not knowing if their application has or has not been received. However, with a successful delivery rate of 99.95%, the receipt of applications does not appear to be a problem. Applicants should feel comfortable their applications have been received. Additionally, applicants can send their applications via certified mail or include an automatic return receipt for applications that have been emailed. Mailing an acknowledgement of receipt of all applications would result in additional postage costs of \$1,500 and nominal staff time.

Staff requests a recommendation from the Executive Committee regarding whether or not to provide mailed notice to applicants upon receipt of their applications. Staff will bring the recommendation forward to the full Board for consideration at its next meeting.

FISCAL IMPACT:

No fiscal impact at this time; however, mailed notices may cost up to \$3,000 depending on how many are sent to each applicant.

**ENVIRONMENTAL IMPACT:**

Giving staff direction regarding the process of receiving and acknowledging low-income senior exemption applications is not a “project” under the California Environmental Quality Act, because it does not involve an activity which has the potential to cause a direct or reasonably foreseeable indirect physical change in the environment. (Cal. Pub. Res. Code § 21065).

Respectfully submitted,

Mark Brown, Executive Officer

Attachment 1 - CO\$T and MWPA Correspondence

Correspondence Between CO\$T and MWPA
Low-Income Senior Tax Exemption – Positive Contact of Receipt of Application

March 19, 2021

Dear Mark,

CO\$T has received a couple of complaints from taxpayers regarding MWPA's low income exemption process. I believe that these issues arose while your organization was in its early formative stages, i.e., did not happen on your watch.

One recurring complaint is that filers for the MWPA low income exemption received no confirmation that the application was complete, nor a response indicating that the exemption-request was approved. I trust that will be addressed in time for this year's June 30 deadline so that **each exemption request is acknowledged as in-hand and being processed**.

Another individual reports that his exemption request was denied. He reports that he was never informed of the denial, learning of it only when he received his tax bill with the MWPA charge on it. He reports he was then told it was too late to do anything to change his tax bill. It would be appropriate that **any person whose application is rejected be immediately informed and given a timely opportunity to respond** (e.g., supply additional documentation or correct any mistakes/misunderstanding).

Can you please update me on the policies and procedures in place for 21/22 that address the above issues? We will be sending out an annual letter to county taxpayers soon updating them on exemptions and discounts for which they may qualify.

CO\$T supported the Wildfire Prevention tax measure and is working for the success of the MWPA. Maintaining community support with good process is vital to that effort.

Thank you for all you do,
Mimi

On Fri, Mar 19, 2021 at 4:39 PM M Brown <mbrown@marinwildfire.org> wrote:

Good afternoon Mimi,

Thank you for reaching out.

You are correct, the path for processing low-income senior exemptions was laid before my “watch”, but it is still my responsibility.

I completely understand the frustration and concern of not receiving feedback from our contractor, NBS, regarding receipt and/or approval of the applications. NBS processed 2,146 low-income senior exemptions. 1,933 were approved and 213 were denied. We processed and approved 11 appeals after we established the appeals process. Of the 11 appeals, 3 of which were people who were originally denied. I will reach out to NBS to inquire if it is feasible to contact people who have been approved, but I am not sure it will be operationally feasible to do that.

NBS does reach out to everybody who was denied and why they were denied. I'm sorry the person who reached out to you didn't have that interaction, but that is the standard. Perhaps NBS tried, but were not successful in getting in contact with that one person.

We have started accepting applications this year and the process can be found at <https://www.marinwildfire.org/senior-exemption>. The Board did approve using last year's low income values as determined by HUD so we can get an earlier start to give the residents plenty of time to apply.

Pasted below is our appeals process (it was on the website, but now that the appeals window is closed we took it down). When it is time to put it back up, we will (after the tax bills are delivered).

- Any low-income senior taxpayer may appeal to the MWPA to seek a determination on the eligibility of a parcel(s) for exemption.
- Appeals must be submitted in writing to the MWPA at 28 Liberty Ship Way, Suite 2800, Sausalito, CA. 94965, or via email sent to info@marinwildfire.org no later than January 31 of the subsequent year following the receipt of the tax bill.
- Appeals must include the following documentation to support the claimed exemption:
 - a copy of the Marin County Secured Tax Statement for appropriate tax year ("20XX-XX Property Tax Bill"), showing the MWPA tax amount (all other tax amounts may be redacted),
 - proof of income, such as the previous year's tax return, and
 - proof of age, such as a copy of a driver's license.
- Appeals will only be considered during the resident's first year of eligibility; first year of the tax, new resident in the area, newly a senior citizen or change in financial status.
- Appeals will only be considered for property owners who demonstrate eligibility for the MWPA's Low-Income Senior Tax Exemption for the appropriate year's Property Tax Bill.
- Appeals will be reviewed by staff members of the MWPA.
- MWPA staff must respond within 60 days of receipt of the appeal.
- Appellants who are found to be eligible for the Low-Income Senior Exemption will be reimbursed for the full amount of the MWPA Tax shown on the current year's Property Tax Bill.

- Appellants who were denied may appeal the decision to the MWPA Executive Committee. That appeal will be heard by the MWPA Executive Committee at its next regularly scheduled meeting. Secondary appeals may be requested in writing, either to the mailing address or via email.
- The MWPA will post the appeals process on its page committed to the Low-Income Senior Exemption on its website.

In your newsletter, please share the weblink (and perhaps a copy of the application if appropriate) to help spread the word about or low-income senior exemption process.

Take care and have a great weekend.

Mark

March 22, 2021

Thank you very much, Mark, for the prompt, complete reply.

The leaks in the exemption application system definitely need to be plugged . The dollar amount of the tax is meaningful to many of those who apply for the exemption... particularly when one notes the large number of add-on taxes on the typical Marin tax bill. I strongly urge that any applicant whose MWPA exemption request is denied be notified via registered mail or email, which serves to protect all parties.

As for NPS, if they cannot or will not provide acknowledgement of receipt of exemption applications, it is appropriate to consider options. One option is to use a different processor. The other option is to have applications be submitted to MWPA, which in turn would submit them to NPS. Some of the school districts do this, as I have personally received confirmation of receipt promptly for my local school parcel tax senior exemption applications.

I look forward to whatever action can be taken to ensure that those submitting senior exemption requests are satisfied with the process.

Best regards,
Mimi

On Tue, Mar 30, 2021 at 12:12 PM M Brown <mbrown@marinwildfire.org> wrote:
Good afternoon Mimi,

I'm reaching out to you to let you know the research we have conducted regarding positive contact from NBS for all applicants of the low-income senior tax exemption and the direction we are taking.

We did a little research and found that no county-wide parcel tax that has an exemption clause provides feedback for those applying for the exemption – the Marin Emergency Radio Authority being a prime example. As you mentioned, some of the smaller jurisdictions do provide positive feedback but not that are serviced by NBS.

NBS is capable and willing to perform this service but it will require a change in our contract and we will be billed for their time and postage fees. The postage fees alone is an estimated cost of \$1,500/year.

Based on the standard of practice not being to notify people of receipt of the application and the additional costs we have decided to continue with the system we have in place as we feel it is better to apply those funds to projects rather than postage. I appreciate the frustration of not knowing your application was received, but that is the standard for these types of exemptions.

The application is very clear that residents will not be notified if there is nothing wrong with their application. To my knowledge, none of the appeals we received were due to NBS not receiving an application and we have only heard of one resident who did not hear why their application was not approved. Additionally, we will continue with the appeals process we put in place last year.

Here is the language from the application:

"Applications must be postmarked on or before June 30, 2021 . If your application cannot be processed, you will be notified in writing, or via telephone call, explaining the reason and requesting the necessary information needed to process your application. If there are no issues with your application, you will not be contacted."

Please let me know if you have any questions and thank you for reaching out.

Mark

April 8, 2021

Hi Mark.

Thank you for the in-depth reply re status notification to low income seniors regarding their MWPA tax exemption applications.

I appreciate your concerns about the additional cost of notification of applicants. CO\$T, and the county's residents, want as much as possible of MWPA's funds to be spent on wildfire preparedness.

Nonetheless I respectfully request that MWPA investigate the most effective low-cost way of providing appropriate notification and take it from there. If the cost exceeds your authority to authorize, I urge you to bring the matter before the Board. This an important opportunity, early in MWPA's existence, to do the right thing in terms of community relations.

One important consideration is the size of the typical MWPA exemption, which is quite large relative to many of the other county-wide low income exemptions. If a person's application for a \$75 exemption goes awry -- or simply isn't acknowledged -- it's not a big deal. \$200 or \$300 might be.

An example of doing this the right way from a community relations standpoint is Tam Union High School District, which offers a senior exemption on its parcel taxes.

I recently spoke with their exemption processor, SCI Consulting. Last year they processed about 2,000 TUHSD senior exemption applications, similar to MWPA. ALL exemption requests are acknowledged if submitted by email. If any information is missing, SCI makes a minimum of two attempts to contact the applicant via phone and email.

While the approval process for such exemptions is simpler than for those involving income, the hurdles/routes to closing the loop with the applicants should be identical.

Tam Union operates a pretty tight ship so I can't imagine they are paying a lot extra for routine communications with the applicants, which in many/most instances are completed by email. MWPA could do the same... perhaps, however, providing registered mail notification for the very small number of folks whose applications MWPA / NBS denies. MWPA staff could likely handle the registered mail notices if NBS won't.

If the above cannot be accomplished at a reasonable price by NBS, perhaps it is appropriate to consider alternatives. NBS was likely selected before you were onboard. Was there a competitive bidding process? Or was NBS selected because of the County's existing role in processing other County exemption applications (which likely are generally small dollar amounts)?

I hope your folks take a fresh look at the exemption issue soon, so that the current round of applicants receive timely reassurance as to the status of their applications. Your leadership on this matter will send a strong positive message that maintains support for your agency and its mission.

Best,
Mimi Willard

President
Coalition of Sensible Taxpayers
COSTMarin.org

April 9, 2021

Good morning Mimi,

Thank you for sharing your thoughts.

I appreciate your concern, but we have looked into low cost methods and found they are not low in cost (postage being the key element) and have decided not to pursue them at this time.

I believe the MWPA has already shown we do the right thing by implementing the appeals process (which many agencies do not have) before anybody asked us to do so. We implemented this very quickly when we learned some people were not aware of the exemption. This appeal can be used by people whose application was not received by NBS, therefore, if it wasn't received for any reason they have a second shot and the appeal is dealt with directly at the MWPA and not at NBS.

We have only received one complaint that I am aware of that an application wasn't received at NBS, and that resident appealed and they were refunded the amount they paid in property taxes.

We only received one complaint that a resident wasn't notified of any issues with their application (the one you shared with us).

With this track record we are comfortable with the system we have in place. If these numbers begin to substantially change, we will investigate how to mitigate the issues.

Thank you and have a great weekend.

Mark



MWPA BOARD OF DIRECTORS AGENDA

Thursday May 20, 2021

3:00 PM

<https://zoom.us/j/93068198420>

Or Telephone:

669-900-6833

Meeting ID: 930 6819 8420

For those joining by phone use: *9 to "raise your hand" and *6 to mute/unmute

ATTENTION: This will be a virtual meeting of the Board of Directors of the Marin Wildfire Prevention Authority pursuant to Executive Order N-29-20 issued by the Governor of the State of California.

There will not be a public location for participating in this meeting, but any interested member of the public can participate telephonically by utilizing the dial-in information printed on this agenda. If any member of the public has a request for a reasonable modification or accommodation for accessing this meeting due to a disability, she/he/they should contact Mark Brown at mbrown@marinwildfire.org

1. Call to order.

2. Roll Call.

David Kimball	Barry Evergettis	Mark White
Sashi McEntee	Bill Shea	Bob Ravasio
Rachel Kertz	Paul Jeschke	Barbara Coler
Gabe Paulson	Bruce Goines	Julie McMillan
Dennis Rodoni	Tom Finn	Steve Burdo
Kathryn Donohue	Cathryn Hilliard	

3. Agenda Adjustments.

4. Open time for public expression.

The public is welcome to address the Board of Directors at this time on matters not on the agenda that are within the jurisdiction of the Board. Please be advised that pursuant to the Government Code Section 54954.2, the board is not permitted to discuss or take action on any matter not on the agenda. Comments may be no longer than three minutes and should be respectful to the

community. ***Please silence your cell phones during the meeting / mute your microphone when not reporting out.***

5. Executive Officer's Report - Verbal Report.

Information Only, such as information about Marin/Statewide Wildfire Status Update, Executive and Finance Committee Updates.

6. Consent Calendar.

The opportunity for public comment on consent agenda items will occur prior to the Board's discussion of the consent agenda. The Board may approve the entire consent agenda with one action. In the alternative, items on the consent agenda may be removed by any Board or staff member, for separate discussion and vote.

- a. Approve April 22, 2021 Board of Director Minutes
- b. Approve Draft MWPA Communications Strategy

7. Staff Reports.

- a. Finance Staff Report
Recommendation: receive report.

8. Committee Reports.

- a. Operations Committee
Recommendation: receive report.
- b. Advisory/Technical Committee
Recommendation: receive report.
- c. FIRESafe MARIN
Recommendation: receive report.

9. Action Items

- a. Fiscal Year 21/22 Annual Budget and Work Plan
Recommendation: approve proposed Fiscal Year 21/22 Annual Budget and Work Plan
- b. Environmental Consulting Proposals
Recommendation: award contract to XYZ consulting firm.
- c. Legislative Support Policy
Recommendation: approve the draft Legislative Support Policy.
- d. Parcel Tax Levy Inflation Adjustment
Recommendation: approve staff's recommendation not to impose an inflation adjustment

for the 21/22 fiscal year.

10. Information Items.

- a. Acknowledge April 7, 2021 Executive Committee Special Meeting Minutes
- b. Acknowledge April 8, 2021 Advisory/Technical Committee Minutes
- c. Acknowledge April 26, 2021 Advisory/Technical Committee Minutes
- d. Acknowledge April 28, 2021 Citizens' Oversight Committee Minutes
- e. Acknowledge April 29, 2021 Operations Committee Minutes

11. Board Members Request Future Agenda Items.

12. Adjourn.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the MWPA at 415-539-MWPA (6972). Notification at least 48 hours prior to the meeting will enable the Agency to make reasonable accommodation to help insure accessibility to this meeting.

*Any writings or documents provided to a majority of the Board of Directors regarding any item on this agenda after the distribution of the original packet will be made available for public inspection at 28 Liberty Ship Way, Suite 2800, Sausalito CA 94965. *Note as of 4/30/20 offices are closed to the public. Therefore, documents will be made available upon request and will be available online at www.marinwildfire.org*

Notice is hereby given that the Board of Directors may discuss and/or take action on any or all of the items listed on this agenda. If any of these matters above are challenged in Court, you may be limited to raising only those issues you or someone else raised at any public hearing described on this agenda, or in written correspondence delivered at, or prior to, this Board meeting. Judicial review of an administrative decision of the Board of Directors must be filed with the Court not later than the 90th day following the date of the Board meeting decision (Code of Civil Procedure Section 1094.6)

I certify that this agenda was posted on the Public Notice Bulletin Board on or before day, month, year at time.



Mark Brown, Executive Officer