



October 31, 2024

Jon Kaufman
East Bay Wildfire Coalition of Governments
via email: jonk@solem.com

Subject: Proposal for East Bay Wildfire Coalition of Governments Historical Ecology Reconnaissance Study, Wildland Urban Interface Vegetation and Forest Restoration Plan, and CEQA Documentation

Dear Jon:

The San Francisco Estuary Institute, Tukman Geospatial, and Ascent appreciate this opportunity to submit a scope of work to assist the East Bay Wildfire Coalition of Governments with a historical ecology reconnaissance study, forest restoration and wildfire resilience plan, and associated documentation required for compliance with the California Environmental Quality Act (CEQA).

We look forward to working with you on this important effort. If you have any questions regarding the enclosed scope of work and cost estimate, please feel free to contact us.

Sincerely,

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Attachments:

- A Scope of Work
- B Price Proposal Estimate

ATTACHMENT A

PROPOSED SCOPE OF WORK

EAST BAY WILDFIRE COALITION OF GOVERNMENTS

INTRODUCTION

The California wildfire crisis continues to worsen, and the effects of climate change and decades of fire suppression are evident in the vegetation of the East Bay Hills. These stressors have increased the vulnerability of the East Bay to wildfire through heavy loads of highly flammable fuel. Endemic species are at risk as nonnative vegetation dominates habitat for hardwoods and grasslands, reducing biodiversity. Together, these factors have increased the potential for catastrophic wildfires like the Tunnel Fire (also known as the Oakland Hills firestorm), one of California's most destructive wildfires, which tore through the wildland urban interface (WUI) of Oakland and Berkeley in 1991. In recent years, California has seen many of the deadliest and most destructive wildfires in recorded history.

Due to the immediacy of the wildfire threat to the lives, property, and natural resources of the East Bay and the urgency expressed by the community, the East Bay Wildfire Coalition of Governments (EBWC) has formed to develop a collaborative and regional approach to reduce wildfire risk in the East Bay Hills of Alameda and Contra Costa Counties, including to over 90,000 homes. The EBWC is a consortium of elected officials representing cities, counties, and fire districts committed to safeguarding the communities and natural landscapes in the East Bay Hills. To reduce wildfire risk in the East Bay Hills, the EBWC needs science-based and data-driven approaches to ecosystem and community resiliency as well as proactive community engagement, education, and collaboration.

To address degraded ecosystems and hazardous fuel conditions resulting from drought, invasive species, and decades of fire suppression, our team consisting of the San Francisco Estuary Institute (SFEI), Tukman Geospatial, and Ascent will support the EBWC by helping design and provide environmental review for critical, high-priority vegetation treatment activities that would help restore natural ecological conditions and reduce future risk of catastrophic wildfire. Our team is proposing three main products, described further below, to provide the necessary tools to prepare the EBWC agencies for implementation of ecologically appropriate and risk reducing vegetation treatments in their jurisdictions. SFEI will conduct reconnaissance-level historical ecology research, synthesizing a range of archival data sources to provide preliminary information about pre-colonization vegetation conditions to guide restoration planning. Tukman Geospatial will prepare a Wildland Urban Interface Vegetation and Forest Restoration Plan with parcel-specific vegetation treatment recommendations, building on the vegetation and fire risk mapping they have already prepared for the EBWC. Ascent will prepare environmental documentation in compliance with California Environmental Quality Act (CEQA) for implementation of the Wildland Urban Interface Vegetation and Forest Restoration Plan. Our team of consultants will work collaboratively in the development of each work product and each consulting organization will review each product to help maintain consistency across products, thereby maximizing their usefulness.

The study area for this proposed work is assumed to be approximately 50,000 acres containing areas designated as high or very high fire hazard severity zones in the East Bay Hills of Alameda and Contra Costa Counties and is primarily located within the EBWC's "Urban Coalition Area."

PROPOSED SCOPE OF WORK

Product 1: Historical Ecology Reconnaissance Study

The San Francisco Estuary Institute (SFEI) will conduct a reconnaissance study of the historical ecology of high fire-risk areas of the East Bay Hills prior to major European-American modification. Synthesizing a range of archival data sources, this research will provide foundational information about historical landscape patterns and processes to contextualize current management challenges and help inform landscape-scale restoration plans and vegetation treatment targets for wildfire risk reduction. Findings from the historical ecology research will also serve as a resource for development of educational and community engagement materials. This work will draw on SFEI's multiple decades of historical ecological research in landscapes across the state, including studies in the nearby Alameda Creek (Stanford et al., 2013) and Wildcat Creek (Collins et al., 2001) watersheds.

SFEI will gather a subset of high-priority archival data, including early maps and surveys, photographs, and textual accounts, from a range of online databases and source institutions. Collected sources may span late 18th through early 20th centuries and include information about historical habitat extent, distribution, structure, composition, and other topics. High priority maps and other spatial data sources will be compiled in a GIS database, and non-spatial data will be compiled and organized thematically or geographically. Data will be synthesized to provide a high-level overview of historical ecological conditions (and where possible land use history) in the study area, focusing on 19th century conditions prior to major Euro-American modification; this reconnaissance study will not include extensive digital mapping of historical landscape patterns. Methods and results from the historical ecology research will be summarized in a brief technical report and slide presentation.

The proposed budget range for the historical ecology work product (\$100,000 - \$200,000) reflects differences in the level of research depth, coordination/communication, and reporting detail, as summarized in the task-level descriptions below.

Task 1 Data Collection (\$14,400 - \$37,900)

Low end budget scenario: SFEI will collect historical texts, photographs and maps relevant to the study area. Selected high-priority historical data will be acquired primarily from in-house collections and online databases. The assembled data may include historical aerial imagery, key early maps and land surveys, narrative descriptions (e.g., early explorer accounts, newspaper articles), and other selected high-priority sources.

Additional items for high end budget scenario: collect data from a larger number of online databases and selected physical archives; collect additional high priority data sources such as early botanical records.

Task 2 Data Compilation (\$19,500 - \$41,400)

Low end budget scenario: SFEI will compile key sources to facilitate synthesis of data collected in Task 1, including sources previously collected by SFEI pertaining to the East Bay Hills' historical landscape. Compilation activities may include georeferencing of high-priority maps, transcription of relevant excerpts from historical texts, and geolocation of selected historical photos and/or narrative descriptions.

Additional items for high end budget scenario: georeference a larger number of high-priority maps, photos, or narrative descriptions; review and transcribe excerpts from a larger number of textual sources.

Task 3 Synthesis and Analysis (\$20,100 - \$39,000)

Low end budget scenario: SFEI will organize compiled materials thematically and/or geographically and synthesize them into a set of preliminary findings about historical landscape conditions in high fire-risk areas of the East Bay Hills, focusing on documenting pre-modification vegetation conditions (i.e., distribution, composition, and structure), and potentially other topics based on project partner input as the budget permits. SFEI will also conduct limited outreach and engagement with local Tribal partners. SFEI will work with project partners to identify priority interests.

The high end budget scenario supports more in-depth synthesis of preliminary findings.

Task 4 Reporting and Communication (\$21,300 - \$38,000)

Low end budget scenario: SFEI will create a brief (~3-4 page) technical report (without designed elements) detailing these emerging findings, highlighting key sources, and summarizing the data collection and compilation process. Additionally, SFEI will develop a slidedeck and deliver one remote presentation to project partners, other collaborators, and interested parties. SFEI will work with project partners to present project deliverables in ways that are most useful to the overall restoration and vegetation treatment planning efforts.

The high end budget scenario supports development of a longer (~7-10 page) technical report (without designed elements).

Task 5 Coordination and Advising (\$13,400 - \$20,400)

Low end budget scenario: SFEI will coordinate with a small number (1-2) of informal technical advisors to guide research activities, provide input on data interpretation, and review deliverables. SFEI will meet with the project team (East Bay Wildfire Coalition, Ascent, and Tukman Geospatial) to coordinate project activities.

The high end budget scenario supports additional meetings with informal technical advisors.

Task 6 Project Management (\$9,900 - \$19,800)

Project management tasks will include invoicing (no more than monthly), progress reports, and coordination with the Contract Manager.

Task 7 Direct Expenses (\$1,400 - \$3,500)

This includes travel costs, fees for acquisition and/or publication of archival data, and stipends for advisors.

Deliverables

- ▲ Brief technical report (~3-4 pages in low end budget scenario; ~7-10 pages in high end budget scenario) without designed elements, summarizing data collection and compilation methodology, relevant examples of source material, and emerging findings
- ▲ Remote presentation and accompanying slide deck delivered to the East Bay Wildfire Coalition

References

Collins, L. M.; Grossinger, R. M.; McKee, L. J.; Riley, A.; Collins, J. N. 2001. Wildcat Creek Watershed: A Scientific Study of Physical Processes and Land Use Effects. SFEI Contribution No. 363. San Francisco Estuary Institute: Richmond, CA.

Stanford B, RM Grossinger, J Beagle, RA Askevold, RA Leidy, EE Beller, M Salomon, C Striplen, AA Whipple. 2013. Alameda Creek Watershed Historical Ecology Study. SFEI Publication #679, San Francisco Estuary Institute: Richmond, CA.

Product 2: WUI Vegetation and Forest Restoration Plan

Tukman Geospatial will develop a Wildland Urban Interface Vegetation and Forest Restoration Plan for the East Bay Hills that targets areas for forest restoration and fuels reduction. The plan will result in maps that show areas recommended for treatment. The areas recommended will be accompanied by the recommended treatments (e.g., thinning from below followed by air curtain burning, shaded fuel break, eucalyptus removal, etc.) as well as estimated treatment costs. The Wildland Urban Interface Vegetation and Forest Restoration Plan will be developed by Tukman Geospatial's interdisciplinary team of natural resources specialists, working with the East Bay Coalition of Governments and local East Bay forest and wildland fuels practitioners.

The development of the Wildland Urban Interface Vegetation and Forest Restoration Plan will occur in following tasks:

Task 1 Compile Data and Create Webmaps

Tukman Geospatial will compile existing foundational geospatial datasets to support restoration planning. These datasets will include best-available GIS layers that depict vegetation type, forest structure, topography, land ownership, administrative boundaries, etc. These datasets will be made available to the project team and partners via an ArcGIS Online web mapping application. Tukman Geospatial has developed many of these datasets in the past few years in work funded by East Bay Regional Parks, CAL FIRE, and others.

Task 2 Create Planning Units

Using a combination of topography, major roads, ownership, and administrative boundaries, Tukman Geospatial will divide the overall project area into several planning units. Planning units divide the larger East Bay Hills project area into manageable sub-areas for the purposes of project planning (and eventually implementation and monitoring).

Task 3 Create Project Polygons

Tukman Geospatial will analyze geospatial datasets including hazard, risk to structures, ladder, fuels, and fine scale vegetation community type and begin to develop treatment area polygons for forest restoration. Some limited site visits will complement the geospatial analysis. Based on the analysis and the limited site visits, Tukman Geospatial will develop draft polygons for restoration. The draft polygons will be shared with a limited set of stakeholders and then iterated/refined based on input and review.

The final proposed polygons slated for treatment will be assigned attribution for the activities to occur in them (e.g., thinning from below followed by air curtain burning, shaded fuel break, eucalyptus removal, etc.) as well as the estimated costs of the treatments.

The draft project polygons (and the final ones when complete) will be published as an ArcGIS Online service so they can be shared with others in webmaps and webapps.

Task 4 Report

Tukman Geospatial will draft a brief (~10-page) report that outlines the types of activities that will be implemented (e.g., thinning from below, eucalyptus removal, etc.) on the project polygons, and provides guidance on implementation and ranges for cost of implementation these activities. The report will include tables with treatment activities by acreage.

Deliverables

- ▲ ArcGIS Online Web Mapping Applications that contains geospatial datasets to support WUI vegetation and forest restoration planning
- ▲ Planning Unit boundaries
- ▲ Proposed project boundaries and recommended treatments for each polygon
- ▲ Brief narrative report, with reporting on proposed treatments by acreage

Assumptions

- ▲ This scope does not include implementation, coordination with landowners, or landowner outreach or research
- ▲ This scope of work does not include the services of a registered professional forester (RPF). Julia on our team has a Bachelor's and Master's in Forestry from UC Berkeley but is not an RPF.

Product 3: CEQA Documentation

The California Vegetation Treatment Program (CalVTP), developed by the Board of Forestry and Fire Protection in 2019, is a critical component of the state's multi-faceted strategy to address California's wildfire crisis. The CalVTP includes the use of prescribed burning, mechanical treatments, manual treatments, targeted herbicide application, and prescribed herbivory as tools to reduce hazardous vegetation around communities in the WUI, to construct fuel breaks (shaded or non-shaded), and to promote ecological restoration of degraded vegetation communities. Numerous environmentally protective standard project requirements are incorporated into the program. The CalVTP Program Environmental Impact Report (Program EIR) provides a powerful CEQA compliance tool to expedite the implementation of wildfire resilience projects. Any local or state agency providing funding or having land ownership, management, or other regulatory responsibility in the CalVTP program area (i.e., treatable landscape) can use the CalVTP to comply with CEQA for vegetation treatments consistent with the CalVTP Program EIR.

Based on our current understanding of the proposed Wildland Urban Interface Vegetation and Forest Restoration Plan (proposed project), the EBWC could use the CalVTP for CEQA coverage. Using the CalVTP would involve preparation of a Project-Specific Analysis and Addendum to the CalVTP Program EIR (PSA/Addendum). Defensible space treatments could be covered by the CalVTP using the Addendum as long as they do not result in new or more substantially severe significant impacts under CEQA. Preparation of a PSA/Addendum for the Wildland Urban Interface Vegetation and Forest Restoration Plan would provide the EBWC substantial cost and time savings compared to preparing a separate CEQA document (e.g., Environmental Impact Report [EIR]). Extensive public review and agency and Tribal coordination occurred in 2019 for the CalVTP Program EIR and does not need to be repeated for projects using the CalVTP. However, for projects preparing a PSA/Addendum under the CalVTP, additional limited reporting and Tribal and agency coordination are required. Once the Wildland Urban Interface Vegetation and Forest Restoration Plan is complete (Product 2), preparation of a PSA/Addendum is anticipated to require 6 to 8 months to complete, depending on the level of coordination and review for each of the EBWC member agencies. One agency will need to assume the role of lead agency under CEQA, and the other member agencies will participate as responsible agencies under CEQA.

As the architect of the CalVTP Program EIR and associated CEQA efficiency process, Ascent is uniquely qualified to assist the EBWC with efficient and effective CEQA permitting support for this project. We have worked closely with numerous agencies and entities throughout California to increase local capacity to implement the CalVTP and develop ready-to-implement projects using CalVTP PSAs under expedited schedules. Because Ascent and resource agency staff worked together to define the information necessary to meet their requirements, we fully understand the needs of resource and regulatory agencies, like the California Department of Fish and Wildlife (CDFW). Our experience and understanding allows for expedited PSA preparation and smooth agency coordination. In addition, Ascent has direct relevant experience through our work with the University of California, Berkeley, on its Wildland Vegetative Fuel Management Plan EIR, and preparation of the East Bay Hills Vegetation Treatment Project PSA/Addendum under the CalVTP for the East Bay Regional Park District and the Mount Diablo Vegetation Treatment Project PSA/Addendum for California State Parks. We have the necessary knowledge and resources to help the EBWC achieve CEQA compliance using the cost effective and efficient process through the CalVTP Program EIR.

Task 1 PSA/Addendum Preparation

Ascent will compile the project description of the PSA/Addendum based on the Tukman Geospatial Wildland Urban Interface Vegetation and Forest Restoration Plan spatial area and recommendations for vegetation treatment (Product 2). The project description will incorporate the historical ecological context of the East Bay Hills based on SFEI's study (Product 1).

Once the project description is finalized, preparation of the PSA/Addendum will require a biological resources reconnaissance-level survey, cultural records searches, outreach letters to geographically affiliated Tribes, and coordination with CDFW and US Fish and Wildlife pursuant to requirements under the CalVTP.

Task 2 Agency Coordination

Ascent will coordinate with the EBWC member agencies during review of the (1) draft CEQA project description and (2) draft CEQA documentation (i.e., PSA/Addendum and Mitigation Monitoring and Reporting Program [MMRP]). At the beginning of each review period, Ascent will present a briefing of the document to the member agencies to help facilitate their review and increase understanding of their use of the CalVTP. Input and comments will be incorporated into the final work products. The CEQA lead agency will help resolve any conflicting comments. A low end budget scenario assumes the abovementioned coordination steps. A high end budget scenario would include additional coordination to address agency-specific interests and needs.

Deliverables

- ▲ Draft and Final Project Description
- ▲ Draft and Final PSA/Addendum
- ▲ Draft and Final Mitigation Monitoring and Reporting Program
- ▲ Draft and Final project-specific CEQA Findings and Statement of Overriding Considerations

Assumptions

- ▲ The appropriate CEQA document will be a PSA/Addendum under the CalVTP Program EIR and will not require a separate document (e.g., EIR or MND)

ATTACHMENT B

PRICE PROPOSAL ESTIMATE

EAST BAY WILDFIRE COALITION OF GOVERNMENTS

The proposed price to complete the enclosed scope of work is estimated to be \$350,000 – 525,000 and is summarized below. This price range estimate is being provided to help the EBWC obtain funds to carry out this project. This estimate is based on a good faith effort and current understanding of the EBWC’s needs and will be refined to reflect any updates to the scope of work at the time of contracting. Variations in approach, issues, and deliverables can adjust the contract price.

Work Products	TOTAL
Historical Ecological Study (SFEI)	\$100,000 – 200,000
Wildland Urban Interface Vegetation and Forest Restoration Plan (Tukman Geospatial)	\$50,000 – 75,000
CEQA Documentation – CalVTP PSA/Addendum including agency coordination (Ascent)	\$200,000 – 250,000
TOTAL	\$350,000 – 525,000