

City of Piedmont
COUNCIL AGENDA REPORT

DATE: September 16, 2024

TO: Mayor and Council

FROM: Rosanna Bayon Moore, City Administrator

SUBJECT: Consideration of the Award of a Contract to Foster Morrison Consulting for Professional Services Related to the City of Piedmont Local Hazard Mitigation Plan Project in the amount of \$144,863

RECOMMENDATION:

By a single motion, take the following actions:

1. Approve the attached Agreement with Foster Morrison Consulting for professional services related to the City of Piedmont Local Hazard Mitigation Plan in the amount of \$144,863; and
2. Authorize the City Administrator to execute related contract documents.

BACKGROUND

Natural hazards can cause loss of life, damage property and infrastructure. These events can also harm a community's economic, social and environmental well-being. Hazard mitigation lessens the impacts of natural hazards by taking actions before the next event. Hazard mitigation plans raise awareness of hazards, risks and vulnerabilities. They also identify ways to reduce risk and focus local resources on the greatest risks. At the same time, they communicate local priorities to state and federal officials.

In 2019, the City of Piedmont adopted its first FEMA and CalOES approved Local Hazard Mitigation Plan (LHMP). Plans are approved for five years and in November of 2023 the City of Piedmont was awarded a Hazard Mitigation Grant by FEMA for the development of an updated LHMP. Preparation of the LHMP update will involve an extensive citywide planning process and will include the following participants:

1. Local special districts
2. Private agencies
3. Members of the public, including representatives of people with access and functional needs
4. Other stakeholders invited to participate in the plan development process as members of the Hazard Mitigation Planning Committee (HMPC)

In order to conduct this extensive planning process, the City of Piedmont issued an RFP seeking a qualified consultant to coordinate, facilitate, and develop a comprehensive Local

Hazard Mitigation Plan (LHMP) pursuant to the Disaster Mitigation Act (DMA) of 2000. Six qualified firms submitted proposals which were scored by a team of City staff and a resident subject matter expert. The top two scoring firms were invited to present their proposals and answer questions from the rating team. From this process, Foster Morrison Consulting scored the highest. As the consultant who wrote the City's 2019 LHMP, Foster Morrison Consulting displayed superior knowledge of the Piedmont community, expertise in the mitigation planning process, and extensive experience throughout neighboring and regional communities in California.

FEMA's Local Mitigation Planning Policy Guide outlines the requirements and processes jurisdictions must follow to produce an adopted LHMP. City staff will work with the Foster Morrison team to engage stakeholder input, assess Piedmont's risk from natural disasters, develop a strategy to mitigate against those risks, and shepherd the plan through CalOES and FEMA approval before ultimately coming before the City Council for adoption. Staff conservatively anticipates the planning process to take eight-to ten months and as many as six more months for approval and adoption.

FISCAL IMPACT

On November 21, 2023, the California Governor's Office of Emergency Service (CalOES) sent the City notification that FEMA has approved the City's application for grant funds to create a Local Hazard Mitigation Plan (the Plan) for a total project cost of \$197,040. The federal share of the grant will cover 75% of the cost of the development of the Plan and an additional \$9,725.60 for management costs. The City is responsible for funding the remaining 25% as a financial or in-kind contribution such as staff time.

CITY ATTORNEY

The City Attorney has reviewed and approved the agreement as to form.

ATTACHMENTS:

Attachment A: Contract

By: Dave Brannigan, Fire Chief

CONTRACT

This Contract made _____ (“Effective Date”), between the City of Piedmont, California, a municipal corporation, 120 Vista Avenue, Piedmont, California 94611, ("City") and Foster Morrison Consulting, a Limited Liability Company ("Independent Contractor").

- A. City is a municipal corporation which needs certain services as more specifically set forth hereafter.
- B. Independent Contractor agrees to provide these services to the City under the terms and conditions set forth in this Contract (“Contract”).

NOW, THEREFORE, in consideration of the mutual promises, covenants, terms and conditions hereinafter contained, the parties hereby agree as follows:

1. Services

Independent Contractor shall provide the services as set forth in Exhibit A attached hereto and incorporated herein (“Services”).

2. Compensation

- a. City will pay the Independent Contractor an amount not to exceed \$144,863 for the Services described in Section 1 above. Compensation shall be paid at the rate and schedule set forth in Independent Contractor’s Table 6 Cost Proposal Summary as set forth in Page 37 to Exhibit A, incorporated herein.
- b. Independent Contractor will provide City with monthly statements of fees earned and permitted reimbursable costs incurred for services provided during the month. Each statement will generally describe the services performed, the applicable rate or rates, the basis for the calculation of fees, a reasonable itemization of all costs, and receipts or other backup the City may reasonably request.
- c. City shall issue payment within 30 days of receipt of satisfactory invoices.

3. Term

This contract shall begin on the Effective Date. Unless otherwise terminated as provided in this Contract, this Contract shall terminate 24 months from the Effective Date.

4. Office Space, Supplies, Equipment, Etc.

Unless otherwise provided in this Contract, Independent Contractor shall provide such

office space, supplies, equipment, vehicles, reference materials, computers and telephone service as is necessary for Independent Contractor to provide the services under this Contract. Independent Contractor - not City - has the sole responsibility for payment of the costs and expenses incurred by Independent Contractor in providing and maintaining such items.

5. Contractual Relationship

The parties intend that an independent contractor-employer relationship will be created by this Contract. City is interested only in the results to be achieved, and the conduct and control of the work will lie solely with Independent Contractor. Independent Contractor is not to be considered an agent or employee of City for any purpose, and neither Independent Contractor nor any employees of Independent Contractor are entitled to any of the benefits that City provides for City's employees. It is understood that City does not agree to use Independent Contractor exclusively. It is further understood that Independent Contractor is free to contract for similar services to be performed for other cities, persons or entities during the term of the Contract. Independent Contractor shall be fully responsible for all income, social security or other taxes or deductions, including but not limited to worker's compensation and unemployment deductions, relating to the services it performs for City.

6. Indemnity and Hold Harmless

To the fullest extent permitted by law, Independent Contractor shall defend (with legal counsel reasonably acceptable to City), indemnify and hold harmless City and its officers, elected officials, employees, agents, and volunteers (collectively "Indemnitees") from and against any and all liability, claims, loss, cost, damage, injury (including, without limitation, injury to or death of an employee of Independent Contractor or its subconsultants), expense and liability of every kind, nature and description (including, without limitation, fines, penalties, incidental and consequential damages, reasonable court costs and attorneys' fees, litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith, and costs of investigation) ("Liability"), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, the performance of this Contract by Independent Contractor or by any individual or entity for whom Independent Contractor is legally liable, including but not limited to, officers, agents, employees, subcontractors or consultants of Independent Contractor.

For design professionals (as that term is defined by Civil Code § 2782.8) acting within the scope of their professional capacity, to the fullest extent permitted by law, Consultant shall, at its own expense, indemnify, protect, defend (by counsel reasonably satisfactory to the City) and hold harmless any Indemnitees from and against any and all Liability, whether actual, alleged or threatened, which arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, or as may be provided by statute in Civil Code § 2782.8, as may be amended from time to time.

Neither termination of this Contract nor completion of the services shall release Independent Contractor from its obligations under this Section 6, as long as the event giving rise to the claim, loss, cost, damage, injury, expense or liability occurred prior to the effective date of any such termination or completion, and this section shall survive the termination of the Contract.

7. Insurance

The following minimum levels of insurance coverage shall be provided during the term of this Contract. Prior to the execution of the Contract, Independent Contractor shall provide proof of insurance required. Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

Independent Contractor shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive Independent Contractor's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

Coverage shall be at least as broad as:

1. Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than \$2,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 05 09 or 25 04 05 09) or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: ISO Form Number CA 00 01 covering any auto (Code 1), or if Contractor has no owned autos, covering hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$2,000,000 per accident for bodily injury and property damage.
3. Workers' Compensation: as required by the State of California, with Statutory Limits.
4. Professional Liability (Errors & Omissions): As appropriate to Independent Contractor's services, and not less than \$2,000,000 per occurrence.

The insurance policies are to contain, or be endorsed to contain, the following provisions:

The City of Piedmont, its Council Members, directors, officers, agents and employees

shall be named as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of Independent Contractor including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Independent Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 forms if later revisions used).

For any claims related to this contract, Independent Contractor's insurance coverage shall be primary insurance coverage (at least as broad as ISO CG 20 01 04 13) with respect to the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the Independent Contractor's insurance and shall not contribute with it.

Independent Contractor hereby grants to City a waiver of any right to subrogation which any insurer of said Independent Contractor may acquire against the City by virtue of the payment of any loss under such insurance. Independent Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

Independent Contractor shall require the insurer to provide City with 30-day prior notice of termination or material change in coverage and ten (10) days prior notice of cancellation for non-payment.

8. Assignability

Independent Contractor shall not assign, delegate, or transfer any interest in this agreement nor the performance of any Independent Contractor's obligations hereunder, without the prior written consent of the City.

9. Miscellaneous

As used in this Contract, the masculine, feminine or neuter gender, and the singular or plural number, shall each be deemed to include the others whenever the context so indicates.

10. Notices

Any notices to be sent pursuant to this Contract shall be given in writing, via facsimile and concurrently by prepaid U.S. certified or registered postage addressed to City at 120 Vista Avenue, Piedmont, California 94611, and to Independent Contractor at 6095 Zang Way, Arvada, CO 80004 or at such other address as each party shall give the other in writing from time to time, and notices shall be deemed received at the time of personal delivery or three (3) working days after being placed in the United States Mail, postage prepaid, certified mail, return receipt requested.

11. Governing Law

This Contract shall be governed by the laws of the State of California. Jurisdiction and venue of litigation arising from this Agreement shall be in the County of Alameda, State of California.

12. Modification

Any modification of this Contract will be effective only if it is in writing signed by all parties to this Contract.

13. Time is of the Essence

Time is of the essence in the performance of this Contract.

14. Termination

The following provisions shall govern termination under this Contract:

- a. Either party may terminate this Contract for cause as follows:
 - (1) The party electing to terminate shall give the other party written notice of termination at least five (5) days prior to the termination date, setting forth very specifically the grounds for termination, the specific provisions of the Contract that has been violated, and a full statement of the facts surrounding the violations(s).
 - (2) If the terminated party so elects, the parties shall meet promptly and make good faith efforts to resolve the violation(s) in a mutually agreeable way.
 - (3) If any such violation cannot be resolved by the parties at such meeting, or at any mutually agreed extension(s) of such meeting, the termination shall proceed.
 - (4) If the violation(s) have not been resolved, the terminating party may proceed with termination, and with retaining other person(s) or entities to provide services, if the terminating party is the City.
- b. Either party may terminate the Contract at any time without cause upon at least sixty (60) days prior written notice to the other party. In the event of any such termination by City, Independent Contractor shall be paid for services actually performed through the date of termination, and Independent Contractor's work shall be immediately discontinued as of that date, except that City may elect, at City's option, to have Independent Contractor complete one or more projects or specific activities which are then in progress, in which case Independent

Contractor shall be paid for such services until completion. If terminated by Independent Contractor, any assignment accepted by Independent Contractor prior to the notice of termination shall be completed if desired by City.

15. Equal Opportunity

Independent Contractor shall insure that its policies and practices provide equal opportunity to all applicants and employees without regard to race, color, creed, gender, age, religion, national origin, sexual preference, gender identity, marital status, disability, Acquired Immune Deficiency Syndrome (AIDS), AIDS-Related Complex (ARC) and in addition, Independent Contractor must comply with the Americans with Disabilities Act.

16. Compliance with Laws

Independent Contractor shall use the standard of care in its profession to comply with all applicable federal, state, and local laws, codes, ordinances, and regulations. Independent Contractor represents and warrants to City that it has and shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Contract any licenses, permits, insurance and approvals which are legally required for Independent Contractor to practice its profession.

17. Entire Agreement

This Contract constitutes the entire agreement of the parties with respect to the matters set forth herein. Any amendments, modifications, or changes to this Agreement shall be in writing and signed by both parties. In the event of a conflict between the terms set forth in this Contract and the terms set forth in any exhibit to this Contract, the terms of this Contract shall govern over the terms of any exhibit.

18. Ownership of Documents

All plans, studies, documents and other writings, including working notes and internal documents, prepared by and for Independent Contractor, its officers, employees and agents and subcontractors in the course of implementing this Agreement, shall become the property of City, upon payment to Independent Contractor for such work, and City shall have the sole right to use such materials in its discretion without further compensation to Independent Contractor or to any other party. Independent Contractor shall, at Independent Contractor's expense, provide such reports, plans, studies, documents and other writings to City upon written request. All documents prepared by Independent Contractor are confidential and shall be maintained to preserve their confidential nature. Release of any such documents to third parties shall only be made upon written consent of City.

19. Licenses

Independent Contractor represents and warrants that it has all licenses, permits,

qualifications, insurance and approvals of whatsoever nature which are legally required of Independent Contractor to practice its profession. Independent Contractor represents and warrants to City that Independent Contractor shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement, any licenses, permits, insurance and approvals which are legally required of Independent Contractor to practice its profession.

20. Waiver

Waiver of a breach or default under this Agreement shall not constitute a continuing waiver of a subsequent breach of the same or any other provision under this Agreement.

21. No Third-Party Beneficiaries

Nothing in this Contract shall operate to confer rights or benefits on persons or entities who are not parties to this Contract.

22. Severability

If any portion of this Contract or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction or if it is found in contravention of any federal, state or local statute, ordinance or regulation the remaining provisions of this Contract or the application thereof shall not be invalidated thereby and shall remain in full force and effect to greatest extent permitted by law.

23. Construction

Headings or captions to the provisions of this Contract are solely for the convenience of the parties, are not part of this Contract, and shall not be used to interpret or determine the validity of this Contract. Any ambiguity in this Contract shall not be construed against the drafter, but rather the terms and provisions hereof shall be given a reasonable interpretation as if both parties had in fact drafted this Contract.

IN WITNESS WHEREOF, the parties have executed this Contract at Piedmont, California, the day and year first above written.

CITY OF PIEDMONT:

[INDEPENDENT CONTRACTOR]:

By: _____
[Mayor or City Administrator]

By: _____
[Title]

Attest:

Anna Brown, City Clerk

Approved as to form and legality:

Michelle Marchetta Kenyon, City Attorney
Deepa Sharma, Assistant City Attorney

City of Piedmont Local Hazard Mitigation Plan Update Proposal Submittal, July 2024



Prepared for:
City of Piedmont
120 Vista Avenue
Piedmont, CA 94611

Prepared by:
Foster Morrison Consulting
6095 Zang Way
Arvada, CO 80004

In Coordination With:
Howell Consulting
14968 Retreats Trail Ct.
Rancho Murieta, CA 95683

Table of Contents

1. Introduction and Program Description	1
2. Project Understanding, Approach, and Work Plan	2
Project Understanding.....	3
Project Approach.....	4
Project Goals and Benefits.....	5
Work Plan.....	6
Project Management and Administration.....	6
Phase I: Planning Process	6
Phase II: Risk Assessment	9
Phase III: Develop Mitigation Strategy (Draft an Action Plan)	13
Phase IV: Plan Maintenance	16
3. The Foster Morrison Team Statement of Qualifications, Experience, & Expertise	18
Foster Morrison Consulting, Ltd.....	18
Sub-consultant: Howell Consulting, Inc.	18
Foster Morrison Team Qualifications and Experience	19
Hazard Mitigation Planning	19
Hazard Mitigation Program Initiatives and Regulatory Drivers	23
Risk Assessments.....	25
Floodplain Management/NFIP's Community Rating System (CRS)	26
Mitigation Project Development, FEMA Grant Applications, and Benefit-Cost Analyses (BCAs)	26
Other Firm Capabilities – Special Considerations	26
4. Foster Morrison Team's Related Experience and References.....	28
Client References.....	28
5. Team Availability, Project Schedule, and Capacity.....	34
Team Availability and Project Schedule.....	34
Team Capacity.....	34
6. City's Services Contract	36
7. LHMP Fee Schedule and Estimated Budget	36
8. Additional LHMP Qualifications	39
Project Team	39

June 26, 2024

Dave Brannigan
Fire Chief
City of Piedmont
120 Vista Avenue, Piedmont, CA 94610

Re: City of Piedmont: Proposal for a Local Hazard Mitigation Plan Update Project

Chief Brannigan:

Foster Morrison Consulting, Ltd. (Foster Morrison), in conjunction with Howell Consulting, Inc., is pleased to submit this work plan, project cost, schedule, and summary of qualifications and experience for a City of Piedmont Local Hazard Mitigation Plan (LHMP) Update. The Foster Morrison Team brings a unique understanding of the mitigation planning needs of the City. Foster Morrison's proposed staff for this City of Piedmont 2025 LHMP Update project were the same key staff that developed the 2019 City of Piedmont LHMP.

Foster Morrison's reputation and expertise is in developing LHMPs and LHMP Updates for California communities throughout the state. Foster Morrison staff have been developing hazard mitigation plans for nearby California communities (including counties, incorporated communities, and districts) over the last twenty years providing coverage for 100's of jurisdictions. Recent planning efforts in Alameda County include the 2024 Tri-City LHMP Update, which covers the cities of Fremont, Newark, and Union City; the Alameda County Water District; and the Union Sanitary District. Also completed in 2023, is the FEMA-approved East Bay Regional Park District LHMP Update (the largest regional park district in the nation, covering the entirety of Alameda and Contra Costa counties). The Foster Morrison Team is very familiar with Alameda County hazards, current data sources, and key mitigation planning issues that will be important to incorporate into Piedmont's LHMP Update.

Other California LHMPs and LHMP Updates completed by Foster Morrison include multi- and single-jurisdictional plans for: Butte County, Colusa County, Sacramento County, Placer County, Sutter County, Amador County, Yuba County, Plumas County, Lake County, Nevada County, Calaveras County, Madera County, and the Los Angeles Unified School District (the second largest school district in the US). Each of the multi-jurisdictional county plans provided coverage and FEMA approval for all of the incorporated communities, numerous special districts, and in a few instances, local tribes. In addition, Foster Morrison has had two LHMPs completed to the new 2023 FEMA guidance and approved by both Cal OES and FEMA. This includes the City of Placentia, CA and the previously mentioned Tri-City LHMP Update, which provided an update to three separate LHMPs.

Our proposed project manager, lead planner, and GIS/Risk Assessment lead for this LHMP Update have worked together as a team doing mitigation plans for all of the aforementioned communities, with many of these being repeat clients. In fact, Foster Morrison staff have completed two planning cycles for numerous California communities, three planning cycles for three California counties (Butte, Sutter, and Amador), and four planning cycles for two California counties (Placer and Sacramento) – all of the completed plans are FEMA approved. As a result of these planning efforts, many of these communities have been successful in obtaining pre- and post-disaster grant funds for various projects identified in their LHMP mitigation strategies.

Foster Morrison's extensive mitigation planning experience combined with their in-depth knowledge of the California regulatory environment, area-specific hazards, and customized plan development process translates to added value to the City. This includes Foster Morrison's working knowledge of the Disaster Mitigation Act of 2000; LHMP implementing regulations published at 44 CFR 201.6 and the latest FEMA LHMP guidance, including FEMA's Local Mitigation Planning Policy Guide FP 206-21-0002 effective April 19, 2023; as well as other current, applicable federal and state requirements.

By utilizing the Foster Morrison Team, the City of Piedmont will receive an LHMP Update that is customized to meet the specific needs of the City, is clear and action oriented, and will enable the City of Piedmont to maintain eligibility for FEMA and state mitigation and disaster recovery funds. Our Team's expertise and working relationships with the Cal OES and FEMA Region IX also assist our clients with navigating all aspects of FEMA programs from disaster preparedness to mitigation and grant applications to post disaster response and recovery.

Our Firm's proposed project manager and primary contact for the project is:

Jeanine Foster, JD
Principal/Sr. Project Manager
Foster Morrison Consulting Ltd.

Jeanine.foster@fostermorrison.com
Phone: (303) 717-7171; Fax: (720) 893-0863
6095 Zang Way, Arvada, Colorado 80004

We are committed to providing the City of Piedmont with an LHMP Update that is approved by Cal OES and FEMA and contains a comprehensive mitigation strategy that is designed to reduce hazard losses and make the City more disaster resilient. If you have any questions, please feel free to contact me at your convenience. We look forward to working with the City on this project.

Sincerely,



Jeanine Foster, JD
Principal/Senior Project Manager

1. Introduction and Program Description

The Foster Morrison Team, comprised of Foster Morrison Consulting, Ltd. (Foster Morrison) and Howell Consulting Inc. (Howell Consulting) have teamed to provide the City of Piedmont with an LHMP Update that is tailored to the unique needs of the City.

The primary purpose of this LHMP planning project is to reduce long-term risk and loss to people and property from identified hazards and to make the City of Piedmont more disaster resilient and better able to recover when a disaster does occur. This City of Piedmont 2025 LHMP Update will be a single-jurisdictional LHMP Update for the City as the participating jurisdiction seeking FEMA approval of the Plan. The LHMP will be inclusive of all key agencies and private and public stakeholders who wish to participate in the overall planning process.

This LHMP Update will address all hazards of significance to the City, will focus on planning for the whole community, and will be developed pursuant to the requirements of DMA 2000, published at 44 CFR 201.6 and associated FEMA guidance, including FEMA's Local Mitigation Planning Policy Guide FP 206-21-0002 effective April 19, 2023, and Local Mitigation Planning Handbook guidance. This LHMP will also address the requirements of SB 379 (Climate Adaptation); AB 1000 (Environmental Justice); applicable California wildfire planning and regulatory initiatives; and will be consistent with the goals and objectives outlined in the 2023 State of California Hazard Mitigation Plan.

The Foster Morrison Team will conduct all work necessary to provide the City with a Cal OES/FEMA-approved 2025 LHMP Update. A FEMA-approved LHMP Update will provide Piedmont with eligibility for FEMA pre- and post-disaster funding. The 2025 Update will be developed to reflect current conditions, with a focus on enhancing community capabilities and hazard risk reduction for the City of Piedmont in accordance with the requirements set forth in Piedmont's RFP. Foster Morrison's proven approach to hazard mitigation planning for local communities fully meets the requirements of the City's RFP, DMA regulations and FEMA's 2023 LHMP guidance.

Foster Morrison's qualifications and experience for providing the City of Piedmont with a FEMA-approved, DMA-compliant, CRS-focused, 2023 LHMP Update is unequalled:

- Foster Morrison's proposed staff for this City of Piedmont 2025 LHMP Update project were the same key staff that developed the 2019 City of Piedmont LHMP.
- Foster Morrison staff have been working with nearby northern California communities developing their hazard mitigation plans and plan updates since 2003, including the recent FEMA approved

2024 Tri-City LHMP Update (for 3 cities; Fremont, Newark, and Union City; and 2 districts) and the 2023 East Bay Regional Park District LHMP Update, both in the East Bay.

- Foster Morrison's staff is very familiar with the Piedmont Planning Area, the current hazards, and most recent and valid hazards data to be utilized in their LHMP Update.
- Foster Morrison staff has completed more than 70 LHMPs and LHMP Updates in 15 states and 7 FEMA regions. This includes 20+ years of FEMA Region IX/California hazard mitigation planning experience:
 - ✓ Over 40 California single and multi-jurisdictional LHMPs/LHMP Updates providing FEMA approved plans for 100s of communities, including counties, cities, special districts, and tribes.
 - ✓ 2 planning cycles for multiple counties, 3 planning cycles for three counties (Sutter, Amador, and Butte), and 4 planning cycles for two counties (Sacramento and Placer).
 - ✓ Completion of two LHMPs since the new 2023 FEMA LHMP guidance became effective. These two plans, a single jurisdictional LHMP for a Southern California city and the Multi-jurisdictional LHMP Update for aforementioned Tri-City jurisdictions in Northern California's East Bay are both Cal OES and FEMA approved to the new guidance.
- Foster Morrison is committed to promoting equity, diversity and inclusion in hazard mitigation planning and project implementation by planning for the "Whole Community". Our recent FEMA review for the 2024 City of Placentia LHMP identified this as one of our strengths: ***"The plan does an excellent job of inviting a diverse set of stakeholders from each of the 5 key groups, including organizations that support underserved populations. The plan shows a robust effort was made to get the public involved."***
- Foster Morrison's extensive mitigation planning experience combined with their working relationship with Cal OES planners and knowledge of the current LHMP regulatory framework will provide the City with a FEMA approved, LHMP Update that contains an inclusive planning process and a comprehensive range of risk reduction measures designed to reduce future hazard related losses in the City of Piedmont.

2. Project Understanding, Approach, and Work Plan

The City of Piedmont is requesting services to coordinate, facilitate, and develop a comprehensive LHMP Update. This section includes our project understanding, approach, and work plan designed to meet and exceed all of the City's expectations for a 2025 LHMP Update.

Project Understanding

The City of Piedmont is an older, well-established community located in Alameda County, approximately 10 miles east of San Francisco. The City is completely encircled by the City of Oakland and has no opportunities for annexation. This has been the case since 1909, when Oakland annexed Piedmont's north and east perimeter. Piedmont's "landlocked" setting has influenced its historic development patterns and significantly affects its potential for new housing and employment today. The City encompasses 1.7 square miles—virtually all of it fully developed.

More than 90% of the City's land area is developed with housing and 9% consists of schools, parks, and churches. Piedmont has less than four acres of commercial land, consisting mostly of offices and small businesses. The City has no industrial land. The City's commercial acreage is fully developed and supports about two dozen active businesses and ancillary storage uses. The replacement of existing single-family homes with multi-family development is not considered feasible, due to the excellent condition of the City's housing stock and the potential for displacement of existing Piedmont residents.

The climate in Alameda County is characterized by warm, dry summers and mild, wet winters. Average temperatures in the City range from the low 50s in the winter to the mid-60s in the summer months. Rainfall is the chief form of precipitation in the City, with most rainfall occurring from October to April. Much of Piedmont consists of gentle slopes between zero and 20 percent, requiring a small to moderate amount of grading to support construction. The City's vacant and undeveloped land is steeper, with slopes exceeding 50 percent in some cases.

Given the geography and climate of the area, the City is vulnerable to numerous natural hazards. Of these hazards, earthquake (and liquefaction), landslides, localized and dam failure flooding, and wildfire are initial hazards of concern for the City. Climate change is also of concern to the City.

Piedmont is located in a geologically active part of the world. The region's geology is dominated by the intersection of the Pacific and North American tectonic plates, two components of the earth's crust that are moving in opposite directions. In the Central Bay Area, most earthquakes are associated with the San Andreas, Calaveras, and Hayward Faults. The San Andreas Fault traverses San Mateo County, about 15 miles west of Piedmont. The Calaveras Fault lies on the edge of the Diablo Range, about 15 miles to the east. The main trace of the Hayward Fault runs about 0.25 miles east of Piedmont, along an alignment that roughly parallels State Highway 13. The fault extends from Point Pinole more than 40 miles south to Milpitas. The Hayward Fault presents the greatest threat to Piedmont, although a large earthquake on any of the region's faults could cause significant damage.

Landslides are relatively common in the East Bay Hills, especially during high-intensity, long duration winter rains. They generally occur along the sides of ravines where surface water and groundwater are concentrated, or on deep-seated bedrock and steep slopes with weak or shallow soils. When such soil becomes saturated with water, its weight increases and resistant forces are reduced. The risk of landslides increases where certain conditions are present, such as hillsides that have been denuded by fire. The risk of landslides generally corresponds to slope, with the highest hazards in Moraga Canyon, along Indian Gulch, in Piedmont Park, in the Wildwood Gardens area, along Park Boulevard, and in the Somerset Road area along the Oakland border. Landslide hazards in the rest of the City are generally low.

There are no FEMA-designated flood plains in Piedmont. The City's creeks carry relatively small volumes of runoff. Heavy rains may produce ponding around storm drains but these events are short in duration and do not typically cause property damage. Flooding could potentially result from the failure of Tyson Lake dam or the collapse of East Bay Municipal Utility District reservoir tanks in the hills above Piedmont.

Wildfire is also a concern. Parts of Piedmont have the same landscape character as the area burned in the devastating 1991 Oakland Hills Fire. The 1991 Fire destroyed more than 3,000 homes in Oakland and Berkeley, caused 23 deaths, burned 2,000 acres, and resulted in \$3 billion in property damage. Although there were no casualties or damage in Piedmont, the fire stopped at the city limits.

In addition, FEMA and the State of California has put an increased emphasis on climate change and its effects on natural hazards. Climate change can exacerbate other hazards like drought, extreme weather, flood, and wildfire. The City of Piedmont's hazards of concern identified during this 2024/2025 plan development process will be addressed in this LHMP Update.

Project Approach

The LHMP Update will assess hazards and risks that pose a threat to the City, identify local resources and capabilities that can assist the City in the mitigation of hazards, and include a mitigation strategy that will make the City of Piedmont more resilient and sustainable. The 2025 LHMP Update will be developed in accordance with DMA 2000, FEMA's 2023 Guidance, and the requirements set forth in Piedmont's RFP and will be prepared utilizing the process shown in Table 1. Table 1 also shows how the Foster Morrison plan development process specifically aligns with the scope of work outlined in the City's RFP. It should be noted that the City of Piedmont's FEMA-approved 2019 LHMP was developed by Foster Morrison following this same 4-phase, 10-step plan development process. The end result will be a FEMA-approved 2025 LHMP Update for the City of Piedmont.

Table 1 Hazard Mitigation Planning Process

Disaster Mitigation Act Planning Regulations (44 CFR 201.6)	CRS/FMA Planning Steps	Piedmont LHMP Update Phases
Phase I: Planning Process		
201.6(c)(1)	1. Organize Resources	Phase 1
201.6(b)(1)	2. Involve the Public	Phase 2
201.6(b)(2) & (3)	3. Coordinate with Others	Phase 1
Phase II: Risk Assessment		
201.6(c)(2)(i)	4. Assess the Hazard	Phase 3
201.6(c)(2)(ii) & (iii)	5. Assess the Problem	Phase 3
Cal OES/FEMA requirement	Assess the Capabilities	Phase 4
Phase III: Mitigation Strategy		
201.6(c)(3)(i)	6. Set Goals	Phase 5
201.6(c)(3)(ii)	7. Review Possible Activities	Phase 5
201.6(c)(3)(iii)	8. Draft an Action Plan	Phase 5
Phase IV: Plan Maintenance		
201.6(c)(5)	9. Adopt the Plan	Phase 7
201.6(c)(4)	10. Implement, evaluate, revise	Phase 6

Project Goals and Benefits

This LHMP Update will be developed to achieve the following project goals and benefits:

- Develop a FEMA-approved, DMA-compliant, LHMP Update for the City of Piedmont utilizing the new FEMA guidance effective April 19, 2023.
- Establish and execute an inclusive plan development process that fully integrates the “whole community” approach to plan development
- Align the LHMP Update with local community and regional plans and the 2023 State of California Hazard Mitigation Plan and address AB 2140, SB 379, AB 1000, and applicable wildfire initiatives.
- Build partnerships with diverse stakeholders and increase opportunities to leverage data and resources
- Improve public safety and local resiliency to damage from identified hazards, thus reducing the impact and cost of disasters to the City and taxpayers
- Position the City to compete more effectively for pre- and post-disaster mitigation funding
- Educate the community, public and all stakeholders about identified hazards, risks, and mitigation strategies within the City of Piedmont
- Make the City more disaster resilient and speed community recovery when disasters occur

Work Plan

This work plan details Foster Morrison's plan development process and how Foster Morrison and the City of Piedmont as the participating jurisdiction will meet the objectives of this LHMP Update project

Project Management and Administration

Foster Morrison will provide the project management and administrative services in support of the Piedmont Fire project lead. Project management tasks will include coordination meetings, as-needed communications, and progress reports pertaining to the work, budget, and schedule. Regular communication and close coordination with the Piedmont Fire Department, as project lead, will be paramount to the successful and timely completion of this LHMP Update.

Also of note, all key planning and public meetings have been scheduled as in-person meetings. However, as may be necessary, logistical alternatives to in person meetings, such as Hybrid or Zoom meetings may also be considered for use on this project to maintain project schedules while providing opportunities for planning committee coordination and facilitating key stakeholder input into the 2025 LHMP Update process. Additional one-on-one meetings with City staff and other key stakeholders will also be conducted as necessary. These may be done in person, via phone, or web based.

Phase I: Planning Process

Task 1: Organize Resources (Piedmont Phase 1)

Hazard mitigation planning is the process through which hazards that threaten communities are identified, likely impacts determined, mitigation goals set, and appropriate mitigation strategies determined, prioritized, and implemented. The LHMP Update documents the hazard mitigation planning process and identifies relevant hazards, vulnerabilities, and strategies the City will use to decrease vulnerability and increase resiliency and sustainability in the community.

Following a Notice to Proceed (NTP), the City of Piedmont project lead and Foster Morrison will hold a conference call to review the project scope and schedule; discuss planning team participation and public outreach efforts; identify initial data sources and contacts, start initial data collection efforts; and plan the project kickoff meeting.

LHMP HMPC Meetings

A coordinated, engaged Hazard Mitigation Planning Committee (HMPC) comprised of key community stakeholders is critical to a successful mitigation planning process and LHMP Update. The HMPC created for the Piedmont 2019 LHMP will be used to form the basis of the new HMPC. Additional representatives from the City, county, districts, and other agencies and public and private

stakeholders with an interest in hazards planning in the City of Piedmont will also be invited to participate on the 2024/2025 HMPC. In addition, committee members may include residents, business owners, non-profits, religious institutions, disability and access and functional needs groups, and other public or private entities to provide for a representative cross-section of the community. The makeup of the HMPC will utilize the “whole community” approach as required by new LHMP guidance. The intent of the HMPC is to be all-inclusive. Foster Morrison will maintain rosters, document meeting attendance, and will facilitate the work of the HMPC with leadership and support provided by the City. The overall planning process and HMPC meetings will be open to the public and participation will be encouraged.

Jurisdictional Participation

The City of Piedmont seeking FEMA-approval of this 2025 LHMP Update will be required to participate in the LHMP development process as set forth by DMA regulations and guidance, and will be required to comply with the following participation elements to receive FEMA Plan approval:

- Provide input to HMPC membership and the identification of key stakeholder groups
- Provide representation on the HMPC, attend meetings, and participate in the planning process
- Assist in providing data and identifying the unique risks and how the risk differs across the planning area
- Identify new and proposed mitigation actions/projects for the mitigation strategy
- Review and comment on the draft Plan(s)
- Coordinate the public outreach process and attend public meetings
- Formally adopt the LHMP Update
- Manage the implementation of the resulting mitigation strategy

All other agencies, and public and private stakeholders will be asked to support the planning process through representation on the HMPC; providing data and input for the updated risk assessment and mitigation strategy; and reviewing Plan drafts prior to submittal to Cal OES and FEMA.

Kickoff Meeting

At the beginning of the process, a kickoff meeting of the HMPC will be held to present information on the hazard mitigation planning regulations and guidance, participation requirements, and project scope and schedule. This meeting will include a review and update of the 2019 hazards. Agency coordination and an initial strategy for public involvement will also be discussed.

Deliverables

- Initial project conference call

- Recommendations for formation of HMPC
- Draft of written invitations to LHMP participants
- Project kickoff meetings (HMPC Meeting #1 – held in conjunction with public meeting #1)

Task 2: Public Involvement (Piedmont Phase 2)

Foster Morrison will work with the City and HMPC to plan and execute a public information outreach strategy, utilizing the “Whole Community” approach, to ensure an effective, inclusive, and equitable public involvement process. Public outreach efforts will be designed to educate the public and build consensus on the City’s risks and vulnerability to hazards and mitigation strategy development.

Public outreach activities will: leverage existing community outreach mechanisms where available and will include publicizing the activities of the HMPC through the City’s website, press releases to local media outlets, development of survey(s) for inclusion on the LHMP website, utilizing outreach tables at community events, and developing informational presentations on the hazard mitigation planning process combined with other community events, public meetings, and other outreach efforts to local public stakeholders. Feedback received from outreach activities will be documented and summarized for the HMPC and LHMP documents.

In addition, three public meetings will be held for this LHMP Update. An early public meeting will be held at the beginning of the planning process to obtain input on the hazard issues and possible risk reduction measures in the planning area. A second public meeting will be held to present the results of the risk assessment. A third public meeting will also be held at the end of the planning process to solicit comments on the draft Plan prior to submittal to Cal OES/FEMA for review and approval.

Deliverables

- Public Information Outreach Strategy
- Drafts of website, press releases, newsletters, survey(s), etc.
- Public meetings, including development of meeting materials, (3 public meetings held during the same time frame as HMPC Meetings #1, #2, and #5)

Task 3: Coordinate with Other Agencies (Piedmont Phase 1)

DMA regulations require that the mitigation planning process include organizations, agencies, and key public and private stakeholders, including groups that represent underserved and vulnerable populations. Representatives from local, state, and federal agencies and organizations with significant interests in the community, hazards, and/or mitigation will be invited to join the HMPC and participate in the LHMP development process.

Data Collection and Review

Foster Morrison staff will work closely with the City and the HMPC to identify key resources and data to support the LHMP Update. In accordance with DMA standards, the LHMP Update will utilize best available data as pertaining to identified hazards of concerns, risks, vulnerabilities, community assets and critical facilities, and existing community mitigation capabilities. The most current GIS datasets and assessor data will also be collected to support the risk analysis for the updated risk assessment.

Coordination (and Integration) with Other Planning Efforts

Also integral to the DMA planning process is the coordination and integration with other community planning mechanisms and with data and information from stakeholders and agencies. Foster Morrison will work with the City and HMPC to identify and review existing plans, programs, and policies from general plans, emergency operations plans, climate plans, earthquake plans, fire plans, flood and stormwater plans, capital improvement program planning and budgeting, and other relevant documents. These plans will be evaluated for effectiveness and integrated into this LHMP Update as appropriate. In addition, past and ongoing integration efforts of the City's 2019 LHMP into other community planning efforts will be described in this Update as required by DMA. As well, Foster Morrison will align this LHMP Update with the goals, objectives, and priorities of the 2023 State of California Hazard Mitigation Plan.

Deliverables

- Identification, collection, and review of relevant data
- Coordination, integration, and documentation with existing planning mechanisms
- Identification and coordination with other agencies, organizations, and stakeholders
- Assessment and documentation of past integration efforts of the City's 2019 LHMP

Phase II: Risk Assessment

The risk assessment is the process of measuring the potential impact to life, property, and other City assets from identified natural hazards. Natural hazards of concern will be addressed in an updated risk assessment to determine quantitative and qualitative vulnerabilities of the City, as data allows. The risk assessment will provide a foundation in which to develop and prioritize mitigation actions to reduce damage from natural disasters by allocating resources to areas of greatest vulnerability.

The risk assessment will include existing and new hazards and will use best available data to evaluate the risk and vulnerability from hazards that may affect or have historically affected the City.. Where hazards and risks vary across the planning area, the differences will be noted.

As part of the updated risk assessment, an evaluation of climate change and its effects on identified hazards will be included. The risk assessment includes three primary components: 1) hazard identification and profiles; 2) vulnerability assessment, and 3) capability assessment.

Task 4: Assess the Hazards – Hazard Identification and Profiles (Piedmont Phase 3)

The first step in assessing the hazard is to identify and profile hazards as they affect the City of Piedmont to determine if any new hazards should be included in the LHMP Update or likewise, whether any existing hazards should drop out. Factors such as frequency and magnitude of past hazard occurrences, the likelihood of future occurrences, and the potential for devastating losses will be considered when updating the hazard list. This will include an evaluation of the hazard history and potential for Piedmont to be affected by various hazards, starting with the hazards identified in the current Piedmont 2019 LHMP; Alameda County's and the City of Oakland's LHMPs; as well as in existing plans, studies, and data available from local, state, and federal sources. The 2023 State of California Hazard Mitigation Plan will be reviewed for their current list of hazards. Input from the HMPC and public and private stakeholders will also be considered. The end result will be an updated list of hazards of concern to the City of Piedmont.

Once an updated hazard list has been determined, historical events and recent hazard events that occurred since the 2019 LHMP will be added and an updated and new profile for each hazard will be developed. This profile will include: a description of the hazard and its location and extent; severity and magnitude of the hazard; potential impacts; previous occurrences; hazard frequency, duration, speed of onset, and recurrence interval (probability of future events). The hazards will be mapped and analyzed using GIS (as described further below) and/or other data and methodologies to identify and analyze areas within the City that are at risk and vulnerable to identified hazards. In addition, as mandated by the State, climate change issues will be considered and addressed to the extent they affect or exacerbate identified hazards.

Deliverables

- Updated list of hazards
- Updated hazard identification and profiles section of the Plan
- GIS mapping and analysis of each mapped hazard

Task 5: Assess the Problem: Vulnerability Assessment (Piedmont Phase 3)

The next step of the risk assessment phase is to conduct a vulnerability assessment to determine the vulnerability of Piedmont to identified hazards. Selected methodologies may include utilizing various loss estimation tools such as GIS mapping and analysis and Level 1 Hazus (FEMA's loss estimation

software) runs to assist in quantifying and portraying the risk from identified hazards to support mitigation strategy development and future community planning decisions. Foster Morrison will utilize best practices and resources and will follow the process outlined in FEMA's Local Mitigation Planning Handbook. Details of historic hazard events, mapped hazard layers and quantitative data (to the extent available) will be incorporated to the greatest extent possible.

The updated risk assessment will include an analysis of the risk and vulnerability of Piedmont to identified priority hazards and will illustrate through existing and updated maps, tables, and other methods how the risk and vulnerability varies across the City planning area. Following FEMA's new 2023 LHMP guidance, the vulnerability assessment will document how the risk and hazard priorities have changed since the 2019 LHMP. In addition, the vulnerability assessment will discuss how climate change influences each hazard over time and how development and changes in populations have and will continue to affect the vulnerability of the City of Piedmont to identified hazards.

Identify and Inventory Assets

The vulnerability assessment is designed to evaluate and quantify, where possible, potential hazard-related losses to the City of Piedmont. Critical to this analysis is conducting an inventory of key community assets. Federal, state, local, and community GIS resources, Alameda County Assessor's data, and other best available data will be used to develop a comprehensive inventory of assets specific to the City of Piedmont and located in identified hazard areas which will be displayed in area maps and tables as data permits. This includes: National Flood Hazard Layer maps; other state level mapping such as CAL FIRE and CGS data; and maps and data from locally developed plans. Regionals hazard studies, General Plans, U.S. Census data, Hazus, and other sources will be reviewed for inclusion into the vulnerability assessment. To the extent supported by available data, the following elements will be addressed:

- Number, types (property use), and values of existing parcels and buildings in the City of Piedmont and in mapped hazard areas, based on local GIS and County Assessor data
- Identification of population concentrations and at-risk and vulnerable populations,
- Repetitive flood loss and severe repetitive loss properties
- Public buildings, critical facilities, infrastructure, utilities, services, and community lifelines
- Estimates of potential dollar losses per hazard utilizing Hazus or GIS
- Natural, cultural, and historic resources at risk
- Impacts to economic assets and community activities of value
- Land use, development trends, and future development in the City and in identified hazard areas

Estimate Potential Losses

Once the hazards and assets have been identified, profiled, and located, Foster Morrison will utilize established loss modeling techniques to estimate potential losses for priority hazards. For common hazards, such as earthquake, flood, and wildfire, Foster Morrison can make use of methods from past work, from GIS overlays of hazard and parcel/assessor data, and from FEMA models, such as Hazus. For hazards with insufficient data or tools for identifying vulnerable assets and estimating losses, other methods will be used to identify those geographical areas and assets most at risk.

Analyze Development Trends

DMA planning requires an analysis of the existing built environment and future development relative to potential hazard impacts. Understanding the current and future land use, zoning, and development trends is a key component of the risk assessment and in identifying risk reduction measures. This will include mapping of existing and proposed land uses and areas identified for future development. This assessment will provide the City with critical information for developing a sound, forward-thinking mitigation strategy as well as determining where and how to grow in the future.

Task 5a: Capability Assessment (Piedmont Phase 4)

The capability assessment is an important step of the risk assessment. Foster Morrison will conduct a local capability assessment to identify and update existing capabilities of the City of Piedmont. By collecting information about existing programs, policies, plans, and regulations as they relate to hazard mitigation, the City and the HMPC can assess those activities and measures already in place that mitigate risk and vulnerability to identified hazards. Understanding what mitigation measures are already in place and how well they are working will better inform the community on designing additional and more effective mitigation strategies for this LHMP Update.

Capabilities will focus on those designed to reduce long-term vulnerability through alignment with core mitigation capabilities: planning and regulatory, administrative and technical, financial, and education and outreach. Examples of capabilities to be inventoried include:

- General plans and other applicable planning documents and studies
- Local land use, zoning, and hazard related building codes, regulations and ordinances
- Flood and stormwater plans and studies; numbers and types of flood insurance policies
- Earthquake plans, studies, and Hazus analyses
- Emergency operations and response plans, hazard-specific annexes, and mutual aid agreements
- Regional Fire Plans and Community Wildfire Protection Plans (CWPPs)
- Climate Plans and Adaptation efforts

- Past mitigation projects and activities conducted throughout the planning area

Hazard Prioritization

As part of the risk assessment, Foster Morrison will work with the City and the HMPC to prioritize hazards of significance based on high, medium, and low risk factors. This final prioritization process is an important element in LHMP development as it allows the City to focus resources on significant hazards to the community, resulting in a more focused, achievable mitigation strategy for the Plan.

Vulnerability Summary

Based on the updated risk assessment, Foster Morrison will work with the City and HMPC to develop a summary of City vulnerabilities by hazard and those common to all hazards to better understand the most significant risks and vulnerabilities of the City. The information will inform the mitigation strategy development and will be captured in a Local Concerns section within the resulting LHMP.

Deliverables

- Updated risk assessment section of the Plan with GIS and Hazus analyses
- Maps and tables of hazard areas, community assets, critical facilities, loss estimates and vulnerability analysis, as data permits
- Prioritization of identified hazards and Summary of Vulnerabilities
- Presentation of risk assessment data at HMPC Meeting #2 (held during the same timeframe as Public Meeting #2)

Phase III: Develop Mitigation Strategy (Draft an Action Plan)

The mitigation strategy is ultimately the most important part of the Plan. While the risk assessment defines the risk and vulnerability of the City, the mitigation strategy contains the mitigation action items and projects that will be implemented over the five-year life of this LHMP Update to reduce hazard-related losses. Utilizing the risk assessment, a description of hazard impacts and vulnerabilities, mitigation goals, and mitigation action items will be established for the City.

Task 6: Set (Hazard Mitigation) Goals (Piedmont Phase 5)

Using the updated risk assessment, Foster Morrison will work with the City and the HMPC to update Plan goals and objectives. The updated goals will reflect the communities' long-term vision to reduce the risk to people and property and will focus on enhancing overall mitigation capabilities. As a starting point, goals and objectives from the 2019 Piedmont LHMP will be reviewed and analyzed for applicability and effectiveness. Goals and objectives from other City and regional plans and policies (e.g., General Plan, hazard plans), as well as state plans and policies (such as 2023 California Hazard Mitigation Plan), will be compiled and analyzed to ensure consistency with existing programs

and the updated goals and objectives for this LHMP Update. Similar to the new 2023 goals from the State Hazard Mitigation Plan, the updated goals will reflect Piedmont's commitment to enhancing diversity, equity, and inclusion for all community members and stakeholders. Plan goals and objectives will be reviewed, leveraged, vetted, and updated during HMPC Meeting #3.

Deliverables

- Review and identification of Plan goals and objectives from other community plans and programs
- Facilitation of goals and objectives update at HMPC Meeting #3 (held during the same timeframe as HMPC Meeting #4)
- Finalized list of updated Plan goals and objectives

Task 7: Review Possible Mitigation Activities (Piedmont Phase 5)

Once Plan goals and objectives have been updated for the City of Piedmont, Foster Morrison will work with the City and the HMPC to identify, analyze, and prioritize updated mitigation actions and projects designed to make the planning area more resilient to the next disaster event.

The existing mitigation actions will be evaluated for progress and to determine if they are still valid for inclusion in this LHMP Update, and new mitigation actions will be developed. The review and assessment of mitigation actions and projects will occur at HMPC Meeting #4, where a comprehensive range of potential mitigation actions will be identified for each priority hazard to reduce hazard impacts and disaster losses and to meet LHMP goals. Identified mitigation projects will address the effects of hazards on future development and new structures as well as on existing buildings and infrastructure. In developing mitigation alternatives, this Plan will adhere to the model of mitigation activities promoted by DMA and CRS, which classifies mitigation measures into the following six categories: Prevention, Property Protection, Emergency Services, Structural Projects, Natural Resource Protection, and Public Information Programs.

Mitigation actions will be developed that are both reasonable and achievable and designed to address any new issues and/or weaknesses in the City's existing business processes and activities identified during the capability assessment. As part of the mitigation strategy this element will address how the hazard mitigation efforts can be implemented through local planning mechanisms.

Deliverables

- Facilitation and identification of mitigation action alternatives for all priority hazards
- Mitigation Action/Project identification/prioritization at HMPC Meeting #4 (held during same timeframe as HMPC Meeting #3)

Task 8: Draft an Action Plan: Mitigation Implementation Strategy (Piedmont Phase 5)

Foster Morrison will work with the City to develop priority actions for inclusion in the Mitigation Action Strategy portion of the Plan. A comprehensive, prioritized mitigation strategy is paramount in focusing community resources to reduce the risk and vulnerability to the destructive consequences of hazards within the City and to promote efficient recovery and reconstruction when disasters do occur.

Mitigation Strategy Prioritization

The prioritization process for the mitigation strategy will involve using a set of criteria for prioritizing potential mitigation actions and projects to ensure that they: are reasonable and achievable, reflect the priorities of the City, and are based on the updated risk assessment. Fundamental to the prioritization process for mitigation measures are key factors such as life, property, health, and safety protection, as well as qualitative cost benefit considerations and the availability of FEMA or other funding sources for any given project. The STAPLEE (i.e., Social, Technical, Addministrative, Political, Legal, Economic, and Environmental) approach promoted by FEMA will be used as a framework for developing additional prioritization criteria:

Foster Morrison will work with the City, HMPC, and other interested stakeholders to develop an implementation strategy for each identified mitigation project that will provide information on project implementation, including a description of the project details, risk reduction goals, alternative actions considered, benefit-cost considerations, possible funding sources, project schedule, and responsible agency. The end result will be a mitigation action strategy of prioritized projects for the City of Piedmont 2025 LHMP Update that best meets the City's hazard damage reduction needs. The implementation strategy will also include recommendations for implementation and integration with other City of Piedmont planning efforts and programs.

Deliverables

- Finalization of prioritized mitigation strategy addressing all mitigation categories
- Development of implementation strategy and compilation of Mitigation Action Worksheets completed by the City
- Draft of mitigation action strategy portion of the Plan

Task 8a: Draft Plan

Using state and federal guidance to ensure that all DMA are being met, a complete first draft of the LHMP Update will be prepared. This will result in a comprehensive LHMP Update that presents all relevant data and includes a community profile/demographics, planning process, risk assessment, mitigation strategy implementation plan, and procedures for plan maintenance. Mitigation successes

and the status of past mitigation actions from the existing Plan will also be documented and highlighted to show the City's commitment to mitigation.

Document the Mitigation Planning Process

The Plan development process will be thoroughly documented, including the evaluation of risks and vulnerability of hazards to the City of Piedmont and the process used to identify, analyze, and prioritize the mitigation strategy. A separate planning process chapter will be developed to document the Plan development process, which will include establishing a record of meetings and participation. This chapter will also detail coordination with other agencies and integration with other planning mechanisms as well as the process that will be used to implement and maintain the LHMP Update. A detailed description of the public outreach elements and strategies implemented for this LHMP will be included and thoroughly documented. A separate planning process appendix will also be developed to provide supporting documentation to meet all DMA planning process documentation requirements.

Draft Plan Review and Finalization Process

A complete first draft of the LHMP Update will be provided to the City and HMPC for review and comment. Comments and all necessary revisions will be incorporated into a second public review draft and distributed to the stakeholders and the public for review and comment via the City website. City e-newsletters, social media, and other public outreach mechanisms will be used to advertise the public review and comment process. A public meeting will be held to solicit comments on the draft Plan prior to submittal to Cal OES/FEMA as described in Task 2 of this scope. A final HMPC meeting, HMPC Meeting #5, will be held to discuss public comments and final input into the Plan document.

Deliverables

- Development of the mitigation planning process chapter and planning process appendix
- First draft of the LHMP Update for review by the City and HMPC
- Second public review draft of the LHMP Update for public and stakeholder review
- Facilitation of HMPC Meeting #5 and Public Meeting #2 on the public review draft Plan (held during the same timeframe)

Phase IV: Plan Maintenance

Task 9: Final Plan Submittal and Adoption (Piedmont Phase 7)

Based on feedback from the public meetings and final input during HMPC Meeting #5, a final draft will be developed for submittal to Cal OES and FEMA for review and approval. Based on the agency review, any requested changes to the LHMP will be made in a timely manner, and a master electronic copy of the LHMP will be developed to assist with City adoption.

Foster Morrison will lead this agency review process and work with Cal OES and FEMA to ensure that the LHMP Update receives approval from Cal OES and FEMA for formal adoption by the City of Piedmont. As part of the adoption process, Foster Morrison will assist the City by facilitating the adoption of the LHMP Update and the incorporation of the LHMP by reference into the Safety element of the General Plan in accordance with AB 2140. Foster Morrison will be responsible for all Plan revisions from Cal OES, FEMA, the City, and stakeholders until adopted by City resolution in accordance with the RFP timeframes.

Finished Product

Upon adoption, the City will submit the adoption documentation to Cal OES/FEMA with a formal submittal letter to FEMA requesting final Plan approval. Once final approval is received, a copy of the approval letter will be incorporated into the final Plan documents along with the adoption resolution and a final electronic master of the LHMP Update will be provided to the City of Piedmont. All format and delivery requirements set forth in the RFP will be followed.

Deliverables

- Preparation of third LHMP draft and Plan review tool for Cal OES and FEMA submission
- Adoption documentation and Final draft of the Plan for formal adoption
- Final Plan delivery to the City of Piedmont

Task 10: Implement, Evaluate, Revise: Plan Maintenance (Piedmont Phase 6)

Foster Morrison will work with the City to determine an updated method and schedule for monitoring and evaluating the 2025 City of Piedmont LHMP Update. The Plan maintenance requirements will address DMA requirements and will include:

- A method and schedule of monitoring and evaluating the Plan, which includes criteria used, responsible office, and process for formal five-year update
- A process by which the Plan will be incorporated into other existing planning mechanisms
- A schedule with procedures for ensuring the Plan's implementation and update within five years
- A discussion of how the public will be involved in the LHMP maintenance and update process

Deliverables

- Development of implementation, monitoring, and update process for the LHMP Update

3. The Foster Morrison Team Statement of Qualifications, Experience, & Expertise

This section provides an overview of the proposed Foster Morrison Team comprised of Foster Morrison Consulting (Prime Consultant) and Howell Consulting (Subconsultant) and includes information on the qualifications, experience, and expertise of the Foster Morrison Team. Foster Morrison and Howell Consulting, both women-owned businesses, have teamed to provide the City of Piedmont with the expertise, experience, and customer service necessary to successfully execute the proposed scope of work for a FEMA-approved Local Hazard Mitigation Plan (LHMP) Update.

Foster Morrison Consulting, Ltd.

Foster Morrison Consulting, Ltd. (Foster Morrison) is an emergency management consulting firm with staff expertise and experience encompassing all aspects of FEMA programs - from disaster preparedness to mitigation and grant applications to post-disaster response and recovery. Specializing in Hazard Mitigation Planning, Foster Morrison develops Hazard Mitigation Plans and Plan Updates that meet the requirements of the Disaster Mitigation Act (DMA) of 2000 as well as the planning requirements of the Flood Mitigation Assistance (FMA) program and the National Flood Insurance Program's (NFIP) Community Rating System (CRS). Our focus is developing FEMA-approved, customized mitigation plans for communities that enable participating jurisdictions to be eligible for FEMA mitigation funds and includes comprehensive mitigation strategies designed to reduce hazard-related losses, enhance community capabilities, and make a community better able to respond and recover when disasters occur.



Foster Morrison staff have been working together as a planning team for the last fifteen years developing hazard mitigation plans for clients around the country. Key geographic areas of expertise include California, Colorado, and Mississippi. Formed in 2014, Foster Morrison, a limited liability corporation, is registered and licensed to do business in the State of California and is also registered and in good standing with the Federal Procurement System for Award Management (SAM).

Sub-consultant: Howell Consulting, Inc.

Foster Morrison is teaming with Howell Consulting as a sub-consultant to this effort. Howell Consulting will be taking the lead on the QA/QC efforts associated with LHMP development and will be a local resource for the project. Howell Consulting will also support other tasks, as needed, to meet client requirements and project deadlines. A brief overview of Howell Consulting is provided below.

Howell Consulting, Inc. (Howell Consulting) is an S-Corporation, founded in 2007 and based in Rancho Murieta, California. Brenna Howell, with comprehensive emergency management expertise, is the owner and primary employee of this specialized firm and is supported by several contract staff, which includes planners, engineers, and GIS expertise. Howell Consulting offers a full range of planning, mitigation, preparedness, and response and recovery consulting services to better prepare organizations before and after disaster strikes. Howell offers both pre- and post-disaster services including the review and updating of emergency response plans, business continuity and hazard mitigation plans, risk analysis, hazards and vulnerabilities identification, and emergency communications plans. Howell Consulting also provides on-site staffing and assistance during actual disasters or emergency situations. Finally, through strategic partnerships, Howell Consulting is able to assess needs and prescribe appropriate emergency management trends such as the latest planning grant requirements and planning guidance.

Howell Consulting has also been working with Foster Morrison in the development of more than 20 single and multi-jurisdictional California LHMPs and LHMP Updates over the last 7 years including Tri-City (East Bay), California, Butte County, Yuba County, Placer County, Sacramento County, Nevada County, Lake County, Colusa County, Plumas

County, City of Piedmont, City of Clearlake, City of Lakeport, City of Garden Grove, City of Placentia, the East Bay Regional Park District, and the Los Angeles Unified School District. Other solo multi-jurisdictional LHMPs and LHMP Updates developed by Howell Consulting include Merced County, Kings County, Yolo County, and Yuba County.

Foster Morrison Team Qualifications and Experience

The Foster Morrison Team’s qualifications and experience for providing the City of Piedmont with a FEMA-approved, DMA-compliant, 2025 LHMP Update is unequalled. Having completed the 2019 LHMP for the City of Piedmont, the Foster Morrison Team is very familiar with the City, hazard mitigation planning in California, current California hazards, and most recent and valid hazards data to be utilized in the LHMP Update. In addition, Foster Morrison staff have been working with numerous California communities developing their single and multi-jurisdictional LHMPs and LHMP Updates since 2003. Whether a single or multi-jurisdictional effort; a rural or urban environment; or a county, city, or special district, each of these plans were highly customized to meet the individual needs of each participating jurisdiction while ensuring FEMA approval.

This section highlights the Foster Morrison Team’s qualifications with a primary focus on hazard mitigation planning experience and expertise for public sector clients in California. Our capabilities are fully integrated into the proposed work plan for this project, designed to meet the requirements of the RFP for providing the City of Piedmont with a DMA compliant, FEMA-approved LHMP Update. Our capabilities and proven approach are based on developing Cal OES and FEMA-approved LHMPs for hundreds of California communities. Our established approach, refined over time, is designed to simplify a complicated process as well as to maximize the use of budget while ensuring all client and Cal OES/FEMA requirements are met.

Hazard Mitigation Planning

Hazard mitigation planning is the foundation for identifying and developing sound hazard mitigation actions and projects for implementation by communities. Hazard mitigation projects are essential for ensuring that at-risk community assets are stronger and more resilient for the next severe storm event or natural disaster. The Foster Morrison Team’s hazard mitigation planning program is built upon the expertise of staff that have extensive direct experience working with FEMA, Cal OES, and local emergency management agencies in the management of emergencies; knowledge of the legislation, and local, state, and federal laws, and policies that govern emergency disasters and in building disaster resilient and sustainable communities.

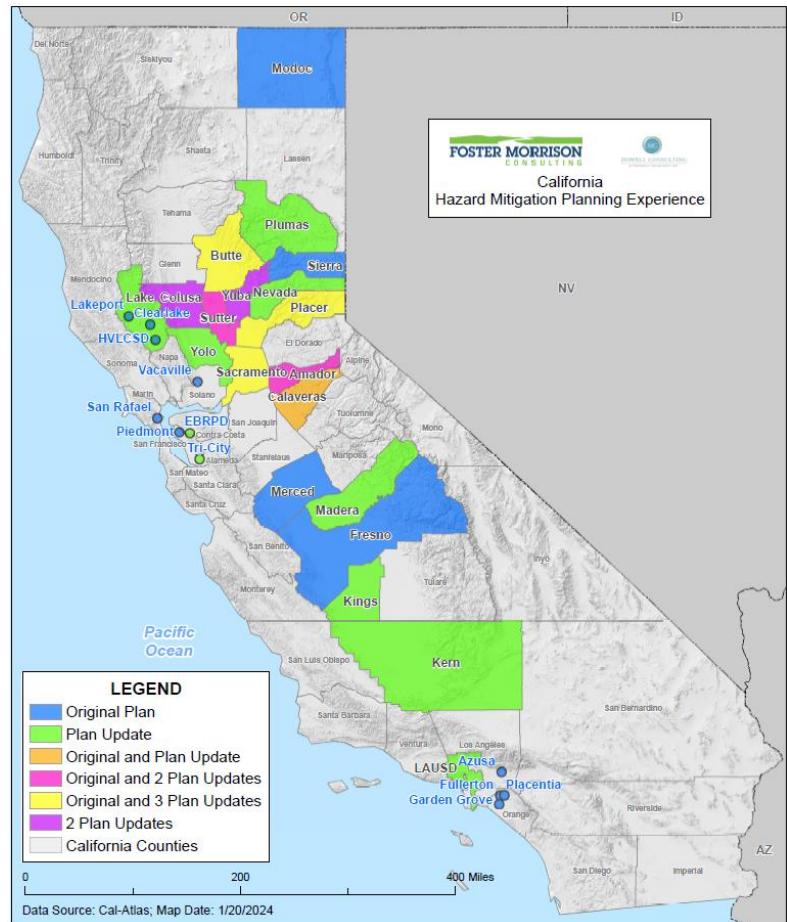
The Foster Morrison Team’s experience completing over 70 mitigation plans for communities across the country provides the expertise to lead this planning effort. In addition, Foster Morrison’s working relationship with Cal OES and FEMA Region IX provides our clients with unique insights and strategies for developing quality hazard mitigation plans aligned with Cal OES and FEMA policies and goals.

California Hazard Mitigation Project Experience

Table 2 details Foster Morrison's staff experience completing LHMPs in California. The figure to the right provides a map of Foster Morrison's (with Howell Consulting) California Hazard Mitigation Planning experience.

In addition to the having developed the FEMA-approved, 2019 City of Piedmont LHMP, Foster Morrison's staff hazard mitigation planning experience includes:

- Over 70 LHMPs and LHMP Updates in 15 states and 7 FEMA regions
- Over 20 years of FEMA Region IX/California hazard mitigation planning experience since 2003:
 - ✓ Over 40 separate California single and multi-jurisdictional LHMPs/LHMP Updates providing FEMA approved plans for 100s of communities, including counties, cities, special districts, and tribes.
 - ✓ 2 planning cycles for multiple counties, 3 planning cycles for three counties (Sutter, Amador, and Butte), and 4 planning cycles for two counties (Sacramento and Placer).
 - ✓ Recent development of FEMA approved LHMPs for nearby East Bay communities, including the 2024 LHMP Update for the Tri-City Planning Area, including the incorporated communities of Fremont, Newark, and Union City and two special districts: Alameda County Water District and Union Sanitary District, as well as the 2023 LHMP Update for the East Bay Regional Park District.
 - ✓ Completion of two LHMPs since the new 2023 FEMA LHMP guidance became effective. These two plans, a single jurisdictional LHMP for a city in Southern California and the Multi-jurisdictional LHMP Update for aforementioned Tri-City jurisdictions in Northern California's East Bay have both gone through Cal OES review to the new guidance, with very limited changes and are both FEMA approved with no additional changes.



The California projects detailed in Table 2 were completed in accordance with DMA, FMA and CRS planning process requirements and guidance which incorporates a 10-step process into four phases: 1) LHMP Planning/Development Process, 2) Risk Assessment, 3) Mitigation Strategy, and 4) Plan Implementation and Maintenance. Execution of the 10-step process for each of these mitigation planning projects resulted in FEMA-approved plans providing coverage for 100's of communities.

All of these FEMA-approved LHMP projects completed by Foster Morrison staff in California followed the same process as that requested by the City of Piedmont and as required by DMA regulations and guidance. As well, the following projects were managed and performed by the same key staff identified in primary roles for the development of this City of Piedmont 2025 LHMP Update.

Table 2 Foster Morrison Staff Hazard Mitigation California Planning Experience since 2014

Project Name	City of Piedmont Local Hazard Mitigation Plan Update – FEMA Approved (2019)
Organization	City of Piedmont Planning Department
Type of Plan	Single-jurisdictional DMA Plan, City
Project Name	Hidden Valley Lake Community Services District Local Hazard Mitigation Plan – FEMA Approved (2020), 2024 LHMP Update in process
Organization	Hidden Valley Lake Community Services District
Type of Plan	Single-jurisdiction DMA Plan, District
Project Name	Los Angeles Unified School District, CA Local Hazard Mitigation Plan Update – FEMA Approved (2018), 2024 LHMP Update in process
Organization	Los Angeles Unified School District, Office of Environmental Health and Safety
Type of Plan	Single-jurisdictional DMA Plan, District
Project Name	Butte County, CA Local Hazard Mitigation Plan – 2 Plan Updates - FEMA Approved (2014, 2019), 2024 LHMP Update in Final Process
Organization	Butte County Office of Emergency Management
Type of Plan	Multi-jurisdictional DMA Plan; County, 5 incorporated communities , and 20 special districts
Project Name	Colusa County, CA Local Hazard Mitigation Plan Update – FEMA Approved (2019), 2024 Update in Final Process
Organization	Colusa County Sheriff's Office, Office of Emergency Services
Type of Plan	Multi-jurisdictional DMA Plan; County, 2 incorporated communities , and 5 special districts
Project Name	Tri-City, CA Local Hazard Mitigation Plan Update – FEMA Approved
Organization	City of Fremont Fire Department; Cities of Newark and Union City, Emergency Management Offices; Alameda County Water District and Union Sanitary District, Operations/Performance Departments
Type of Plan	Multi-jurisdictional DMA Plan; 3 cities and 2 special districts
Project Name	City of Placentia Local Hazard Mitigation Plan Update – FEMA Approved
Organization	City of Placentia – Emergency and Health Services
Type of Plan	Single jurisdictional DMA plan, City
Project Name	East Bay Regional Park District Local Hazard Mitigation Plan Update (2022) – FEMA approved (2022)
Organization	East Bay Regional Park District
Type of Plan	Single jurisdictional DMA plan, District
Project Name	Sacramento County, CA Local Hazard Mitigation Plan – Original Plan and 3 Plan Updates - FEMA Approved (2006, 2011, 2016, 2021)
Organization	Sacramento County Department of Water Resources, City of Sacramento Public Works
Type of Plan	Multi-jurisdictional DMA/CRS-focused Plan; County, 7 incorporated communities , and 23 special districts
Project Name	Yuba County, CA Local Hazard Mitigation Plan –Plan Update - FEMA Approved (2021)
Organization	Yuba County Office of Emergency Services
Type of Plan	Multi-jurisdictional DMA/CRS-focused Plan; County, 2 incorporated communities , and 9 special districts

Project Name	Placer County, CA Local Hazard Mitigation Plan – Original Plan and 2 Plan Updates - FEMA Approved (2005, 2010, 2016, 2021)
Organization	Placer County Office of Emergency Services
Type of Plan	Multi-jurisdictional DMA/CRS-focused Plan; County, 5 incorporated communities , 20 special districts
Project Name	Sutter County, CA Local Hazard Mitigation Plan – Original Plan and Plan Update - FEMA Approved (2007, 2014, 2021)
Organization	Sutter County Office of Emergency Management
Type of Plan	Multi-jurisdictional DMA/CRS-focused Plan; County, 2 incorporated communities , and 6 special districts
Project Name	Plumas County Local Hazard Mitigation Plan Update – FEMA Approved (2020)
Organization	Plumas County Planning & Building Services
Type of Plan	Single jurisdictional DMA Plan, County
Project Name	Amador County Local Hazard Mitigation Plan Update – Original Plan and 2 Plan Updates FEMA Approved (2006, 2014, 2020)
Organization	Amador County Sheriff's Office
Type of Plan	Multi-jurisdictional DMA Plan; County, 5 incorporated communities , and 3 districts
Project Name	City of Garden Grove Local Hazard Mitigation Plan – FEMA Approved (2020)
Organization	City of Garden Grove Water Services Division
Type of Plan	Single-jurisdictional DMA Plan, City
Project Name	City of Clearlake Local Hazard Mitigation Plan – FEMA Approved (2019)
Organization	City of Clearlake Engineering Department
Type of Plan	Multi-jurisdiction DMA Plan; City and 1 special district
Project Name	City of Lakeport Local Hazard Mitigation Plan – FEMA Approved (2019)
Organization	City of Lakeport Department of Public Works
Type of Plan	Multi-jurisdiction DMA Plan; City and 1 special district
Project Name	Lake County, CA Local Hazard Mitigation Plan Update– FEMA Approved (2018)
Organization	Lake County Office of Emergency Services
Type of Plan	Single-jurisdictional DMA, CRS-focused Plan, County
Project Name	City of Azusa, CA Local Hazard Mitigation Plan – FEMA Approved (2019)
Organization	City of Azusa Planning Division
Type of Plan	Single-jurisdictional DMA Plan, City
Project Name	Madera County, CA Local Hazard Mitigation Plan Update– FEMA Approved (2018)
Organization	Madera County Office of Sheriff
Type of Plan	Multi-jurisdictional DMA Plan; County, 2 incorporated communities and 1 Tribe
Project Name	Nevada County, CA Local Hazard Mitigation Plan Update– FEMA Approved (2018)
Organization	Nevada County Office of Emergency Services
Type of Plan	Multi-jurisdictional DMA Plan; County, 3 incorporated communities and 3 special districts
Project Name	City of San Rafael, CA Local Hazard Mitigation Plan – FEMA Approved (2017)
Organization	City of San Rafael Fire Department
Type of Plan	Single- jurisdictional DMA Plan, City

Project Name	Modoc County, CA Local Hazard Mitigation Plan – FEMA Approved (2016)
Organization	Modoc County Office of Emergency Services
Type of Plan	Multi-jurisdictional DMA Plan; County and 1 incorporated community
Project Name	Calaveras County, CA, Local Hazard Mitigation Plan – Original Plan and Plan Update - FEMA Approved (2010, 2015)
Organization	Calaveras County Sheriff's Office
Type of Plan	Multi-jurisdictional DMA Plan; County and 1 incorporated community

All of these planning projects required extensive research, analyses, and distillation of large amounts of hazard and community related data as well as the development, facilitation, and presentation of public outreach programs to a wide variety of stakeholders. The Foster Morrison Team's extensive hazard mitigation planning experience developing FEMA-approved LHMPs throughout California and other FEMA regions brings this expertise to all of our planning projects.

As well all completed LHMPs were approved by Cal OES and FEMA; were completed on time and within budget; and were written and developed utilizing Foster Morrison's customized LHMP approach and the same key staff to ensure all LHMP requirements and applicable guidance are met to facilitate timely review and approval by Cal OES and FEMA. **Foster Morrison's qualifications, experience, and track record for completing FEMA-approved LHMPs is based on their extensive knowledge of the Disaster Mitigation Act of 2000; LHMP implementing regulations published at 44 CFR 201.6 as well as the latest FEMA LHMP guidance, including FEMA's Local Mitigation Planning Policy Guide FP 206-21-0002 effective April 19, 2023; FEMA's Local Mitigation Planning Handbook guidance; as well as other current, applicable federal and state requirements and initiatives.**

Key LHMP initiatives are detailed below.

Hazard Mitigation Program Initiatives and Regulatory Drivers

Foster Morrison's hazard mitigation planning experience includes developing LHMPs to address multiple related program requirements including DMA, the NFIP's CRS program, the Flood Mitigation Assistance (FMA) program, FEMA's new High Hazard Potential Dam (HHPD) Grant program, as well as California initiatives such as Assembly Bill (AB) 2140 (General Plan Safety Element Integration), Senate Bill (SB) 379 (Climate Change Adaptation), SB 1000 (Environmental Justice), and various wildfire initiatives, such as CAL FIRE's Safety Element Assessment requirements, SB 1241 (SRA and Very High Fire Hazard Severity Zone requirements), and others. Meeting multiple program requirements provides our clients with a variety of grant program options for funding and implementation of their mitigation projects and helps establish compliance with these other program mandates.

Climate Change Considerations (SB 379 and SB 1000)

Integral to our LHMPs is the inclusion of climate change. SB 379 requires California cities and counties to integrate climate change adaptation and resiliency strategies into the Safety Element of their General Plans. In response to this requirement, Foster Morrison has been addressing climate change in their LHMP and LHMP Updates since 2016. Specifically, Foster Morrison has addressed climate change in 25 separate LHMPs since passage of SB 379, all of which have been reviewed and approved by Cal OES and FEMA. This effort has involved developing climate change vulnerability assessments; adaptation and resilience goals; and implementation measures for inclusion in our plans. The extent to which climate change influences or exacerbates other identified hazards of concern is also included in the hazard risk assessments for all our LHMPs. For coastal communities, this has also included a detailed vulnerability assessment, including a parcel level GIS analysis of the coastal flooding and sea level rise hazards to determine the local impacts of these issues on communities and how to better plan for the future. Local and state level tools such as Cal-Adapt, the California Adaptation Planning Guides, local climate adaptation plans, and other sources are used in the development of

climate change data for these plans in order to focus both regional and local climate change issues and possible adaptation solutions on the unique hazards, issues, and adaptation opportunities specific to each community.

In addition, SB 1000 requires the General Plan to include an environmental justice element, or related environmental justice goals, policies, and objectives integrated in other elements, to identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities, as specified, identify objectives and policies to promote civil engagement in the public decision-making process, and identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities. To support the SB 1000 requirements and as also required by new FEMA guidance, our LHMPs integrate vulnerable and underserved populations concerns in all aspects of mitigation planning from the planning process to the development of the hazard risk assessment and the resulting mitigation strategy.

High-Hazard Potential Dam Grant Program (HHPD) Considerations

Dams are an aging infrastructure; the average age of dams in the US is 57 years. High hazard potential is a classification standard for any dam whose failure or mis-operation will cause loss of human life and significant property destruction. Many of these high hazard dams lack regular maintenance and improvements and present an ongoing risk to nearby communities. In response to this issue, the Consolidated Appropriations Act, 2019 passed in February appropriated \$10,000,000 for Rehabilitation of HHPD under section 8A of the National Dam Safety Program Act (33 U.S.C. 467f-2). Future years' authorization may increase to \$60,000,000 for each of fiscal years 2021 through 2026. The purpose of the HHPD program is to provide assistance for repair, removal or rehabilitation of HHPDs, and may include funding for technical, planning, design, and construction activities. The focus on this new program is to provide funding for those dams that pose an unacceptable risk to the public. In order for local dam owners to be eligible for this grant program, they must have a FEMA approved LHMP and all dam risks must be addressed in both state and local hazard mitigation plans, in addition to meeting other eligibility requirements.

It should be noted that Foster Morrison has always included a comprehensive dam risk assessment in all of their California plans, including an analysis of critical assets and populations at risk within identified dam inundation areas. In fact, the 2019, Butte County LHMP Update was one of the first LHMPs in California to fully meet these new HHPD requirements for LHMPs since this program was authorized. In conversations with Cal OES, the Dam section of the Butte County Risk Assessment is being used as a "best practices" model to address these new HHPD requirements for LHMPs.

Wildfire Planning Initiatives

Fire is a natural part of California's landscape and is a vital component of many ecosystems. Continued growth and development throughout California's wildfire prone areas puts more people at risk to the potential for a catastrophic wildfire. According to the Governor's Office of Planning and Research's (OPR) 2022 Fire Hazard Planning Advisory, approximately one third of all homes in California are located in a wildland-urban interface (WUI) area. WUI conditions are associated with an increased risk of loss of human life, property, natural resources, and economic assets. Climate change further compounds this concern. California's Fourth Climate Change Assessment concluded that if greenhouse gas emissions continue to rise, California is likely to see a 50% increase in fires larger than 25,000 acres as well as a potential 77% increase in average area burned by 2100. As communities plan for the future, it will be important to work with other local, state, federal, and tribal partners to develop and implement a variety of solutions to address the increasing wildfire risk to protect public health, promote resilience, and support local economies at risk.

CAL FIRE's 2019 Community Wildfire Prevention & Mitigation Report outlines how the State will implement strategies such as fuel modification, prescribed burning, home hardening, and public education to reduce future fire risk. With Foster Morrison's California LHMP experience across numerous wildfire prone communities, the Foster Morrison Team is positioned to address new and updated wildfire requirements and initiatives as applicable in their LHMPs, including the 2025 LHMP Update for City of Piedmont. A comprehensive approach to wildfire planning and mitigation in the City of Piedmont will be important given the risk and vulnerability of the City to wildfire.

Whole Community Planning (Coordination with Underserved and Vulnerable Populations)

As detailed in FEMA's new 2023 LHMP guidance, the LHMP development process should utilize the Whole Community approach to hazard mitigation planning. Engagement and coordination with a variety of community-based organizations that work directly with or provide support to underserved communities and socially vulnerable populations, including individuals with disabilities and access and functional needs, is a critical component in addressing equity in mitigation planning and implementation. Every disaster reveals disparity in communities, including the varying capacities to prepare for, respond to, and recover from disasters. Much of the disparity stems from unequal distribution of resources and high levels of social vulnerability. Disparity leads to certain neighborhoods sustaining more damage, limited access to recovery resources, and overall slower recovery. Climate Change is likely to exacerbate these disparities over time. Mitigation planning creates both the mechanism and opportunity to address community vulnerability and disparity to future hazard events and disasters. As part of the new FEMA guidance, equity and diversity in mitigation planning is not just required but is vital to planning for the whole community. Foster Morrison has been developing an updated approach to the plan development process to promote equity and diversity in our LHMPs. This includes an inclusive planning process that considers which groups and key stakeholders should be targeted, how to best engage these stakeholders, and how multiple backgrounds and values can help inform hazard mitigation priorities. This process allows for a better understanding of all community issues and concerns and how to integrate equity into the LHMP to better meet the needs of these underserved and more vulnerable neighborhoods and groups.

Risk Assessments

Foster Morrison staff have conducted numerous risk assessments as part of state, local, and tribal hazard mitigation planning. The risk assessment is the fundamental basis of mitigation and mitigation planning. It is the process that documents the problems that are unique to each community or participating jurisdiction. There are three interrelated portions to the approach Foster Morrison takes when developing a risk assessment: (1) hazard identification, (2) vulnerability assessment, and (3) capability assessment.

Together, the hazard identification and vulnerability assessment paint the picture of the hazards that could occur in a jurisdiction, and then assesses each hazard's historic impacts and potential future impacts on populations, property, and critical facilities and other assets. The capability assessment measures this vulnerability against programs, policies, and plans that are already in place in the jurisdiction that can reduce the effects of these hazards. The end result of this analysis is the identification of additional mitigation strategies that build upon the community's existing capabilities.

Foster Morrison staff experience with state, local, and tribal risk assessments include:

- Creating and analyzing GIS-based risk assessments for dam failure, flood, earthquake, landslide, wildfire, and other natural and man-made hazards
- Developing vulnerability analyses using GIS and parcel/assessor data: centroid method, proportionate division, Access queries, raster analysis, and annualized loss calculations to support detailed damage/loss estimates by jurisdiction
- Experience with Level 1 and 2 Hazus analysis, FEMA's GIS-based loss-estimation tool, for earthquake, flood and other hazards, including DFIRM integration for Hazus flood analysis
- Conducting detailed inventories of community assets, including an inventory of natural, historic, and cultural resources and key critical and public facilities and infrastructure
- Developing high quality maps and tables for displaying hazards, vulnerabilities, and loss estimates by jurisdiction
- Conducting exhaustive research in each jurisdiction to inventory and document existing capabilities to mitigate and reduce the impacts of identified hazards.

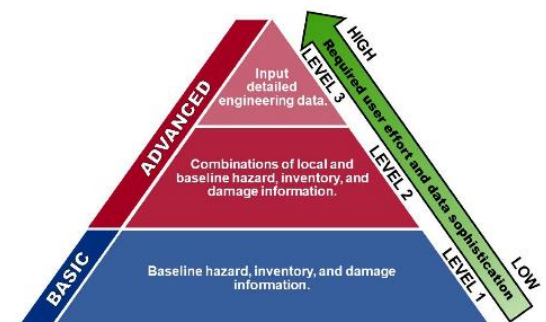


Figure 2-2 Levels of Hazus Analysis

Floodplain Management/NFIP's Community Rating System (CRS)

Historically, people have been attracted to developing in and around waterways for a variety of reasons. Sound floodplain management practices implemented at the local level are a key factor in reducing flood-related losses in a community in these flood-prone areas. The NFIP is a federal program created to mitigate future flood losses through community-enforced building and zoning ordinances and to provide protection for property owners against potential losses through flood insurance. The NFIP's CRS is a voluntary program that recognizes community floodplain management activities that exceed the minimum NFIP requirements. The incentive behind the CRS program is to provide discounted flood insurance premiums to community residents as a result of implementing a floodplain management program that encourages a comprehensive approach to reduce flood losses. Foster Morrison staff provide floodplain management and CRS expertise to clients to assist in enhancing their floodplain management programs, including developing hazard mitigation plans that maximize CRS credits. The end result is helping clients achieve a lower CRS class which ultimately reduces the cost of flood insurance to community residents, both within and outside of designated Special Flood Hazard Areas (SFHAs). This has included helping flood-prone communities in California, Colorado, and Mississippi maximize their CRS credits under CRS Activity 510 in accordance with the 2013 and 2017 CRS Coordinator's Manuals. In fact, several recent plans developed by Foster Morrison staff have developed DMA/CRS compliant plans to the current CRS schedule, scoring among the highest CRS credits in the nation for this activity.



Mitigation Project Development, FEMA Grant Applications, and Benefit-Cost Analyses (BCAs)

FEMA provides mitigation funding support primarily through five pre- and post-disaster programs: Pre-Disaster Mitigation (PDM) Grant Program, Building Resilient Infrastructure and Communities (BRIC) program, the Hazard Mitigation Grant Program (HMGP), the Flood Mitigation Assistance (FMA) program, and Public Assistance (PA) Section 406 Mitigation. In addition to our hazard mitigation planning experience, Foster Morrison staff have significant experience working with clients in all aspects of mitigation following a disaster as part of Section 406 Mitigation and as part of FEMA's PDM, BRIC, HMGP, and FMA Programs. This includes identifying and developing mitigation projects based on community risks and vulnerability; developing grant applications and securing funding for identified projects; conducting Benefit-Cost Analyses (BCAs) to support competitive grant applications; supporting Environmental and Historic Preservation (EHP) project clearances; and providing project management and grant administration services for project implementation. Foster Morrison knows from experience that in order to be successful with these programs, a community must submit a thorough application that addresses key factors: a technically feasible project definition/scope of work, project alternatives, preliminary design, cost estimates, cost effectiveness, and NEPA/CEQA environmental considerations. This expertise will assist in the development of mitigation actions and projects for inclusion in the updated LHMP that are eligible for funding under these grant programs. Recently, since the development of the 2023 EBRPD LHMP, Foster Morrison has developed 4 separate BCAs in support of the District's wildfire Fuels Reduction Projects for a variety of areas located throughout the Oakland and East Bay Hills. These have included BCAs for both HMGP and PDM FEMA mitigation grant programs.

Other Firm Capabilities – Special Considerations

Foster Morrison was formed in order to better focus on what we most enjoy – working closely with our clients to assist them in meeting and exceeding their project goals. Foster Morrison staff are motivated problem solvers that bring a depth and variety of hazard mitigation planning experience and expertise to their clients in California and elsewhere. Likewise,

Howell Consulting was founded on many of the same principles. Distinguishing features and capabilities of the Foster Morrison Team, providing added value to the City of Piedmont 2025 LHMP Update project, include:

- **Small boutique firms able to provide better customer service than larger companies.** With a focus on client satisfaction and projects rather than time-consuming corporate objectives, the Foster Morrison Team has the flexibility and freedom to do a complete, personalized job for our clients.
- **Extensive northern California LHMP experience.** This includes developing numerous multi-jurisdictional and single jurisdictional LHMPs and LHMP Updates for numerous northern California communities in both urban and rural environments since 2003. This has allowed us to understand the northern California hazard environment, hazard data and resources, and other hazard related issues in the region.
- **Customization of plans and work products, driven by the data and information unique to each jurisdiction.** We pride ourselves on not doing cookie-cutter plans. Foster Morrison staff continue to update approaches, processes, and work products to better align with changing DMA and CRS guidance, plan approval requirements, and updates to state level Hazard Mitigation Plans. We build upon what still works and incorporate new ways of doing things and presenting information. Our mitigation action worksheet format was called out by FEMA Region IX as a model example for other consultants to follow.
- **Strong working relationship and process collaboration with Cal OES and FEMA Region IX mitigation staff.** This allows us to understand changing DMA requirements and guidance to develop a high-quality end product and to discuss preferred approaches to the planning processes and other plan requirements in order to streamline the LHMP approval process. This is evident from our recent Cal OES and FEMA plan reviews which have gone through the review process with no or minor requests for revisions. Most all reviews have been completed by both agencies within the 90-day review time.
- **Over 20 years of hazard mitigation planning experience to draw from.** This includes significant hazard-related expertise in a wide-range of natural hazards affecting local communities, as well as the ability to assemble and obtain FEMA approval for large multi-jurisdictional LHMPs. This allows us to incorporate the best and proven strategies into all of our mitigation planning projects.
- **Floodplain management and NFIP's CRS experience and expertise.** This allows us to incorporate CRS components into our mitigation plans to: maximize CRS credits, to include a comprehensive approach to floodplain management, and to provide eligibility for FMA and CRS-related grant funding.
- **Emergency Management Program expertise.** With Howell Consulting, the Foster Morrison Team brings the broader, emergency management program knowledge and expertise to this hazard mitigation planning project. Howell Consulting is led by an emergency manager professional that understands emergency management and the importance of mitigation planning for disaster response and recovery.
- **Extensive wildfire experience and expertise.** Our recent California experience working with wildfire prone communities and fire safe councils developing their LHMPs and BCAs for wildfire mitigation projects brings this knowledge and expertise to all our communities. Our LHMPs in northern California included some of the first fire safe councils as participating jurisdictions making them eligible to apply directly to FEMA for mitigation grant funding implementing wildfire projects benefiting multiple communities. Our experience includes developing an LHMP Update for Butte County in the immediate aftermath of the Camp Fire. This allowed us to assist in identifying and integrating wildfire mitigation strategies into local recovery efforts and ensuring all future mitigation projects would be eligible for FEMA pre- and -post disaster mitigation grants. Through these efforts the Foster Morrison Team established working relationships with CAL FIRE and numerous local fire agencies and groups. This experience will assist with the development of the updated wildfire risk assessment and mitigation strategy designed to mitigate wildfire risk in the City of Piedmont.
- **Organizational commitment and experience to planning for the "Whole Community".** Foster Morrison is committed to promoting equity and diversity in hazard mitigation planning and project implementation. Our team continues to develop an inclusive planning process that considers how to identify each community's underserved and vulnerable populations, how best to engage these important stakeholders, and how to listen to and integrate important

issues and concerns, from often marginalized communities, into the hazard mitigation planning process to better inform each community's hazard mitigation priorities.

- **Proven commitment to established scopes, schedules, and budgets.** Foster Morrison has a demonstrated track record of completing LHMP projects in accordance with established scopes, schedules, and budgets. As detailed herein, the Foster Morrison Team is committed to completing the City of Piedmont 2025 LHMP Update as described with a Cal OES/FEMA submittal in May of 2025.

4. Foster Morrison Team's Related Experience and References

This section highlights several Foster Morrison Team's LHMP projects similar to that proposed for City of Piedmont and includes associated references. **The following projects were all managed by Jeanine Foster and performed by the key staff identified in primary roles for the development of this City of Piedmont LHMP Update.**

The California projects detailed in Table 3 were completed in accordance with DMA, FMA and CRS planning process requirements and guidance which incorporates a 10-step process into four phases: 1) LHMP Planning/Development Process, 2) Risk Assessment, 3) Mitigation Strategy, and 4) Plan Implementation and Maintenance. Execution of the 10-step process for each of these mitigation planning projects resulted in FEMA-approved plans customized to meet the needs of each community. The plan development process and resulting plans included: data-driven risk assessments; previous mitigation projects and successes; comprehensive mitigation strategies; development and coordination of public outreach and stakeholder engagement programs; facilitation of planning committee and public meetings; and a thorough, systematic, and fully documented planning process. All completed plans were reviewed and approved by the state and FEMA with no or minimal requests for revisions. Detailed project descriptions for these projects follow the table.

Client References

Client references for these LHMP projects are also detailed below in Table 3. We encourage the City to contact these references as they can attest to the experience, expertise, and professionalism of Foster Morrison and Howell Consulting and the quality of our Local Hazard Mitigation Plans and planning process.

Table 3 Foster Morrison Hazard Mitigation Planning References

Project Name	Tri-City Local Hazard Mitigation Plan Update – FEMA Approved (2024)
Organization	City of Newark and City of Union City Emergency Management
Contact Information	Richard Martinez – Emergency Coordinator, 510-578-4821, richard.martinez@newark.org
Project Description	Multi-jurisdictional DMA Plan with 5 participants
Project Name	City of Placentia Local Hazard Mitigation Plan – FEMA Approved 2024
Organization	Emergency and Health Services Department
Contact Information	Patrick Powers, Emergency and Health Services Manager, 714-993-8214, ppowers@placentia.org
Project Description	Single jurisdictional DMA Plan
Project Name	East Bay Regional Park District
Organization	Grants and Finance
Contact Information	Katy Hornbeck –Grants Manager, 510-544-2204, khornbeck@ebparks.org
Project Description	Single jurisdictional DMA Plan
Project Name	Plumas County Local Hazard Mitigation Plan Update – FEMA-Approved (2020)
Organization	Plumas County Planning Department
Contact Information	Tracey Ferguson – Planning Director, 530-283-7011, traceyferguson@countyofplumas.com
Project Description	Single-jurisdictional DMA Plan

City of Piedmont, CA, Local Hazard Mitigation Plan – Original Plan – FEMA Approved 2019

Foster Morrison Staff/Project Manager: Jeanine Foster – project manager/senior planner; Chris Morrison – lead planner; Alejandro Gutierrez – GIS/risk assessment lead, Brenna Howell – QA/QC

Foster Morrison, partnering with Howell Consulting, developed the 2019 Local Hazard Mitigation Plan for the City of Piedmont, located in the East Bay Area of California. Priority hazards of concern included climate change, flood, dam failure, wildfire, earthquake, drought, and other severe weather events. The risk assessment identified areas where improvements could be made and provided the framework for the HMPC to formulate planning goals and objectives and to develop a mitigation strategy for the City of Piedmont planning area. The resulting mitigation strategy identified new and ongoing mitigation actions and projects targeting priority hazards and their mitigating effects on City assets and critical infrastructure.



Unique issues in the development of this LHMP Update included the topography of the City and its location in the Bay Area. Additionally unique was the high value of the homes in the City of Piedmont. While urban in nature, much of the City is located in a Very High Fire Hazard Severity Zone requiring close coordination with Cal Fire in the development of a detailed wildfire risk assessment and a comprehensive mitigation strategy.



Earthquakes are also a significant hazard of concern given the City's location relative to numerous potentially active faults and the historic earthquake activity in the region. Foster Morrison worked with the City and the Association of Bay Area Governors' (ABAG) Resiliency Program to identify the best available regional data and earthquake scenarios for use in the City's risk assessment and in identifying earthquake risk reduction measures best suited for implementation by the City. Through this process, it was determined that the earthquake hazard had a compounding effect on many of the other identified hazards, which were considered in the development of the mitigation strategy. For example, earthquakes were identified as a key factor for a potentially cascading, catastrophic hazard event. A large, damaging earthquake, with an epicenter close to the City could result in dam failures, landslides, and fires occurring throughout the City with disastrous results. Loss of life, injuries, property damage, and impacts to critical services and infrastructure would be significant. All of the hazard issues and vulnerabilities within the City are further compounded by structures built on steep slopes, narrow roads, and numerous ingress and egress challenges. Similar to other California communities, drought and other severe weather hazards were also considered relative to specific City vulnerabilities and associated mitigation strategies. While most of the City is considered built out, mitigation strategy planning evaluated mitigation actions and projects for both the existing built environment and for future areas of development and redevelopment. This project was completed on time and within budget and passed Cal OES and FEMA review quickly.

Tri-City, CA Local Hazard Mitigation Plan Update – FEMA Approved 2024

Foster Morrison Staff: Jeanine Foster – project manager/senior planner; Chris Morrison – lead planner; Alejandro Gutierrez – GIS/risk assessment; Brenna Howell – QA/QC

Foster Morrison developed the 2024 Tri-City Local Hazard Mitigation Plan Update for five participating jurisdictions in California's East Bay. Participating jurisdictions included the cities of Fremont, Newark, and Union City, the Alameda County Water District, and the Union Sanitary District. This LHMP Update necessitated the update of 3 separate LHMPs for the jurisdictions and combining them into one 2024 LHMP Update. The Tri-City LHMP Update was completed to the FEMA's new Local Mitigation Planning Policy Guide FP 206-21-0002 effective April 19, 2023.

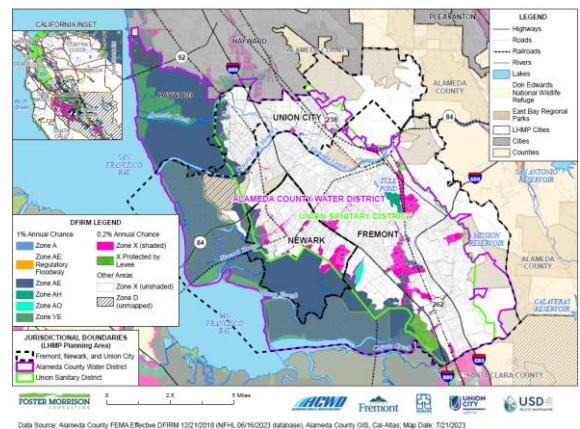
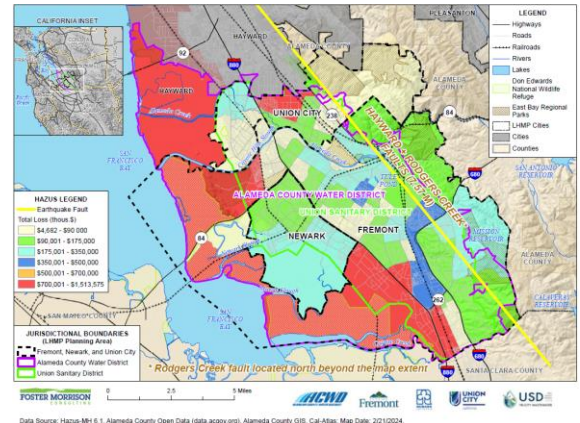
As part of this effort, a unique Tri-City Planning Area was established that covered the geographical boundaries of the five jurisdictions. All hazards from the three existing plans were assessed to see if they were still valid and what additional hazards should be included for this Update. Recent state and federal disaster declarations, severe weather events, Alameda County's 2021 LHMP, and the State of California's 2023 Hazard Mitigation Plan were evaluated to determine applicability of regional hazards to the five Tri-City jurisdictions. The end result was an updated list of hazards that included both common and unique hazards specific to participating jurisdictions. A detailed risk assessment for all jurisdictions was conducted specific to 16 separate hazards. The extent to which climate change exacerbates hazards was also addressed. Notable hazards included Dam Failure, Coastal Flooding and Sea Level Rise, Drought and Water Shortage, Earthquake, Flood, Levee Failure, Tsunami, and Wildfire. Also addressed is the issue of power outages and failures as a potential vulnerability of all hazards.

The LHMP Update included: a thorough planning process which encouraged involvement of the public in all aspects of Plan development through their participation on the planning committee and focused on inclusivity and planning for the whole community; a robust risk assessment for all jurisdictions, which included detailed assets analysis and mapping for all jurisdictions, including facility and linear assets for the two Districts; and a mitigation strategy that identified a comprehensive range of risk reduction measures for each jurisdiction.

Equity and diversity in hazard mitigation planning and implementation was emphasized throughout the plan development process, with all interested members of the public invited to be on the planning committee and to provide input into the LHMP. As a result, public participation was significant and resulted in valuable feedback to the jurisdictions for both the LHMP document and for other regional planning efforts moving forward. Through this collaborative process, key stakeholder relationships were formed by all parties.

Unique features to this Plan encompassed: the development of a critical facility definition and associated GIS inventory layer and hazard analysis for all jurisdictions; a Level 2 Hazus analysis for four different earthquake fault scenarios (Calaveras, Hayward, Hayward + Rogers Creek, and San Andrus) specific to each of the 5 jurisdictions and the Planning Area, with outputs related to total losses, peak ground acceleration (shaking), landslide and liquefaction potential, and fire following earthquake; and a comprehensive flood hazard analysis and planning process designed to maximize credits for the cities under the National Flood Insurance Program's (NFIP), Community Rating System (CRS).

The Tri-City LHMP Update was reviewed and approved by both Cal OES and FEMA to the new FEMA guidance.



City of Placentia , CA Local Hazard Mitigation Plan – Original Plan – FEMA Approved 2024

Foster Morrison Staff: Jeanine Foster – project manager/senior planner; Chris Morrison – lead planner; Alejandro Gutierrez – GIS/risk assessment lead, Brenna Howell – QA/QC

Foster Morrison, partnering with Howell Consulting, developed a new Local Hazard Mitigation Plan for the City of Placentia, located in Orange County, California. The LHMP was completed to the FEMA’s new Local Mitigation Planning Policy Guide FP 206-21-0002 effective April 19, 2023. Priority hazards of concern included climate change, flood, dam failure, earthquake, drought, and other severe weather events. The risk assessment, including a hazard identification, vulnerability assessment, and capability assessment, formed the basis for the hazard mitigation strategy for the City of Placentia planning area. A definition of critical facilities and infrastructure was developed and mapped for the City as part of the risk assessment for the Plan Update. The mitigation strategy included a wide range of mitigation actions and projects targeting priority hazards and their mitigating effects on City assets, including: people and populations; parcels and structures (the existing built environment); critical facilities and infrastructure; community lifelines; natural and historic and cultural resources; and economic assets and community activities of value.

As required by new FEMA guidance, this plan focused on outreach and engagement of underserved and vulnerable populations and emphasized planning for the “whole community”. A number of factors, including poverty, lack of access to transportation, and crowded housing can weaken a community’s ability to prevent human suffering and financial loss in a disaster. These factors are known as social vulnerability. The mitigation strategy developed for the City’s first LHMP included mitigation goals and policies recognizing the importance of inclusion, equity, and diversity in mitigation planning. In addition, key stakeholders representing these underserved groups provided key data profiling the City’s socially vulnerable populations and identified key vulnerability concerns to be addressed in the mitigation strategy. Inclusivity in hazard mitigation planning is both critical and strategic. FEMA’s National Risk Index (NRI) has adopted an established vision for a multi-hazard view of risk that combines the likelihood and consequence of natural hazards with social factors and resilience capabilities. Integration of the NRI and inclusivity in mitigation planning can be leveraged when pursuing FEMA mitigation grants, many of which are prioritizing grant monies for communities that need it the most. Given its importance in mitigation and grant funding, an analysis of the NRI relative to the City was performed.

Other unique issues in the development of the Placentia LHMP included balancing mitigation priorities of the historic nature of the City such as those assets dating back to the City’s contribution to the citrus (orange) industry, with newer development and a more recent City focus as a bedroom community with much of current day economies based on tourism in support of popular destinations such as nearby Disney Land, Knotts Berry Farm, and others. Also of note, given the City’s inland location, relatively flat topography and limited water resources, and the mostly built out community, as a whole, the City was not extremely vulnerable to the typical California hazards such as flood and wildfire found in neighboring jurisdictions. Earthquake, drought and severe weather hazards were some of the more significant hazards facing the City. As a result, the hazard prioritization process was critical in focusing resources on priority hazards and concerns to the City to better inform mitigation strategy development.



The City of Placentia LHMP was the first Foster Morrison plan to go through Cal OES and FEMA since the new guidance and was approved with very minimal requests for revisions. Notably, FEMA (identifying plan strengths) recognized that, “The plan does an excellent job of inviting a diverse set of stakeholders from each of the 5 key groups, including organizations that support underserved populations. The plan shows a robust effort was made to get the public involved.”

East Bay Regional Park District, CA, Local Hazard Mitigation Plan Update – FEMA Approved 2023

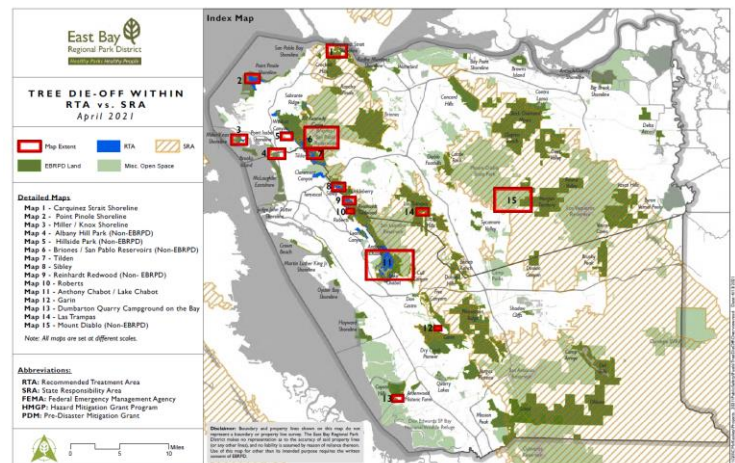
Foster Morrison Staff/Project Manager: Jeanine Foster – project manager/senior planner; Chris Morrison – lead planner; Alejandro Gutierrez – GIS/risk assessment lead, Brenna Howell – QA/QC

Foster Morrison, working with Howell Consulting, recently completed the 2023 LHMP Update for the East Bay Regional Park District (EBRPD). The EBRPD owns and manages regional parks and open spaces in Alameda and Contra Costa counties, a 1,400 square mile area that is home to 2.6 million people and forms the eastern shoreline of San Francisco Bay. The Park District owns and operates 73 parks spanning across 125,000 acres; 1,250 miles of trails; 55 miles of shoreline. Due to its location and the vast area of land the Park District covers, coupled with the high number of stakeholders, the Park District coordinates with Alameda County, Contra Costa County, and many of the cities and special districts therein. As such, there were many unique features to their Plan Update.

To better meet the revised FEMA plan review tool, an entire rework of the risk assessment was conducted for each identified hazard to reflect new information and the updated FEMA plan review tool. This included reworking the hazard profile and adding sections on location, extent, and new hazard event occurrences; redoing the entire vulnerability analysis to add additional items; and updating the vulnerability assessment based on more recent hazard data and the most current EBRPD land and assets data. GIS analysis was conducted for the existing built environment and areas subject to future growth and development and formed the basis of hazard mapping, vulnerability assessments, and quantifying assets at risk specific to affected park lands. Foster Morrison, working with the Park District, also developed a list of critical facilities, a subset of their asset layer that were overlaid on each mapped hazard.

New dam data provided by Cal OES and California Division of Safety of Dams (DSOD) was used for the dam inventory and analysis. This data included an updated hazard classification for identified dams and updated inundation mapping. This was of particular interest to the Park District, as it is the owner of two dams defined by the DSOD as being Extremely High Hazard dams (the highest ranking category). The Park District had just updated their Emergency Action Plans for each of these dams, which helped to inform the LHMP. The EBRPD's LHMP was written to qualify the Park District for a new funding stream from the DSOD known as the High Hazard Potential Dam (HHPD) program.

Foster Morrison worked with EBRPD on a strategy to engage as many stakeholders as possible. In total, there were 2 counties, 27 cities, 5 fire districts, 5 water districts, 2 park and recreation districts, 5 state and federal agencies, and 6 non-governmental organizations that were invited to participate along with the Park District organization in updating the EBRPD LHMP. This project was completed on time and within budget and was reviewed and approved by Cal OES and FEMA with no revisions. Following the LHMP project, Foster Morrison has performed 4 separate Benefit-Cost Analyses (BCAs) for the EBRPD's grant division in support of FEMA wildfire mitigation grant applications.



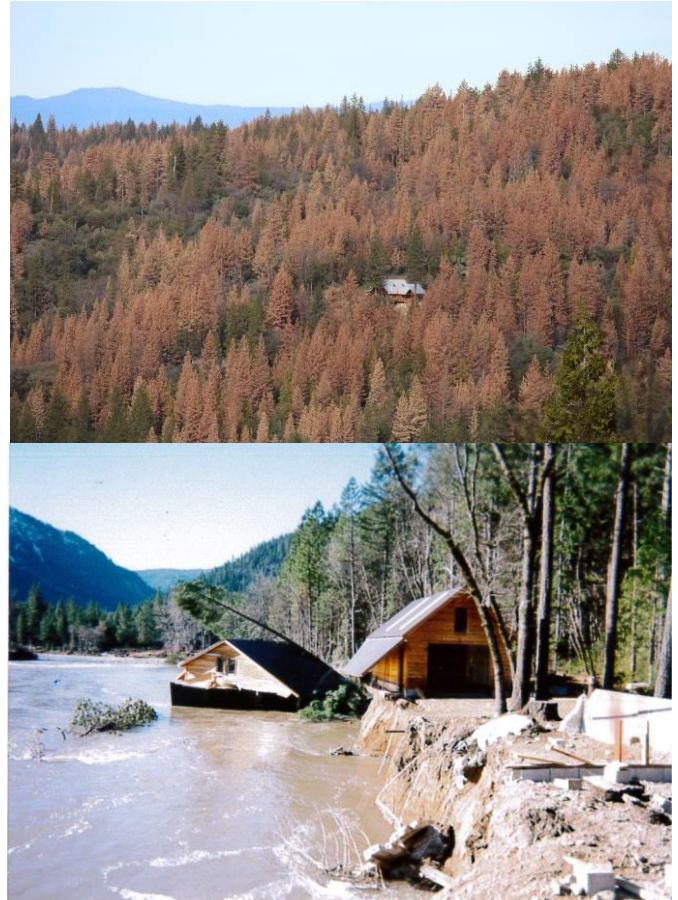
Plumas County, CA Local Hazard Mitigation Plan Update – FEMA Approved (2020)

Foster Morrison Staff: Jeanine Foster – project manager/senior planner; Chris Morrison – lead planner; Alejandro Gutierrez – GIS/risk assessment; Brenna Howell – QA/QC

Foster Morrison completed the 2020 Plumas County Local Hazard Mitigation Plan Update. All hazards from the 2014 plan were profiled in this LHMP Update. New hazards include localized flooding (broken out from the flood hazard), levee failure, pandemic, and tree mortality. Water shortage was added to the drought hazard. A new critical facility definition was created. The County created a new list of critical facilities that were spatially quantified in GIS, and then overlaid on each mapped hazard.

Unique features to this Plan include the topography of the County. Severe weather affects all areas of Plumas County but differs significantly by region. Throughout areas of the County there are significant variations in the average temperature and amount of precipitation received due to topography. Portions of the Plumas County Planning Area does experience snowfall on a seasonal basis, and portions of the County receive an abundance of snow, mostly between the months of November through March. This has caused avalanches in the County, especially in the Grizzly Ridge areas. Much of this snowfall melts in the spring causing high water levels. There are 22 dams in the County that store water and assist with flood control. Even with these safeguards, flooding does occur on a somewhat regular basis. On the opposite side of the spectrum, periods of recent droughts have caused issues in the County. Many areas in Plumas County have seen increases in tree mortality. In the past decade, tree mortality has increased in the northern portion of Plumas County as well as the Lakes Basin area. This has increased the wildfire risk in the County.

To analyze how hazards can affect the County, new dam data provided by Cal OES was used for the dam inventory and analysis. This data included an updated hazard classification for identified dams and updated inundation mapping. Additionally, GIS analysis was performed on earthquake (using Hazus – FEMA’s loss estimation software), flooding, landslide, and wildfire. Working with the County, Foster Morrison assisted in updating critical facility GIS mapping for the Planning Area. This improved the analysis regarding critical facilities that fall within mapped hazard areas. Environmental justice concerns were addressed in portions of this Plan Update. All of these risk assessment efforts set the stage for the development of a comprehensive range of mitigation strategies designed to reduce the risk and vulnerability of the Plumas planning area to identified hazards of concern. This plan passed Cal OES and FEMA review with little to no comments received.



5. Team Availability, Project Schedule, and Capacity

Team Availability and Project Schedule

Generally, the LHMP Update process takes 12-18 months, or longer, from project kickoff to plan submittal and approval by Cal OES and FEMA. The City of Piedmont has requested a plan submittal to Cal OES within 10 months of contract execution. With a signed contract and a project start date of August 1, 2024, and timely participation by the City of Piedmont, Foster Morrison is prepared to initiate work and conduct all plan development activities with a plan submittal to Cal OES/FEMA by May 31, 2025. A proposed schedule, including key milestones and HMPC and public meetings in bold, is included below in Table 4. Upon contract award, identified timeframes and overall schedule can be modified to best reflect the needs of the City of Piedmont.

Team Capacity

The Foster Morrison Team fully meets all the requirements necessary for providing high quality hazard mitigation planning services for the City of Piedmont. Our Team has a proven track record in providing clients with responsive and timely service to meet project objectives, schedules and changing work needs. We are committed to working on the City's LHMP Update project and will make staff available to complete work associated with this project. As small businesses, the Foster Morrison Team has great flexibility in scheduling of work and will make staff available to complete any work associated with this proposal in a timely manner while ensuring all project objectives are met and delivery of a high-quality work product. At particular stages of the project, individual Team members will be required to devote a substantial part of their effort to the work, perhaps even 100% of their capacity, at other times, project demands on individuals will be less. Additional planning staff from both Foster Morrison and Howell Consulting can also be called upon as needed to expand resources, as we have done together as a team on numerous recent LHMP projects. Managing the variable and competing demands of many projects is a natural and necessary part of the Foster Morrison Team's practice and is something that we have done successfully since our inception. The anticipated volume of work from this contract is well within our Team's capacity to execute efficiently and effectively. The Foster Morrison Team commits our Team and resources to the City of Piedmont for this LHMP Update project and will deliver the LHMP both on schedule and within the budget.

Table 4 City of Piedmont 2024 – 2025 LHMP Update Schedule

Phase/Task	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Phase I: LHMP Planning Process														
Task 1: Organize Resources														
HMPC Mtg. #1 - Kickoff/Public Mtg. #1														
Task 2: Public Involvement														
Task 3: Coordinate with Other Agencies														
Phase II: Risk Assessment														
Task 4: Assess the Hazard														
Task 5: Assess the Problem														
Capability Assessment														
HMPC Mtg #2														
Phase III: Mitigation Strategy														
Task 6: Set Goals														
Task 7: Review Possible Activities														
HMPC Mtg #3 & 4														
Task 8: Draft an Action Plan														
Task 8a: Draft Plan														
Draft Plan to City/HMPC														
City/HMPC Review and Comments to FM														
Public Review Draft to City														
Public Review and Comments														
HMPC Mtg #5/Public Mtg #2														
Phase IV: Plan Maintenance Process														
Task 9: Final Plan Submittal and Adoption														
Plan Submittal to Cal OES/FEMA														
Cal OES/FEMA Review and Approval														
LHMP Adoptions														
Task 10: Implement, Monitor and Update														

6. City's Services Contract

The Foster Morrison Team has reviewed the project requirements, service contract terms, and other terms and conditions specified in this RFP and agree to comply with all terms in full. No exceptions are requested.

7. LHMP Fee Schedule and Estimated Budget

The fee schedule for Foster Morrison can be seen on Table 5.

Table 5 Foster Morrison Fee Schedule

Project Staff	Hourly Rate
QA/QC	\$125.00
Project Manager	\$140.00
Lead Planner	\$125.00
GIS Analyst	\$100.00

Foster Morrison will execute the proposed scope of services for a not to exceed price of \$144,863 as detailed below in our cost proposal. Execution of the work plan within the proposed fee will meet the expectations to provide the City of Piedmont with a DMA compliant, FEMA-approved LHMP Update. Table 6 provides a summary of our fees broken out by project phase and task and includes all labor and direct costs. Direct costs include all reimbursable expenses such as travel and materials. Assumptions used in development of project costs are also identified. Table 7 provides detailed costs by task and also includes the hourly rate, number of anticipated hours, and total costs by proposed staff as well as a detail of proposed costs for travel and incidental expenses.

Table 6 City of Piedmont LHMP Update Cost Proposal Summary

Description (by Project Phase and Task)	Labor Costs	Direct Costs	Total Costs
Phase I LHMP Planning/Development Process			
Task 1: Organize Resources	\$7,600.00	\$2,314.00	\$9,914.00
Task 2: Public Involvement	\$6,480.00	\$0.00	\$6,480.00
Task 3: Coordinate with Other Agencies	\$11,060.00	\$2,339.00	\$13,399.00
Total Phase I	\$25,140.00	\$4,653.00	\$29,793.00
Phase II Risk Assessment			
Task 4: Assess the Hazard	\$12,150.00	\$0.00	\$12,150.00
Task 5: Assess the Problem	\$31,560.00	\$1,864.00	\$33,424.00
Capability Assessment	\$5,370.00	\$0.00	\$5,370.00
Total Phase II	\$49,080.00	\$1,864.00	\$50,944.00
Phase III Mitigation Strategy			
Task 6: Set Goals	\$7,980.00	\$2,176.00	\$10,156.00
Task 7: Review Possible Activities	\$11,660.00	\$1,351.00	\$13,011.00
Task 8 and 8a: Draft an Action Plan	\$17,480.00	\$0.00	\$17,480.00
Total Phase III	\$37,120.00	\$3,527.00	\$40,647.00
Phase IV Plan Maintenance Process			
Task 9: Adopt the Plan	\$13,840.00	\$6,239.00	\$20,079.00
Tasks 10: Implement, Evaluate & Revise	\$3,240.00	\$160.00	\$3,400.00
Total Phase IV	\$17,080.00	\$6,399.00	\$23,479.00
LHMP Update: Total Estimated Costs	\$128,420.00	\$16,443.00	\$144,863.00

Table 7 City of Piedmont LHMP Update Cost Proposal Detail

		Phase I: Prerequisite and Planning Process						Phase II: Risk Assessment						Phase III: Mitigation Strategy						Phase IV: Plan Maintenance Process			
		Task 1: Organize Resources (HMPC Mtg. #1; Pub Mtg. #1)		Task 2: Coordinate with Other Agencies		Task 3: Public Involvement		Capability Assessment	Task 4: Hazard ID & Profiles		Task 5: Vulnerability Assessment (HMPC Mtg. #2; Pub Mtg. #2)		Task 6: Establish Goals (HMPC Mtg. #3)	Task 7: Identify and Analyze Mitigation Measures HMPC Mtg. #4)		Task 8: Mitigation Strategy & 8a Draft Plan		Task 9: Final Plan Submittal & Adoption (HMPC Mtg. #5; Pub. Mtg #3)		Tasks 10: Plan Maintenance		Total Estimated Costs	
PROFESSIONAL SERVICES																							
Project Staffing	Rate	Hrs	Cost	Hrs	Cost	Hrs	Cost		Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost
Howell: QA/QC - LHMP Support	\$ 125.00	8	\$ 1,000.00	4	\$ 500.00	12	\$ 1,500.00	2	\$ 250.00	2	\$ 250.00	6	\$ 750.00	12	\$ 1,500.00	12	\$ 1,500.00	16	\$ 2,000.00		\$ -	86	\$ 10,750.00
Foster: PM/Senior Planner	\$ 140.00	40	\$ 5,600.00	32	\$ 4,480.00	54	\$ 7,560.00	8	\$ 1,120.00	20	\$ 2,800.00	54	\$ 7,560.00	32	\$ 4,480.00	44	\$ 6,160.00	42	\$ 5,880.00	36	\$ 5,040.00	16	\$ 2,240.00
Morrison: Lead Planner/Technical Editor	\$ 125.00	8	\$ 1,000.00	12	\$ 1,500.00	16	\$ 2,000.00	32	\$ 4,000.00	60	\$ 7,500.00	58	\$ 7,250.00	16	\$ 2,000.00	32	\$ 4,000.00	68	\$ 8,500.00	48	\$ 6,000.00	8	\$ 1,000.00
Gutierrez: GIS/Risk Assessment	\$ 100.00		\$ -		\$ -		\$ -		\$ -	16	\$ 1,600.00	160	\$ 16,000.00		\$ -		\$ -	16	\$ 1,600.00	8	\$ 800.00		\$ -
Total Professional Expenses		56	\$ 7,600.00	48	\$ 6,480.00	82	\$ 11,060.00	42	\$ 5,370.00	98	\$ 12,150.00	278	\$ 31,560.00	60	\$ 7,980.00	88	\$ 11,660.00	138	\$ 17,480.00	108	\$ 13,840.00	24	\$ 3,240.00
DIRECT EXPENSES																							
Item	Unit Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Air Travel	\$550	1	\$ 550.00		\$ -	1	\$ 550.00		\$ -		\$ -	1	\$ 550.00	1	\$ 550.00		\$ -		\$ -	1	\$ 550.00		\$ -
Car Rental	\$275	1	\$ 275.00		\$ -	1	\$ 275.00		\$ -		\$ -	1	\$ 275.00	1	\$ 275.00		\$ -		\$ -	1	\$ 275.00		\$ -
Per diem	\$263	3	\$ 789.00		\$ -	3	\$ 789.00		\$ -		\$ -	3	\$ 789.00	2	\$ 526.00	2	\$ 526.00		\$ -	3	\$ 789.00		\$ -
Parking/baggage/misc.	\$125	1	\$ 125.00		\$ -	1	\$ 125.00		\$ -		\$ -	1	\$ 125.00	1	\$ 125.00	1	\$ 125.00		\$ -	1	\$ 125.00		\$ -
Local Travel	\$450	1	\$ 450.00		\$ -	1	\$ 450.00		\$ -		\$ -			1	\$ 450.00	1	\$ 450.00		\$ -		\$ -		\$ -
Priority Mail and Shipping					\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ 60.00		\$ 60.00
Photocopying, Color Printing /Meeting Supplies			\$ 125.00		\$ -		\$ 150.00		\$ -		\$ -		\$ 125.00		\$ 250.00		\$ 250.00		\$ -		\$ 4,500.00		\$ 100.00
TOTAL DIRECT COSTS			\$ 2,314.00		\$ -		\$ 2,339.00		\$ -		\$ -		\$ 1,864.00		\$ 2,176.00		\$ 1,351.00		\$ -		\$ 6,239.00		\$ 160.00
TOTAL LABOR AND DIRECT COSTS			\$ 9,914.00		\$ 6,480.00		\$ 13,399.00		\$ 5,370.00		\$ 12,150.00		\$ 33,424.00		\$ 10,156.00		\$ 13,011.00		\$ 17,480.00		\$ 20,079.00		\$ 3,400.00
Breakout by Phase		Phase I Planning Process						Phase II Risk Assessment						Phase III Mitigation Strategy						Phase IV Plan Maintenance			
Item		Total Hours		Costs		Total Hours		Cost		Total Hours		Cost		Total Hours		Cost		Total Hours		Costs		Qty.	Cost
Foster Morrison Labor		186		\$ 25,140.00		418		\$ 49,080.00		286		\$ 37,120.00		132		\$ 17,080.00				\$ 6,399.00		1022	\$ 128,420.00
Foster Morrison Expenses				\$ 4,653.00				\$ 1,864.00				\$ 3,527.00											\$ 16,443.00
PHASE COST		186		\$ 29,793.00		418		\$ 50,944.00		286		\$ 40,647.00		132		\$ 23,479.00						1,022	\$ 144,863.00

LHMP Cost Assumptions

The following is a summary of cost assumptions for the development of the LHMP Update:

- Monies associated with labor and direct expense costs will be interchangeable as needed, between labor and direct costs and between project phases, to complete project requirements.
- Four trips total are planned by the Foster Morrison planning team to accommodate the five HMPC planning and coordination meetings and three sets of public meetings.
- City staff will assist with coordinating and advertising public meetings.
- This cost assumes ten hard color copies of the final plan document, and electronic deliverables as described in the RFP, to be provided to the client for the final plan submittal. All other interim plan submittals to the client and HMPC will be done electronically.
- City staff will coordinate and facilitate the LHMP’s adoption.
- City staff will support the DMA planning process requirements as previously described for participating jurisdictions.
- In accordance with DMA guidelines, only existing best available data will be used during this planning process, no new source data will be created.

This cost estimate remains valid for 120 days.

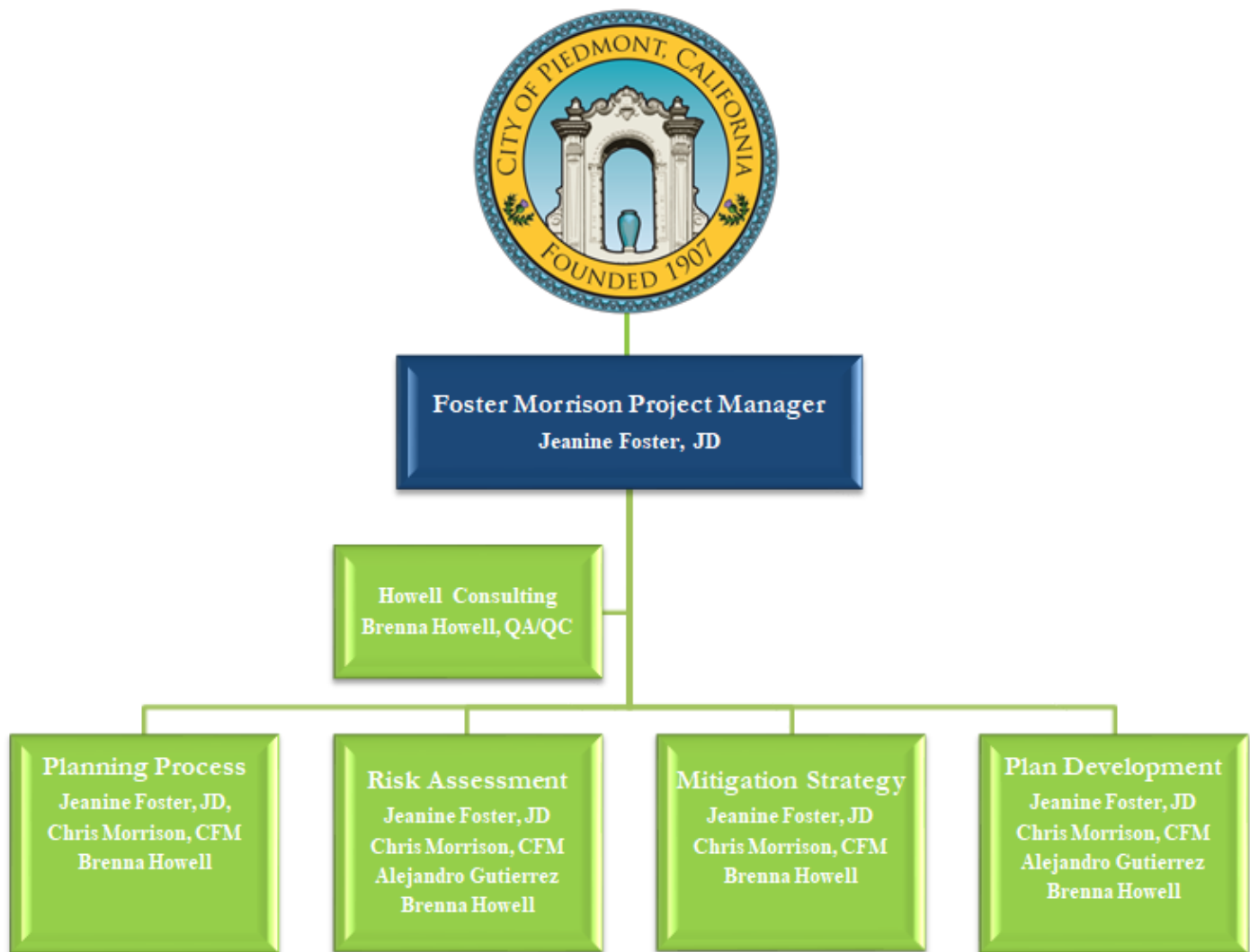
8. Additional LHMP Qualifications

Of critical importance to any project is the consultant staff that will actually be conducting the work and performing all tasks necessary to provide the City with a FEMA-approved LHMP Update. Foster Morrison commits its most qualified staff to this LHMP Update project – and the same staff that developed the 2019 LHMP for the City. Utilizing the same staff, not only provides continuity between projects, it also ensures the proposed staff is most knowledgeable of the City and the risks and vulnerabilities of the City to natural hazards. Thus, the proposed Project Team as detailed further below will be able to quickly emerge themselves in the project details and LHMP development tasks to ensure an efficient and comprehensive approach to this LHMP Update. Also of note, Jeanine Foster, the proposed project manager for this LHMP Update, grew up on the other side of the Oakland Hills in Moraga. In addition, her father had a dental practice in the City of Piedmont. As such, Jeanine has a unique understanding and familiarity with Piedmont and the surrounding areas which will provide a deeper understanding of the City to support plan development.

Project Team

The Foster Morrison Team’s hazard mitigation planning staff is uniquely experienced, knowledgeable, and qualified to develop an LHMP Update for the City of Piedmont. Foster Morrison Team staff have been involved over the last twenty years in the development of numerous local hazard mitigation plans for California communities, including our multiple planning efforts in other nearby northern California communities.

The proposed project organizational chart is provided below in Figure 1 followed by our proposed staffing plan. For each person identified as key staff for this project, a discussion of their project role is provided followed by a brief summary of qualifications. Resumes for key personnel are included in Appendix A.

Figure 1 Foster Morrison Team for City of Piedmont LHMP Update***Jeanine Foster, JD - Principal/Project Manager/Senior Mitigation Planner*****Project Role**

Jeanine Foster, JD will be the project manager and senior mitigation planner for this effort and take the lead role in project management, community engagement, planning process and meeting facilitation, coordination of risk assessment and mitigation strategy tasks, and drafting the plan document. She will be the primary point of contact with the City of Piedmont and will facilitate all HMPC and public meetings identified in the scope of services as detailed for this project. As a Principal and key technical lead for Foster Morrison's Hazard Mitigation Planning program, Jeanine is committed to providing her clients with hands-on communications and project support necessary to ensure a high-quality end product to meet client and community objectives. Jeanine served in this role during the creation of the 2019 City of Piedmont LHMP.

Summary of Qualifications

Jeanine Foster is a co-owner of Foster Morrison Consulting and plays a key role as principal, project manager, and senior mitigation specialist. She has diverse experience providing project management, mitigation planning, and disaster recovery services in response to damages caused by a variety of natural hazard events, including flood and wildfire, to affected communities, with a focus on cities and counties located in California, Colorado, and Mississippi. Jeanine's responsibilities include project management; hazard mitigation planning; disaster recovery; grant application development, including benefit-cost analysis (BCAs); environmental and historic preservation compliance, grant

administration, agency coordination; National Flood Insurance Program (NFIP) Community Rating System (CRS) compliance; Floodplain Management Services; regulatory compliance; and marketing. She works closely with clients to define project direction and scope; to identify and pursue grant opportunities; to implement and administer projects funded through a variety of grant resources; and to ensure compliance with applicable regulatory programs such as FEMA's Disaster Mitigation Act (DMA) and NFIP's CRS program. These responsibilities have entailed working with the Federal Emergency Management Agency (FEMA), the National Oceanic and Atmospheric Administration (NOAA), Army Corp of Engineers (USACE), State Emergency Management Agencies and Water Resources Agencies, and local city, county, and district officials to execute and manage projects from startup to final project closeout. Jeanine has a JD from the University of Denver and a BA from the University of Colorado, Boulder.

Chris Morrison, MPA, CFM – Lead Planner and Technical Editor

Project Role

Chris, as the lead mitigation planner on this project, will take the lead in the data collection, the risk assessment research, and plan development and will work closely with the project team to integrate data collected throughout the process into the plan document. He will also be responsible for technical editing and overall document production. Chris served in this role during the creation of the 2019 City of Piedmont LHMP.

Summary of Qualifications

Chris is a co-owner of Foster Morrison Consulting and is the Lead Mitigation Planner/Technical Editor for Foster Morrison. During the past 15 years, he has provided planning, research, writing, technical editing, and document production expertise to over 70 different DMA and CRS plans for jurisdictions in Arkansas, California, Colorado, Louisiana, Mississippi, Missouri, Montana, Nevada, New Mexico, South Dakota, Virginia, Wisconsin, and Wyoming. Recently he has been a key mitigation planner on California Hazard Mitigation Plans for the cities of Clearlake, Lakeport, Placentia, Azusa, Garden Grove, Fullerton, Piedmont, San Rafael, Vacaville, and Tri-Cities (Fremont, Newark, Union City), as well as Lake County, Colusa County, Madera County, Nevada County, Amador County, Butte County, Calaveras County, Kern County, Modoc County, Placer County, Sacramento County, Yuba County, Plumas County, and Sutter County. He has also worked on plans for special districts including Hidden Valley Lake Community Services District, Los Angeles Unified School District, East Bay Regional Park District, and the Calaveras County Water District. Chris is a certified floodplain manager and has a B.S in Political Science, and a Master in Public Administration from Minnesota State University – Moorhead.

Alejandro Gutierrez – GIS Analyst

Project Role

Alejandro will assist in the risk and vulnerability assessment and take the lead in the GIS analysis. He will identify and collect all GIS and risk assessment data, will assist in the development of the risk assessment, and will create the plan maps, analysis tables, and associated methodologies using GIS, Hazus, and other tools. Alejandro served in this role during the creation of the 2019 City of Piedmont LHMP.

Summary of Qualifications

Alejandro has 21 years of GIS data development, analysis, conversion, and manipulation within various GIS industries (floodplain mapping, E-911 data development, remote sensing, hydrogeology, and mining). For 6 years, Alejandro worked in a key capacity with FEMA on their Map Modernization (DFIRM) Program. As a GIS Project Manager, Production Manager, and GIS Analyst for the development of 27 county-wide vector- and ortho-based DFIRMs in FEMA Regions III, V, VII, and VIII, he developed a strong team/work environment, trained staff in production techniques, tracked budgets and schedules, and has traveled to study areas to coordinate public outreach meetings. Alejandro has also provided mitigation planning and GIS support for multiple California DMA plan updates: Butte, Yuba, Calaveras, Fresno, Lake, Colusa, Modoc, Madera, Nevada, Placer, Sacramento, and Sutter counties, as well as for cities of Clearlake, Lakeport, Placentia, Azusa, Garden Grove, Fullerton, Piedmont, San Rafael, Vacaville, and Tri-Cities (Fremont, Newark,

Union City). He has also worked on plans for special districts including Hidden Valley Lake Community Services District, Los Angeles Unified School District, East Bay Regional Park District, and the Calaveras County Water District. For the DMA plans, he generated thematic and illustrative facilities and hazards maps, both at the countywide and city scales, to represent FIRM data and to quantify risks to the county using parcel and assessor's value data. He also generated the standardized map template to present the wildfire risk analysis, also at the parcel level, using GIS data from the California Department of Forestry and Fire Protection. He has used the ESRI tools and Microsoft Access to perform flood analysis using FIRM data on parcels (land use type and valuation data) by city and performed the wildfire analysis using the same methodology. Alejandro has a bachelor's in Environmental Resource Management.

Brenna Howell – Planning Process, Risk Assessment, and Mitigation Strategy Support, QA/QC

Project Role

Brenna will provide support to the planning process, risk assessment, and mitigation strategy tasks. This will include assisting with the development of the hazard profiles and vulnerability assessment for identified hazards and meeting facilitation support for HMPC and public meetings. She will also assist with the development of a capability assessment and will provide support to the development of the City's mitigation strategy. In addition, Brenna will provide quality assurance and quality control (QA/QC) during all phases of the project and will ensure that the plan meets all Cal OES and FEMA mitigation plan review tool requirements before it is submitted for agency review. Brenna served in this role during the creation of the 2019 City of Piedmont LHMP.

Summary of Qualifications

Brenna Howell, of Howell Consulting, has over 20 years of consulting experience with the last 15 years focused on development of local Emergency Operations Plans, local Hazard Mitigation Plans, and hazard-specific functional annexes specifically for California local government jurisdictions. Brenna has served as the Emergency Services Coordinator for the cities of Stockton and West Sacramento, Sutter County, as well as the County of Yolo providing full emergency management program management responsibilities. Brenna is fully conversant with the concepts and protocols of the National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS). She has been managing projects for many years and has a proven track record in managing consultant teams to plan and implement large and small emergency planning projects. She has performed such work for Butte, Colusa, Kings, Merced, Placer, Plumas, Nevada, Sacramento, Sutter, Yolo, and Yuba counties. Brenna has also completed work for multiple cities such as Winters, Woodland, West Sacramento, Davis, Sacramento, Chico, Piedmont, Garden Grove, Los Banos, Avenal, and Hanford.

Foster Morrison Team Strengths

- Development of the 2019 City of Piedmont LHMP, and development of over 40 single and multi-jurisdictional LHMPs and LHMP Updates for California County communities since 2003. All completed LHMPs are FEMA-approved.
 - Detailed knowledge of FEMA (DMA, FMA, CRS) and state planning requirements and guidance (including new 2023 LHMP guidance) and strong working relationship with Cal OES and FEMA Region IX.
 - Knowledge of northern California hazards and risks, past disaster history, local governments, and data sources.
 - Extensive experience developing and portraying hazard risk assessment studies supported by Hazus and GIS.
 - Emphasis on a strong planning process that includes high levels of public, community, and stakeholder involvement and strong meeting facilitation.
 - Experience leveraging hazard mitigation funding for our clients.
 - Experience with grant application development, grant management, and EHP clearances for FEMA funded projects.
-

Appendix A. Resumes

Jeanine Foster, JD

Principal/Project Manager/Senior Mitigation Planner

Professional Biography

Ms. Jeanine Foster is a co-owner of Foster Morrison Consulting and plays a key role as principal, project manager, and senior mitigation specialist. She has diverse experience providing project management, mitigation planning, and disaster recovery services in response to damages caused by a variety of natural hazard events, including flood and wildfire, with a focus on cities and counties located in California, Colorado, and Mississippi. Her recent focus includes the development of Local Hazard Mitigation Plans (LHMPs) and LHMP Updates throughout California with a focus on Northern California communities.

Jeanine's responsibilities include project management; hazard mitigation planning; disaster recovery; grant application development, including benefit-cost analysis (BCAs); environmental and historic preservation compliance, grant administration, agency coordination; National Flood Insurance Program (NFIP) Community Rating System (CRS) compliance; Floodplain Management Services; regulatory compliance; and marketing. She works closely with clients to define project direction and scope; to identify and pursue grant opportunities; to implement and administer projects funded through a variety of grant resources; and to ensure compliance with applicable regulatory programs such as FEMA's Disaster Mitigation Act (DMA) and NFIP's CRS program. These responsibilities have entailed working with the Federal Emergency Management Agency (FEMA); the National Oceanic and Atmospheric Administration (NOAA); Army Corp of Engineers (USACE); State Emergency Management Agencies; Water Resources Agencies; Fire Agencies; and other local, state, and federal agencies to obtain grant funding and to execute and manage projects from startup to final project closeout. Her expertise includes:

- Project Management
- Hazard Mitigation and Emergency Management Planning and Disaster Recovery
- Floodplain Management Services/NFIP's CRS Program Compliance
- Regulatory/Environmental Compliance

Education

- JD, University of Denver, 1988
- BA, University of Colorado, 1984

Professional Qualifications/Registrations

- Admitted to Bar: Colorado, 1988

Presentations/Publications

- California Flood Risk Symposium, The Differing California Flood Disasters, "The Importance of Hazard Mitigation" (presenting with Cal OES), Association of State Floodplain Managers (ASFPM), 2019
- Floodplain Management Association (FMA) Conference, Colorado 2013 Floods, "Mitigation and Resiliency: A Path Toward Recovery", 2014
- Transportation Research Board, Washington, DC, 1995 Annual Conference, "Legal and Liability Aspects of Design and Construction Projects Involving Environmentally Sensitive Areas."
- Westside Corridor Light Rail Project, Portland, Oregon, Training Seminar entitled, "Hazardous Materials and the Transportation Project," September 1992.

- Environmental Technology, Volume 7, Issue 5, September/October 1997. Feature article, “Spiraling Toward the UST Deadline.”

Representative Projects

Hazard Mitigation Plans

For the following projects, Jeanine served as the Project Manager and Senior Planner responsible for development of original LHMPs and LHMP Updates that meets the requirements of DMA, CRS and FMA. Responsibilities included updating the hazard and risk assessment data, identification and development of new plan goals and mitigation strategies, development and implementation of an enhanced public outreach effort, and maximizing participating CRS communities’ credits for DMA planning under CRS Activities 510 and 450. Representative LHMP and LHMP Update projects include the following:

- City of Piedmont Hazard Mitigation Plan (2018 Original Plan), Piedmont, CA
- Los Angeles Unified School District, Los Angeles, CA (2018 Plan Update and 2024 Plan Update in process)
- Hidden Valley Lake Community Services District (2020 Original Plan and 2024 Plan Update in process)
- Colusa County Mitigation Plan Update, Colusa County, CA (2018 Plan Update, 2024 Update in process)
- Butte County Local Hazard Mitigation Plan (2013 and 2019 Plan Updates, 2024 Update in process)
- Tri-City (Fremont, Newark, Union City) Hazard Mitigation Plan (2024 Update in process)
- City of Placentia Local Hazard Mitigation Plan (2023 Original Plan)
- East Bay Regional Park District Hazard Mitigation Plan and BCA Services (2022 Plan Update), Alameda and Contra Costa Counties, CA
- Sacramento County Multi-jurisdictional Hazard Mitigation Plan (2005 Original Plan; 2011, 2016, and 2021 Plan Updates), Sacramento, CA
- Placer County Multi-jurisdictional Hazard Mitigation Plan (2005 Original Plan; 2010, 2015, and 2021 Plan Updates), Placer, CA
- Yuba County Multi-jurisdictional Hazard Mitigation Plan (2021 Plan Update), Yuba, CA
- Sutter County Multi-jurisdictional Hazard Mitigation Plan (Original 2009 Plan; 2014 and 2021 Plan Updates), Sutter, CA
- Amador County Multi-jurisdictional Hazard Mitigation Plan (Original 2006 Plan and 2014 Plan Update), Amador, CA
- Plumas County Hazard Mitigation Plan (2020 Plan Update), Plumas CA
- City of Garden Grove Hazard Mitigation Plan (2019 Original Plan), Garden Grove, CA
- City of Azusa Hazard Mitigation Plan (2019 Original Plan), Azusa, CA
- City of Lakeport Multi-jurisdictional Hazard Mitigation Plan (2019 Original Plan), Lakeport, CA
- City of Clearlake Multi-jurisdictional Hazard Mitigation Plan (2019 Original Plan), Clearlake, CA
- Lake County Hazard Mitigation Plan (2018 Plan Update), Lake County, CA
- Madera County Multi-jurisdictional Hazard Mitigation Plan (2017 Plan Update), Madera, CA
- City of San Rafael Hazard Mitigation Plan (2017 Original Plan), San Rafael, CA
- Nevada County Multi-jurisdictional Hazard Mitigation Plan (2017 Plan Update), Nevada, CA
- Modoc County Local Hazard Mitigation Plan, Modoc County, CA (2015 Original Plan)
- Calaveras County Multi-jurisdictional Hazard Mitigation Plan (2010 Original Plan and 2015 Plan Update), Calaveras, CA
- City of Vacaville Hazard Mitigation Plan (2015 Original Plan), Vacaville, CA
- Calaveras County Water District Hazard Mitigation Plan (2012 Plan Update), Calaveras, CA
- City of Fullerton Multi-Hazard Mitigation Plan (Original Plan 2011), Fullerton, CA
- Fresno County Multi-jurisdictional Hazard Mitigation Plan (2009 Original Plan), Fresno, CA
- City of Boulder Floodplain Management/CRS Services, Boulder, CO, 2009
- City of Boulder Multi-jurisdictional Hazard Mitigation Plan CO (2006 Original Plan), Boulder, CO
- University of Colorado DMA/Disaster Resistant University (DRU) Plan (2006 Original Plan), Boulder, CO

- Mississippi Hazard Mitigation Services for Local Communities along Mississippi Gulf Coast, 2008-2014
- City of Waveland Hazard Mitigation/Climate Adaptation/CRS Plan (2013 Plan Update), Waveland MS,
- City of Pascagoula Hazard Mitigation Plan Update (2013 Plan Update), Pascagoula, MS

Other Hazard Plans

City of Sacramento Comprehensive Flood Management Plan (CFMP 2014 Update), Sacramento, CA

With a previous firm Jeanine was Project Manager and Senior Planner responsible for an update to the City's CFMP. This unique plan serves as the City's strategic plan to reduce flood risk to the City through a comprehensive approach to risk management. The risk reduction tools implemented through this plan include: Land Use Planning and Development Guidelines, Emergency Management, Levee and other Structural Improvements, Internal drainage Improvements, Risk Communication (Public Education and Awareness), and NFIP/CRS. As part of this effort a review, update and rewrite of each chapter was required and with a focus on overhauling the Emergency Management, Risk Communication and NFIP/CRS chapters. The updated CFMP also included development of mitigation strategies for each risk reduction tool.

Hazard Mitigation and Disaster Recovery Services

Mississippi Hazard Mitigation Services for Local Communities along Mississippi Gulf Coast, 2008-2014

With a previous firm Jeanine and following Hurricane Katrina, Jeanine, as Project Manager, supported a multitude of hazard mitigation and recovery projects for Cities and Counties along the Mississippi Gulf Coast that were severely impacted by widespread and catastrophic flooding and hurricane storm surge and winds. Services included those related to securing FEMA grant funds for over 20 projects in five different communities:

- Preparation of FEMA's new Expanded Mitigation Strategies Planning Grant Pilot.
- Preparation of HMGP, PDM and FMA grant applications including retrofit to critical facilities, residential home acquisition and demolition, residential home elevation, residential mitigation reconstruction (rebuild), construction of 361 FEMA shelters, installation of generators for critical facilities, and municipal drainage projects.
- Development of benefit-cost analyses (BCA) in support of FEMA project applications.
- Preparation of Partnered Mitigation Project (PMP) Applications to combine Public Assistance (PA) funding with HMGP funding, providing both project management and grant administration services.
- Preparation of housing administrative plans and NFIP/CRS repetitive loss plans for identifying and prioritizing residential acquisition and elevation projects.
- Update to existing Hazard Mitigation Plans (DMA, FMA, and CRS) to better reflect communities' interests with revised risk assessments, mitigation goals and mitigation strategies.
- Update to existing building and zoning codes to direct future development.
- Project management and grant administration of HMGP/PDM/FMA grants for the retrofit of multiple critical facilities and installation of generators; reconstruction of municipal buildings; reconstruction, elevation, and acquisition projects for affected housing; and local drainage projects.
- Grant administration and project closeout to ensure that project work and required documentation is maintained and meets state and FEMA requirements for reimbursement.



Christopher Morrison, MPA, CFM

Owner/Lead Mitigation Planner

Professional Biography

Chris is a co-owner of Foster Morrison Consulting and is the Lead Mitigation Planner/Technical Editor for Foster Morrison. During the past 15 years, he has provided planning, research, writing, technical editing, and document production expertise to over 70 different DMA and CRS plans for jurisdictions in Arkansas, California, Colorado, Louisiana, Mississippi, Missouri, Montana, Nevada, New Mexico, South Dakota, Virginia, Wisconsin, and Wyoming. Recently he has been a key mitigation planner on California Hazard Mitigation Plans as shown below. In addition, he has provided technical editing and document production services to clients such as the EPA, BIA, and large mining clients in the US, Russia, and Mongolia. He has also performed large scale technical editing on UFOC, SEC, U.S. Supreme Court, U.S. Appeals Court, State Supreme Court, and international court documents. During the completion of his Masters of Public Administration, he was educated in policy analysis, grant writing and management, legal analysis, legal research, and financial management for government and non-profit entities. Chris is also a Certified Floodplain Manager.

Education

- Master of Public Administration, Minnesota State University Moorhead, 2012
- B.S. in Political Science, Minnesota State University Moorhead, 1998

Professional Qualifications/Registrations

- Association of State Floodplain Managers
- Certified Floodplain Manager

Representative Projects

Hazard Mitigation Plans

Chris has been the primary writer and technical editor for multiple original and updated local hazard mitigation plans. His responsibilities included review and revision of the plan and conducting research to create a hazard identification and risk assessment, demographic data, jurisdictional profiles, formatting, and layout of the plan. He is also responsible for compiling, analyzing, and implementing materials to ensure compliance with FEMA guidelines.

- City of Piedmont Local Hazard Mitigation Plan (2018/2019 Original Plan)
- Los Angeles Unified School District, Los Angeles, CA (2018 Plan Update and 2024 Plan Update in process)
- Hidden Valley Lake Community Services District (2020 Original Plan and 2024 Plan Update in process)
- Colusa County Mitigation Plan Update, Colusa County, CA (2018 Plan Update, 2024 Update in process)
- Butte County Local Hazard Mitigation Plan (2013 and 2019 Plan Updates, 2024 Update in process)
- Tri-City Local Hazard Mitigation (2024 Plan Update)
- City of Placentia Local Hazard Mitigation Plan (2023 Original Plan)
- East Bay Regional Park District – In Cal OES review as of January 2023
- Sacramento County Local Hazard Mitigation Plan Update (2011, 2016, and 2021 Plan Update)
- Placer County Local Hazard Mitigation Plan Update, Placer County, CA (2010, 2015, and 2021 Plan Updates)
- Yuba County Local Hazard Mitigation Plan Update, Yuba County, CA (2021 Plan Update)
- Sutter County Hazard Mitigation Plan Update, Sutter County, CA (2014 and 2021 Plan Updates)
- Plumas County Hazard Mitigation Plan (2020 Plan Update)



- Amador County Hazard Mitigation Plan Update (2014 and 2020 Plan Update)
- City of Garden Grove Local Hazard Mitigation Plan (2019 Original Plan)
- City of Lakeport Local Hazard Mitigation Plan (2018/2019 Original Plan)
- City of Clearlake Local Hazard Mitigation Plan (2018/2019 Original Plan)
- City of Azusa Local Hazard Mitigation Plan, City of Azusa, CA (2018 Original Plan)
- Lake County Mitigation Plan Update, Lake County, CA (2018 Plan Update)
- Madera County Mitigation Plan Update, Madera County, CA (2017 Plan Update)
- City of San Rafael Local Hazard Mitigation Plan, San Rafael CA (2017 Original)
- Nevada County Hazard Mitigation Plan Update, Nevada County, CA (2017 Plan Update)
- Modoc County Local Hazard Mitigation Plan, Modoc County, CA (2015 Original Plan)
- Calaveras County Local Mitigation Plan Update, Calaveras County, CA (2010 Original Plan and 2015 Update)
- City of Fullerton Local Hazard Mitigation Plan, City of Fullerton, CA
- City of Vacaville Local Hazard Mitigation Plan, Vacaville, CA
- Twin Rivers School District Hazard Mitigation Plan, Sacramento County, CA
- Calaveras County Water District Hazard Mitigation Plan Update, Calaveras County, CA
- Fresno County Hazard Mitigation Plan Update, Fresno County, CA
- Kern County Hazard Mitigation Plan Update, Kern County, CA
- Los Alamos County Hazard Mitigation Plan Update, Los Alamos County, NM
- Teton County Hazard Mitigation Plan Update, Teton County, MT
- Liberty County Hazard Mitigation Plan Update, Liberty County, MT
- Toole County Hazard Mitigation Plan Update, Toole County, MT
- Tribal Hazard Mitigation Plan Development, Ute Mountain Ute Tribe, CO
- State of Arkansas Multi-Hazard Mitigation Plan Update, Little Rock, AR
- State of South Dakota Multi-Hazard Mitigation Plan Update (2010 and 2013), Pierre, SD
- City of Waveland Hazard Mitigation Plan Update, Waveland, MS (CRS Focused Plan)
- City of Pascagoula Hazard Mitigation Plan Update, Pascagoula, MS (CRS Focused Plan)
- City of Boulder Multi-Hazard Mitigation Plan Update, Boulder, CO (CRS Focused Plan)
- Carbon County Local Hazard Mitigation Plan, Carbon County, MT
- Big Horn County Local Hazard Mitigation Plan, Big Horn County, MT
- Washakie County Multi-Hazard Mitigation Plan, Washakie County, WY
- City of Moss Point Hazard Mitigation Plan, Moss Point, MS
- City of Long Beach Hazard Mitigation Plan, Long Beach, MS
- City of Aurora Energy Assurance Plan, Aurora, CO
- Pearl River County Local Hazard Mitigation Plan Update, Pearl River County, MS
- City of Bay St. Louis Local Hazard Mitigation Plan Update, City of Bay St. Louis, MS
- Southeast Colorado Regional Multi-Hazard Mitigation Plan, Southeast Colorado (Counties of Baca, Bent, Crowley, Kiowa, Otero, and Prowers)
- State of Colorado Drought Mitigation and Response Plan, Denver, CO
- City of Bossier City Local Hazard Mitigation Plan Update, City of Bossier City, LA
- State of Missouri Multi-Hazard Mitigation Plan Update, Jefferson City, MO
- Jefferson County Multi-Jurisdictional Multi-Hazard Mitigation Plan Update, Jefferson County, CO
- Regional Hazard Mitigation Plan Update, Northeast Colorado (Counties of Cheyenne, Kit Carson, Lincoln, Logan, Morgan, Phillips, Sedgwick, Washington, Weld, and Yuma)
- Washoe County Multi Hazard Mitigation Plan, Washoe County, NV
- Dane County Hazard Mitigation Plan Update, Dane County, WI
- Multi-Hazard Mitigation Plan Update, City of Poquoson, VA



Alejandro Gutierrez

GIS Analyst, Risk Assessment Development

Professional Biography

Alejandro has 21 years of GIS data development, analysis, conversion, and manipulation within various GIS industries (floodplain mapping, disaster recovery, urban real estate analysis, E-911 data development, remote sensing, hydrogeology, hazards analysis, cartography, cadastral mapping, and mining). For 6 years, Alejandro worked in a key capacity with FEMA on their Map Modernization (DFIRM) Program. As a GIS Project Manager, Production Manager, and GIS Analyst for the development of 27 county-wide vector- and ortho-based DFIRMs in FEMA Regions III, V, VII, and VIII, he developed a strong team/work environment, trained staff in production techniques, tracked budgets and schedules, and has traveled to study areas to coordinate public outreach meetings to discuss the new DFIRMs with the city/county officials, floodplain managers, emergency management officials, local engineers, FEMA representatives, NFIP coordinators, and the public. Alejandro has also provided mitigation planning and GIS support for multiple California DMA plan updates outlined below. He has used the ESRI tools and Microsoft Access to perform flood analysis using FIRM data on parcels (land use type and valuation data) by city and performed the wildfire analysis using the same methodology. Alejandro has also provided mitigation planning and GIS support for three state hazard mitigation plan updates: Wyoming, Missouri, and Mississippi. For the state plans, Alejandro supported the initial GIS data collection efforts by contacting the county and jurisdictional representatives; created state, county, and jurisdictional thematic maps utilizing local and national DFIRM and HAZUS generated data; and also created thematic maps depicting earthquake, soil, and loss ratios utilizing local, national and HAZUS generated data. Alejandro assisted the project managers with Level 2 data input and parameter modifications. Alejandro has FEMA public assistance (PA) experience working directly with and within communities as a recovery specialist responsible for conducting flood-site assessments and developing mitigation improvement reports at sites in Larimer County, Colorado through coordination with several consulting firms, County, and FEMA. These efforts were focused on the Public Improvement Districts, private roads, and public roads to support bid packages necessary for FEMA to allocate disaster funds to the State and County.

Education

- University of TX, Austin, TX - BA Environmental Resource Management, 1999

Professional Qualifications/Registrations

- Rocky Mountain Hazus Users Group

Representative Projects

Hazard Mitigation Plans

In the following LHMPs, Alejandro was the lead GIS analyst. He performed GIS analysis on natural hazards such as earthquake, fire, levee failure, dam failure, and flood to support these LHMPs. He analyzed population, critical facilities, and improved parcels at risk to hazards, as well as generating thematic and illustrative facilities hazards maps and loss estimates to represent hazard data and to quantify risks to the County, City, or tribal entity using parcel and assessor's data.

- City of Piedmont, CA Local Hazard Mitigation Plan, City of Piedmont (2018/2019 Original Plan)
- Los Angeles Unified School District, Los Angeles, CA (2018 Plan Update and 2024 Plan Update in process)



- Hidden Valley Lake Community Services District (2020 Original Plan and 2024 Plan Update in process)
- Colusa County Mitigation Plan Update, Colusa County, CA (2018 Plan Update, 2024 Update in process)
- Butte County Local Hazard Mitigation Plan (2013 and 2019 Plan Updates, 2024 Update in process)
- Tri-City (Fremont, Newark, Union City) Local Hazard Mitigation Plan (2024 Plan Update in process)
- City of Placentia, CA Local Hazard Mitigation Plan (2023 Original Plan)
- East Bay Regional Park District – In Cal OES review as of January 2023
- Yuba County Local Hazard Mitigation Plan Update, Yuba County, CA (2021 Plan Update)
- Placer County Local Hazard Mitigation Plan Update, Placer County, CA (2010, 2015, and 2021 Plan Updates)
- Sacramento County Local Hazard Mitigation Plan Update, Sacramento County, CA (2011, 2016, and 2021 Plan Update)
- Sutter County Hazard Mitigation Plan Update, Sutter County, CA (2014 and 2021 Plan Updates)
- Plumas County Hazard Mitigation Plan Update (2020 Plan Update)
- Amador County Hazard Mitigation Plan Update (2020 Plan Update)
- City of Garden Grove, CA Local Hazard Mitigation Plan (2019 Original Plan)
- City of Lakeport, CA Local Hazard Mitigation Plan (2018/2019 Original Plan)
- City of Clearlake, CA Local Hazard Mitigation Plan (2018/2019 Original Plan)
- City of Azusa, CA Local Hazard Mitigation Plan, City of Azusa (2018 Original Plan)
- Lake County Hazard Mitigation Plan Update, Lake County, CA (2018 Plan Update)
- Madera County Local Hazard Mitigation Plan, Madera County, CA (2017 Plan Update)
- Nevada County Local Hazard Mitigation Plan, Nevada County, CA (2017 Update)
- City of San Rafael, CA Local Hazard Mitigation Plan, City of San Rafael (2017 Original Plan)
- Modoc County Local Hazard Mitigation Plan, Modoc County, CA (2015 Original Plan)
- Calaveras County Local Hazard Mitigation Plan Update, Calaveras County, CA (2015 Plan Update)

DFIRM Work

- State of South Dakota - Brown, Davison, Sanborn, and Spink County DFIRMs.
- Bowen Collins & Associates, State of Utah – Box Elder, Iron, Moab/Grand, Sevier, Wasatch, Washington County DFIRMs.
- State of Missouri – State Emergency Management Agency (SEMA) – Boone, Franklin, Henry, Howell, Johnson, Lawrence, Perry, St. Louis, Wayne County DFIRMs
- North Dakota State Water Commission – Stark County DFIRM.
- State of Alabama – Colbert County DFIRM
- State of Arizona – Mohave County DFIRM
- State of Kentucky DOW – Henderson County DFIRM
- State of West Virginia – Greenbrier, Mineral, Webster Counties, WV DFIRM
- State of Virginia – Prince George County DFIRM
- State of Maryland – Alleghany County DFIRM

Dam Inundation Mapping

- Critical Infrastructure Protection and Resiliency (CIPR) – Dam Break Inundation Mapping: CONUS, USACE Nationwide, 2010

Other Mitigation Planning Work

- Wyoming Mitigation Plan Update - Wyoming Office of Homeland Security, State of Wyoming
- Flood Decision Support System – Flood DSS, Riverside Technology, Inc., Colorado
- Missouri Mitigation Plan Update and Mapping Needs Assessment – Missouri State of Emergency Management Agency (SEMA), State of Missouri
- Mississippi Hazard Mitigation Plan – Earthquake Maps June 2007, Mississippi

Brenna Howell – Howell Consulting

Planning Process, Risk Assessment, Mitigation Strategy, Annex Development, QA/QC, Dam Outreach

Professional Biography

Brenna Howell has more than 20 years of consulting experience with the last 15 years focused on development of local Emergency Operations Plans, local Hazard Mitigation Plans, and hazard-specific functional annexes (including Floods) specifically for California local government jurisdictions, as discussed below. Brenna has served as the Emergency Services Coordinator the cities of Stockton and West Sacramento, Sutter County, as well as the County of Yolo providing full emergency management program management responsibilities. Brenna is fully conversant with the concepts and protocols of the National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS). She has been managing projects for many years and has a proven track record in managing consultant teams to plan and implement large and small emergency planning projects.

Education

- Bachelor's of Science – Emergency Management and Public Safety, Grand Canyon University, 2013.

Representative Projects

General Project Experience

Brenna Howell has completed FEMA-approved Hazard Mitigation planning projects as shown below. Brenna completed over 30 Flood Emergency Operations Plan for Reclamation Districts in San Joaquin County and has completed many Basic Emergency Operations Plans throughout California. Brenna has served as Project Manager for Sacramento County on several planning projects such as their Fall Functional Exercise Team and After-Action Report, the Evacuation Standard Operating Procedures, and their Continuity of Operations Plan projects. Brenna also serves other emergency management firms and companies as a sub-contractor to utilize her expertise in the area of Emergency Operations Center management and function, as well as an Emergency Operations Plan subject matter expertise as recent as January 2017.

Sample Emergency Management and Hazard Mitigation Plans

Brenna has worked with Foster Morrison on multiple Local Hazard Mitigation Plan. She has written hazard profiles, completed jurisdictional annexes, supported mitigation strategy development, and has provide QA/QC. She has also assisted with planning team and public meetings.

- City of Piedmont Local Hazard Mitigation Plan, City of Piedmont (2018/2019 Original Plan)
- Los Angeles Unified School District, Los Angeles, CA (2018 Plan Update and 2024 Plan Update in process)
- Hidden Valley Lake Community Services District (2020 Original Plan and 2024 Plan Update in process)
- Colusa County Mitigation Plan Update, Colusa County, CA (2018 Plan Update, 2024 Update in process)
- Butte County Local Hazard Mitigation Plan (2013 and 2019 Plan Updates, 2024 Update in process)
- Tri-City Local Hazard Mitigation Plan (2024 Plan Update)
- City of Placentia Local Hazard Mitigation Plan (2023 Original Plan)
- East Bay Regional Park District Local Hazard Mitigation Plan (2022 Plan Update)
- Placer County Local Hazard Mitigation Plan (2021 Plan Update)
- Sacramento County Local Hazard Mitigation Plan (2021 Plan Update)
- Yuba County Local Hazard Mitigation Plan (2021 Plan Update)
- Plumas County Hazard Mitigation Plan Update (2020 Plan Update)

- Amador County Hazard Mitigation Plan Update (2020 Plan Update)
- City of Garden Grove Local Hazard Mitigation Plan (2019 Original Plan)
- City of Lakeport Local Hazard Mitigation Plan (2018/2019 Original Plan)
- City of Clearlake Local Hazard Mitigation Plan (2018/2019 Original Plan)
- Los Angeles Unified School District Local Hazard Mitigation Plan (2018 Plan Update)
- Lake County Hazard Mitigation Plan Update, Lake County, CA (2018 Plan Update)
- Nevada County Local Hazard Mitigation Plan, Nevada County, CA (2017 Update)

Brenna has also worked with multiple clients prior to working with Foster Morrison.

- Yuba County – Brenna worked with Yuba County on a Multi-Jurisdictional Local Hazard Mitigation Plan update and revision. She also assisted the County with a Reclamation District Flood Response Plan as the Mapping Project Manager.
- Merced County – Brenna worked with Merced County on multiple planning processes: Merced County Emergency Operations Plan update, Local Hazard Mitigation Plan development (FEMA approved), Access and Functional Needs Plan development, EOC Training for the County and Cities, Mass Care and Shelter planning, and Continuity of Operations Plan update for the County and the cities of Atwater, Dos Palos, Gustine, Livingston, Los Banos and Merced. Consultant selected October 2010 to present.
- Yolo County - Emergency Operations Plan development, Local multi-jurisdictional Hazard Mitigation Plan update and revision, development of their Emergency Support Function Annexes (1-15), back-up Emergency Services Coordinator to the County Emergency Manager, provide overall emergency management support on a contract basis.
- Kings County - Kings County Local multi-jurisdictional Hazard Mitigation Plan update and revision, Emergency Operations Plan update and revision, several functional annexes (Mass Care, Access and Functional Needs, Emergency Operations Center).

Other Local, State, and Federal Planning Involvement

Brenna is currently a part-time Emergency Services Coordinator for the City of West Sacramento. She developed their Emergency Management Team policies and procedures, revised their All-Hazards EOP. Other city responsibilities include the oversight of day to day emergency management responsibilities and direct assistance in the areas of: planning, training, preparedness, response, recovery, and mitigation. While at the City of West Sacramento, Brenna served on the Yolo County Local Hazard Mitigation Plan revision planning team. Brenna has served as the Emergency Manager for the County of Sutter. In 2017 following the Oroville Spillway Disaster and several Floods, Brenna was contracted to guide and lead the County's Emergency Management program to help them recover from those disasters and to aid their executive to get their OEM office organized and managed. She helped them to train staff, outline a response structure, and expand/relocate the office to name a few.

While working at the former Governor's Office of Emergency Services (OES), Brenna provided direct support to Operational Areas (cities, counties, and special districts) as well as state agencies. She responded to numerous emergencies and disasters statewide, served many of the county governments on their local hazard mitigation planning teams during the release of FEMA's DMA 2000 program. Additionally, while in those response roles, Brenna worked to broker Mutual Aid resources and information during disasters. She has served in Emergency Operations Centers at all levels of government and has been assigned to several field level Incident Command Posts. In 2004, Brenna was appointed to a team that responded out of state to the Florida Hurricanes.