



City of Emeryville
CALIFORNIA

EXHIBIT A: LHMP

LOCAL HAZARD MITIGATION PLAN UPDATE

2025 - 2030



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ACKNOWLEDGEMENTS

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Emeryville General Plan
Emeryville Climate Action Plan 2008
Emeryville Climate Action Plan 2.0 2016
Emeryville Climate Hazard Analysis, Four Twenty-Seven, August 26, 2016
Emeryville Emergency Operations Plan
City of Berkeley, 2019-2024 Local Hazard Mitigation Plan
City of Oakland, 2021-2026, Local Hazard Mitigation Plan
City of Piedmont 2019-2024 Local Hazard Mitigation Plan
Association of Bay Area Governments (ABAG), Cascading Failures
California Maritime Tsunami Response Playbook and Mitigation Guidance, Berkeley /
Emeryville – Alameda County Updated 1/8/2020
California Tsunami Evacuation Playbook, City of Emeryville, Alameda County, No. C09-
ALA-03, Updated May 9, 2023
State of California Sea Level Rise Guidance, 2024 Science and Policy Update

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BACKGROUND AND INTRODUCTION



City of Emeryville Old Town Hall, built in 1903

BACKGROUND

The preservation of life, property and the environment are an inherent responsibility of local, state, and federal governments. The Disaster Mitigation Act (DMA) of 2000 requires that all state and local governments develop a Local Hazard Mitigation Plan (LHMP) as a condition of receiving federal disaster assistance. The DMA encourages state and local authorities to work together on pre-disaster planning and promotes sustainable practices as a form of disaster resistance. The DMA also requires that the LHMP be updated every 5 years.

Local Hazard Mitigation Plans are investment strategies that communities develop to identify hazards, assess risks and vulnerabilities, and develop mitigation strategies that can be funded using a wide range of sources.

Mitigation policies (State Mitigation Planning Policy Guide and Local Mitigation Planning Policy Guide) require equity considerations for underserved communities and socially vulnerable populations in every Local Hazard Mitigation Plan.

What is equity? Equity is the consistent and systematic, fair, just and impartial treatment of all individuals, including individuals who belong to underserved communities who have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.¹ This is an important consideration as studies have shown that socially vulnerable communities are especially hit hardest during disasters and need the most support to recover²

The degree to which a community exhibits certain social conditions, including high poverty, low percentage of vehicle access, or crowded households, among others, may affect that community's ability to prevent human suffering and financial loss in the event of a disaster. These factors describe a community's social vulnerability.³

Researchers use the following variables to help determine a community's social vulnerability:

- Socioeconomic Status
- Household composition and disability
- Racial and Ethnic Minority Status and Language
- Housing Type and Transportation

¹ [Federal Register :: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government](#)

² Jerolleman, Alessandra. (2019). Disaster Recovery Through the Lens of Justice. 10.1007/978-3-030-04795-5.

³ www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI_documentation_2022.html.

The young and the elderly can be the most vulnerable in a disaster for a variety of reasons. According to the 2022 US Census Data, 7% of the City's population is under the age of 18 and 12% are 65 years and over. In addition, 12% of the City's population live below poverty level.⁴ Identification and recognition of where vulnerable community members are located within the community is critical to building long-term community resilience.

This is the third update to the City's original 2009 Local Hazard Mitigation Plan and reflects the City's continued effort to identify and evaluate all potential natural and man-made hazards which may affect the City of Emeryville, to present mitigation strategies that the City can take to address those hazards and to improve the City's resilience to a disaster and its ability to recover. This is only one of many steps the City of Emeryville is taking to protect the welfare of our residents as well as the natural and cultural resources of our community.

The City embarked on the 2024 plan update in November 2023. For this update, the hazards and risks in the City were updated and reprioritized based on the community's survey responses as well as the planning team's experiences and concerns since the 2019 update.

A review was also conducted of new and existing plans and programs related to hazard mitigation and the best available data was used to assess the City's current hazards, vulnerabilities and risks associated with those hazards.

The development of this plan update included input from all City departments. The public was also encouraged to take several surveys to prioritize their concerns for the natural and man-made hazards that the City faces, to provide their input on how best to reduce the risks of these hazards as well as to provide their opinion on the mitigation ideas that the City has identified. The following chart recognizes the changes in the City's identified hazards since the last plan:

| Hazard | Current Priority Ranking | Prior Priority Ranking | Changes in Hazards Addressed and/or Risk Analysis |
|--------------------------------|--------------------------|------------------------|--|
| Earthquake | 1 | 1 | None |
| Climate Change | 2 | 3 | Added Atmospheric Rivers Added analysis on the impacts of shallow groundwater as a result of sea level rise |
| Hazardous Materials Release | 3 | 2 | None |
| Utility/Infrastructure Failure | 4 | 7 | Added Public Safety Power Shutoffs |
| Floods | 5 | 5 | None |
| Fires | 6 | 4 | Added Bad Air Quality |
| Biological Threats | 7 | 9 | Added Covid-19, Mpox |

⁴ <https://data.census.gov/table?q=those%20living%20in%20poverty%20in%20Emeryville>

| Hazard | Current Priority Ranking | Prior Priority Ranking | Changes in Hazards Addressed and/or Risk Analysis |
|-------------------|--------------------------|------------------------|---|
| Civil Disturbance | 8 | 6 | None |
| Terrorism | 9 | 8 | Ransomware |

The project manager reached out to outside stakeholders via email (Appendix A) about the 2025 – 2030 Local Hazard Mitigation Plan Update and invited them to participate in the plan update process. Stakeholders included local neighboring jurisdictions, the cities of Berkeley, Oakland, Piedmont, Albany, San Leandro, Alameda, Hayward and Union City, and Alameda County. The project manager also reached out other partners such as East Bay MUD, PG&E, Kinder Morgan, BART, Caltrans, California Department of Conservation, East Bay Regional Park District, and Comcast for their input. Several partners provided their comments which were incorporated into the plan.

The project manager also reached out to Operation Dignity and the Emeryville Unified School District that work directly with and/or provide support to underserved and socially vulnerable populations in the City. No comments were received.

Members of the public were also encouraged to become part of the Local Hazard Mitigation Plan Update Planning Team. The Local Hazard Mitigation Plan Update Planning Team convened in November 2023, and consisted of representatives from the City Manager, Human Resources, Community Services, Community Development, Public Works and Police Departments as well as a representative from the Alameda County Fire Department. Three community members joined the planning team in January 2024. The planning team met six (6) times over the next ten (10) months.

The following plans, studies and reports were used in the development of the 2025-2030 Local Hazard Mitigation Plan:

Table 1.1 (a)

| Existing Plans, Studies, Reports and Technical Information | Method of Incorporation into the Local Hazard Mitigation Plan |
|---|--|
| Climate Action Plan & Climate Action Plan 2.0 | Mitigation Policies and Programs |
| General Plan, Conservation, Safety and Noise Safety Element; Sustainability Element | Community Profile, Capabilities, Mitigation Policies, Programs and Hazards |
| ABAG Bay Area Risk Landscape (2015) | Hazards, Risk Assessment, Vulnerabilities |

| Existing Plans, Studies, Reports and Technical Information | Method of Incorporation into the Local Hazard Mitigation Plan |
|--|--|
| ABAG Cascading Failures, December 2014; Earthquake Threats to Transportation and Utilities | Hazards, Risk Assessment, Vulnerabilities |
| City of Berkeley 2019 Local Hazard Mitigation Plan | Capabilities Assessment, Hazards, Risk Assessments, Vulnerability |
| City of Oakland, 2021 Local Hazard Mitigation Plan | Capabilities Assessment, Hazards, Risk Assessments, Vulnerabilities |
| Emeryville Climate Hazard Analysis, Four Twenty-Seven, August 2016 | Hazard Analysis, Risk Assessment, Vulnerabilities |
| State of California Sea Level Rise Guidance 2024 Science & Policy Update | Hazards, Risk Assessment, Vulnerabilities, Mitigation Planning |
| City of Emeryville Emergency Operations Plan | Capabilities Assessment, Hazards |
| California Maritime Tsunami Response Playbook and Mitigation Guide | Hazards, Risk Assessment, Mitigation Programs |
| 2019 NTHMP Tsunami Information Guide Presented by the National Tsunami Hazard Mitigation Program | Hazards, Risk Assessment, Vulnerabilities, Mitigation Planning |
| Emeryville Municipal Code | Capabilities, Risk Assessment |

In addition, a draft of the Local Hazard Mitigation Plan Update was presented for review and public comment to the City's Public Safety Committee, Transportation Committee, Planning Commission and City Council. Outside stakeholders were also sent a copy of the Local Hazard Mitigation Plan Update and invited via email to attend all of these public meetings.

To ensure that the mitigation strategies in the 2025-2030 LHMP are implemented as envisioned, and to review new hazards data as they become available, the Community Development Director or their designee, will track the mitigation activities and will annually review the Local Hazard Mitigation Plan with the Public Works and Planning and Building Departments. A Local Hazard Mitigation Plan Update Planning Team will be convened by the Community Development Director or their designee every 5 years for a comprehensive review and revision of the Local Hazard Mitigation Plan.

The Local Hazard Mitigation Plan was adopted as an amendment to the Safety Element of the City's General Plan in July 2019.

Appendix A provides a detailed outline and documentation of the City's planning and public outreach process from 2019 -2024.

INTRODUCTION⁵

Emeryville is located on the east shore of the San Francisco Bay in Alameda County, bordered by the City of Berkeley to the north and the City of Oakland to the east and south. Interstate 80/580 passes through Emeryville towards Sacramento, running north from the Bay Bridge, while Interstate 580 towards Hayward, passes just to its south. Figure 1.2 (a) illustrates the City's regional location.

The City is compact, occupying only 1.2 square miles. Emeryville is largely flat and is distinguished by a peninsula created in the 1960s that extends just over a mile into the Bay. According to the California Department of Finance, Emeryville's estimated population as of January 1, 2024, was 13,314.⁶



Figure 1.2 (a). *Regional Map of Emeryville*⁷

HISTORY OF EMERYVILLE

Before the settlement of Spanish land grants in the 1800s, the Emeryville area was the site of extensive Native American settlements. After settlement of the area by Europeans, Emeryville was incorporated as a City in 1896, largely due to the efforts of Joseph S. Emery, a local businessman. Emeryville soon became a city of big industrial enterprises and rail terminals. Residential areas were confined to small portions of the City's eastern edge, bordering Oakland. The City remained this way for many years.

⁵ Emeryville General Plan, Introduction and Overview pgs. 1-7 to 1-9.

⁶ State of California, Department of Finance. Population and Housing Estimates for Cities, counties, and the State – January 2023 - 2024 State of California Department of Finance, 1 May 2024 Web.

[.Estimates-E1 | Department of Finance \(ca.gov\)](#)

⁷ City of Emeryville. Emeryville General Plan. City of Emeryville Planning Division. October 2009. Web. 17 Apr. 2017. <http://emeryville.org/DocumentCenter/Home/View/1016>.

However, in the 1970s the make-up of the City began to change. The City's older industries began to move to the suburbs or close up shop altogether. Along the peninsula, the City saw a major residential development occur with the Watergate Apartments (now condominiums), built in 1974, (1,249 units) along with multi-story high rise office buildings. The City also created parks and a 500-berth marina by filling in 7.8 additional acres of the San Francisco Bay to create a small boat harbor.

Emery Bay Village, located on 53rd Street, was built in 1980 (112 units) followed by the Pacific Park Plaza, on Christie Avenue, in 1984 (a high-rise with 583 units). These two developments along with the Watergate Apartments doubled the city's population to nearly 5,000 residents. Many multi-unit buildings have been built in the City over the past 40 years doubling the City's population since 1984. In 2023-2024, Emeryville was the fastest growing city in the Bay Area and the third fastest in the State of California.⁸ It is projected that Emeryville's population could increase to approximately 16,600 by 2030, a 20% increase from its population today.

Development of the City continues through today. Large-scale commercial/retail redevelopment projects have changed and will continue to change the landscape of the City. As these large tracts of industrial land have been redeveloped and continue to be redeveloped, Emeryville will continue to see a substantial increase in employment and population.

⁸ Department of Finance, Office of the Director, State of California, Press Release, "State's Population Increases While Housing Grows per New State Demographic Report," 30 April 2024, [E-1 2024 Press Release \(ca.gov\)](#)

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HAZARDS AND RISKS IN EMERYVILLE



Cypress Freeway Collapse, Loma Prieta Earthquake, October 18, 1989

BACKGROUND

The City of Emeryville is one of the smallest cities in California, covering 2.25 square miles of which approximately 1.2 miles is land area, and one square mile is tidal on the San Francisco Bay.

This 2025-2030 update evaluates the different risks that pose a hazard to the City, identifies past and present mitigation activities and current policies and programs, as well as mitigation strategies for the future.

The Local Hazard Mitigation Plan Update Planning Team initially met on November 28, 2023, and reviewed the hazards previously identified in the City's 2019 Plan, as well as the risks and hazards identified by community members in our Local Hazard Community Survey, and the City of Berkeley's 2019 Local Hazard Mitigation Plan. From this review, the team identified the following nine natural or man-made risks to the City to be included in the plan (in order of concern):

- Earthquake (Ground Shaking, Liquefaction, Fire, Damage to Lifelines)
- Climate Change (Drought, Sea Level Rise, Extreme Weather – Heat, Freeze, Atmospheric Rivers)
- Hazardous Materials Release (Pipelines, Transportation, Biotechnology)
- Utility/Infrastructure Failure (Energy Shortage, Public Safety Power Shutoffs, Terrorism)
- Floods (Seasonal, Tsunamis, Dam Failure)
- Fires (Urban Fires, Wildfires, Bad Air Quality)
- Biological Threats (Pandemic, COVID-19, Ebola, Zika Virus, Bird Flu, MERS, Enterovirus D68, West Nile Virus, Mpox), Biotech Companies)
- Civil Disturbance
- Terrorism (Cyberterrorism and Ransomware, Bioterrorism)

EARTHQUAKE

The San Francisco Bay Area is a seismically active region with numerous faults. Although no active faults run through Emeryville, the City is approximately three miles from the Hayward Fault and 15 miles from the San Andreas Fault, the two most prominent and active faults in the Bay Area.

To the east of the Hayward Fault runs the Calaveras Fault. In 2007, the U.S. Geological Survey suggested that these two faults may be connected. If true, this would have significant implications for the potential maximum strength of earthquakes on the Hayward Fault, since this strength is determined by the maximum length of the fault

rupture and this rupture could extend beyond the juncture point and could include some portion of the Calaveras Fault.

North of San Pablo Bay, and somewhat offset from the Hayward Fault is the Rodgers Creek Fault, which many experts had considered to be an extension of the Hayward Fault. The connection between the Rodgers Creek Fault Zone and the Hayward Fault Zone was unclear until 2015 when a survey of the floor of San Pablo Bay found that the ends of the two faults were smoothly linked between Point Pinole and Lower Tubbs Island.⁹

This new finding means that the Rodgers-Hayward system together could produce a quake with a magnitude as high as 7.2.¹⁰ It is also considered possible that a major seismic event on either fault may involve movement on the other, either concurrently or within an interval of up to several months. The entire City is subject to hazardous ground shaking (and liquefaction for half the City) in a major earthquake on any of these fault lines.

Destructive earthquakes struck the Bay Area in 1838, 1868, 1906, 1911 and 1989, and 2014. In the 1989 Loma Prieta earthquake, 62 people died. Most of the fatalities (42) were caused by the collapse of the double-decked Cypress Freeway that ran through West Oakland, and within one mile of Emeryville. In 2014, the Napa Earthquake killed two persons, injured 200 and caused \$500 million in damages.

The most powerful earthquake in the State in 20 years occurred in Ridgecrest, California in July 2019 and consisted of 3 main shocks of magnitudes 6.4, 5.4 and then 7.1. 5 people were injured, 50 homes suffered structural damage, and 4 homes were damaged by fire from broken gas lines. Overall damage was estimated to be in excess of \$100 million.

CLIMATE CHANGE

Like regions across the globe, the San Francisco Bay Area is experiencing and will continue to increasingly experience the impacts of the changing climate. By 2100, average temperatures in the San Francisco Bay Area are projected to increase by 11°F. In 2100, Emeryville is also expected to experience six to ten additional heat waves each year, which will disproportionately impact the elderly, children under five and the low-income members of our community.¹¹ If the average temperatures increase, this could shorten the snowfall season in the Sierra Nevada Mountains, increasing the amount of rain and the rate of snow melt, thereby threatening even coastal cities, such as Emeryville

⁹ Perlman, David. "New Data on 2 Bay Area Faults Cause Worry about next Big Quake."

www.sfchronicle.com. San Francisco Chronicle 26 Jan. 2016. Web. 16 Mar. 2017.

<http://www.sfgate.com/bayarea/article/New-data-on-2-Bay-Area-faults-cause-worry-about-6731300.php>

¹⁰ Perlman, David. "Quake Threat: Research Shows 2 Bay Area Faults Probably Linked, Cause for Worry among Scientists about next Big One." San Francisco Chronicle 2 Jan. 2016: C-1, 4. Web. 16 Mar. 2017.

<http://www.pressreader.com/usa/san-francisco-chronicle/20160102/281973196630630>.

¹¹ 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008. Sacramento, CA: California Natural Resources Agency, 2009.

with increased flooding. Conversely, reduced snowpack could increase the risk and severity of drought conditions.

The Bay Area has seen its fair share of drought over the past decade. In 2014, the Governor declared a State of Emergency in California in response to the drought conditions that began in 2012. 2015 was the driest year on record in California since 1977. At that time, statewide reservoirs were only at 18 – 67% of average.¹² Another State of Emergency was declared in 2021; when that declaration was lifted in 2023 the state left several key water conservation requirements in place permanently. It is clear that climate change will likely increase the number and severity of future droughts. The cumulative impact of climate change will result in drier conditions for the entire City of Emeryville and could alter the timing and efficiency of the Bay Area water supply.

All weather conditions are becoming more severe due to climate change. When it rains, the Bay Area is increasingly likely to experience atmospheric rivers due to climate change. 50% of California's total annual precipitation and streamflow can come from a few intense atmospheric rivers during fall and winter. Although they provide essential water resources and relieve regional drought, strong atmospheric rivers often pose serious risks including floods, landslides, and levee breaks in California.¹³ Atmospheric rivers can also bring extreme winds with them. These winds can topple trees and power lines causing widespread power outages as well as wildfires.

Sea level rise is another concern for the City as a direct result of climate change. According to the City's General Plan, the local effects of sea level rise could be severe in Emeryville. According to the California Office of Environmental Health Hazard Assessment (OEHHA), sea level in the San Francisco Bay Area has risen by as much as eight inches over the past century.¹⁴ The Ocean Protection Council in the State of California Sea Level Rise Guidance, 2024 Science and Policy Update, project that Statewide sea levels are most likely to rise by 0.8 feet by 2050 and by the mid-term (2050 to 2100), the Statewide averaged sea levels could rise between 1.6 feet and 3.1 feet although higher amounts are possible.¹⁵ This could, in turn, erode bay shores, marshes and wetlands and increase the salinity in our groundwater and streams.

HAZARDOUS MATERIALS

The existence of hazardous materials is a fact of life in Emeryville. Everyday trains travel through the City pulling tanker and boxcars carrying various types of hazardous materials.

¹² California Governor's office of Emergency Services (2015).

¹³ Mendez, Emily (2024, Feb 5) "A Climate Expert Explains Why Atmospheric Rivers are Causing Historic Rainfall in California," State of the Planet, News from the Columbia Climate School, <https://news.climate.columbia.edu/2024/02/05/a-climate-expert-explains-why-atmospheric-rivers-are-causing-historic-rainfall-in-california/>

¹⁴ California Office of Environmental Health Hazard Assessment, Sea Level Rise, 23 Aug 2023; <https://oehha.ca.gov/climate-change/epic-2022/impacts-physical-systems/sea-level-rise>

¹⁵ State of California Sea Level Rise Guidance, 2024 Science and Policy Update, California Ocean Protection Council, Page 8

A natural gas transmission line, similar to the gas transmission line that exploded in San Bruno in 2010, runs through the City underneath Hollis Street. The explosion in San Bruno illustrated the threat to the surrounding community from such a hazardous incident. A jet fuel line runs through the City under the railroad tracks as well. In addition, Emeryville is home to many biotech companies, research and development labs, and medical facilities, some of which use hazardous materials in their work.

History has shown that wherever accidents and emergencies involve hazardous materials, they are extremely complex to mitigate. A hazardous materials release could harm community members by exposing people to vapors that are toxic, suffocating, cause burns or are irritating. A hazardous materials release can threaten not only life and property, but also the environment, such as Temescal Creek or San Francisco Bay.¹⁶

UTILITY INFRASTRUCTURE FAILURE

Disruptions to communications, water and transportation networks can cause emergencies to cascade into disasters. In day-to-day lives, Bay Area communities, including the City of Emeryville, are heavily reliant on local, regional, state, and interstate utility and transportation systems. For the City, its residents, and its businesses to remain functional, buildings must not only sustain minimal damage, but must also be connected to operating water, power, and sewer systems.¹⁷

FLOODS

Flooding in the City could occur as a result of storms, inundation from a dam failure or a tsunami. Flooding can occur when storm water exceeds the capacity of a creek channel, or the capacity of the storm drain system. Flooding may also occur as a result of the impacts of sea level rise on shallow groundwater. The dam at Lake Temescal is the closest dam to the City and is located approximately 3.5 miles east of the City limits. The dam is considered generally to be sound and able to withstand a large earthquake. However, if it were to fail, most of the southern part of Emeryville could be flooded. Tsunamis, though rare inside the San Francisco Bay, could occur from a large offshore subduction style earthquake around the Pacific Rim.

FIRES

An urban fire is a bigger concern for the City than a wildfire. Emeryville does not have the terrain and vegetation conditions for large or devastating wildfires; however, due to the density of the City, urban fires are a constant threat. The worst-case urban fire could be associated with an earthquake. The potential for loss of life and property from an urban

¹⁶ City of Berkeley. Local Hazard Mitigation Plan. City of Berkeley Fire Department, 1 June 2014. Web. 17 Mar. 2017. http://www.ci.berkeley.ca.us/uploadedFiles/Fire/Level_3_-_General/2014%20LHMP.pdf.

¹⁷ Bay Area Risk Landscape. Association of Bay Area Governments, Section 4.3, Page 74.

fire is greatest in places where large groups of people gather, such as offices, stores, hotels, high-rise buildings, and theaters.

BIOLOGICAL THREATS

Biological threats can be naturally occurring or the result of terrorism. The most recent naturally occurring biological threat was the SARS COVID-19 pandemic which killed 7,042,022 worldwide as of April 2024.¹⁸ Other naturally occurring biological threats in recent years have included Mpox, the Zika Virus, Ebola, Avian Influenza (Bird Flu), and the West Nile Virus.

A biological terrorist attack is the intentional release of a pathogen (disease causing agent) or a biotoxin (poisonous substance produced by a living organism) against humans, plants, or animals.¹⁹ A bioterrorist attack against the United States is a constant threat with potentially devastating consequences, including mass casualties, economic instability, and damage to critical infrastructure.

CIVIL DISTURBANCE

Civil disturbance is a broad term that is typically used by law enforcement to describe one or more forms of disturbance caused by a group of people. It can take the form of small gatherings or large groups. The Bay Area has recently experienced protests that have attempted to block buildings, major highways, and even the Golden Gate Bridge and the Bay Bridge. In 2020, Emeryville experienced several protests in the City that originated in Berkeley and/or Oakland and resulted in vandalism and damages to local businesses.

TERRORISM

Since September 11, 2001, terrorism has become a fact of life for all Americans. The Federal Bureau of Investigations (FBI) defines terrorism as the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian populations, or any segment thereof, in furtherance of political or social objectives. Terrorist acts or acts of war may cause casualties, extensive property damage, fires, flooding, and other ensuing hazards.

Although most likely not a direct target, the City of Emeryville, given its geographic proximity to the Bay Bridge, Oakland, and San Francisco, could be affected by a terrorist

¹⁸ [Ritchie, Hannah](#); Mathieu, Edouard; Rodés-Guirao, Lucas; Appel, Cameron; Giattino, Charlie; Ortiz-Ospina, Esteban; Hasell, Joe; Macdonald, Bobbie; Beltekian, Diana; Dattani, Saloni; [Roser, Max](#) (2020–2022). "Coronavirus Pandemic (COVID-19)". *Our World in Data*. Retrieved 10 April 2024.

¹⁹ United State Department of Homeland Security, "Biological Attack Fact Sheet: Human Pathogens, Biotoxins, and Agricultural Threats, <https://www.dhs.gov/publication/biological-attack-fact-sheet>

attack on any of these locations. In addition, the presence of so many biotech companies in the City can make it a target for domestic terrorism.

Cyberterrorism, the use of computer network tools to shut down critical government infrastructures and Ransomware, a type of malicious software that denies a user's access to a system or data until a sum of money is paid is an ongoing threat to the City's infrastructure as well.

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HAZARD ANALYSIS



Oakland-Berkeley Hills Fire, October 1991

HAZARD ANALYSIS

With its rapidly growing permanent, transient, and recreational populations, Emeryville is subject to potential negative impacts from a broad range of natural and man-made hazards and threats. This section will analyze the hazards identified in order of priority by the City to have the greatest potential for occurrence and damage.

The Local Hazard Mitigation Planning Team identified the probability of hazards as ‘high’ which is defined as occurring every 1 – 10 years, “medium” as occurring every 10 – 50 years, and “low” as occurring at intervals greater than 50 years. However, for some hazards, such as earthquakes, there is a high percentage probability that an earthquake will occur in the Bay Area; it could be tomorrow, or it could be 30 years from now.

EARTHQUAKES

PROBABILITY – HIGH

SEVERITY – HIGH

Earthquakes are the principal geologic activity affecting public safety in Emeryville. An earthquake is a sudden rapid shaking of the ground caused by the breaking and shifting of rock beneath the Earth’s surface. The San Francisco Bay Area is a seismically active region with numerous active faults. Scientists predict that within a 30-year period (beginning in 2014), there’s a 51 percent chance that the San Francisco region specifically will experience one or more magnitude-7.0 or greater earthquakes. And there’s a 98% chance of one or more magnitude-6.0 or greater quakes hitting the Bay Area in that same timeframe.²⁰

In Emeryville, an earthquake is the hazard with the highest combined likelihood to cause extensive damage to the City and to the region as a whole. In the event of an earthquake, the location of the epicenter as well as the time of day and season of the year could have a profound effect on the number of deaths, casualties, property damage, and disruption of normal government and community services and activities. The effects could be compounded by collateral emergencies such as fires, dam failure, flooding, tsunami, hazardous material spills, utility disruptions, bridge collapses, structural collapses, street blockage by debris, street surface breakage due to liquefaction, landslides, and transportation emergencies.

Figure 4.1(a) shows the location of active faults that are mapped by the State of California under the Alquist-Priolo Act.

²⁰ California Earthquake Authority. “CEA - California Earthquake Risk Map & Faults by County.” Earthquakeauthority.com, 2024, www.earthquakeauthority.com/California-Earthquake-Risk/Faults-By-County.

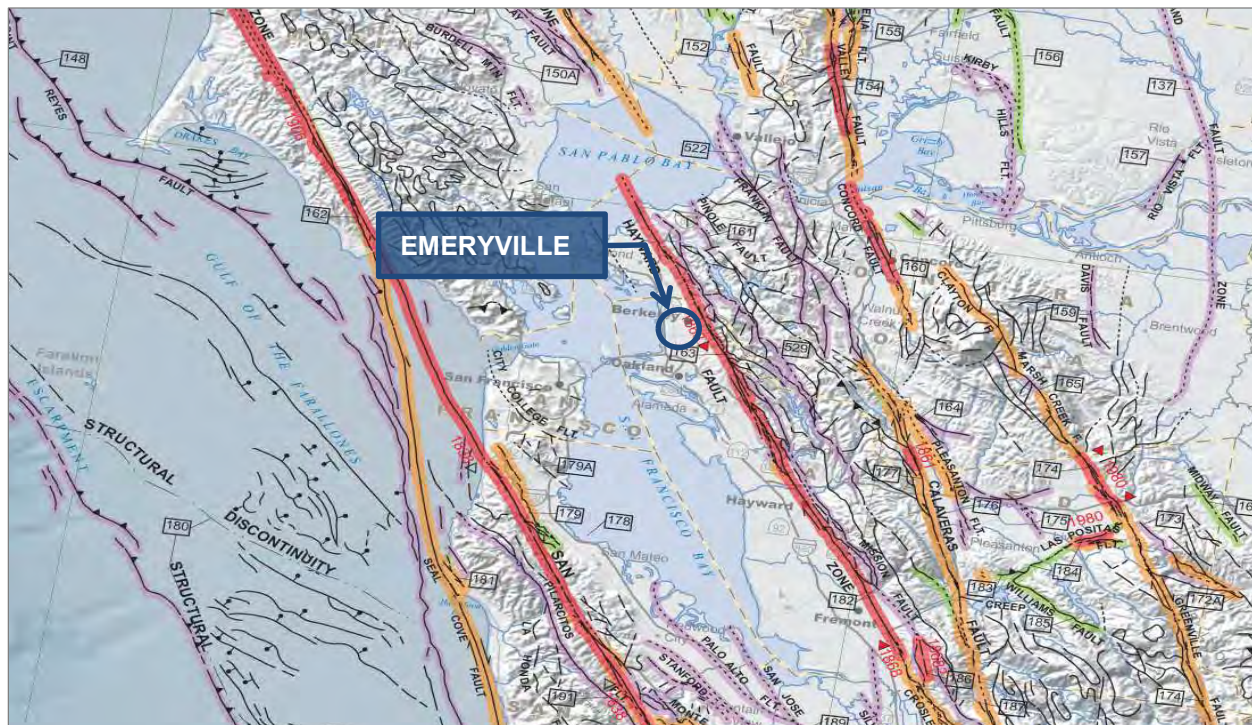


Figure 4.1 (a). Alquist-Priolo Active Faults - San Francisco Bay Area²¹

EXISTING FAULTS IN OR NEAR EMERYVILLE

There are many faults running through the Bay Area - The San Andreas Fault, The Hayward Fault, The Calaveras Fault and the Rogers Creek Fault, to name a few. Emeryville is approximately 15 miles from the San Andreas Fault, 3 miles from the Hayward Fault and 19 miles from the Calaveras Fault. Therefore, the entire City is subject to hazardous ground shaking in a major earthquake.

The San Andreas Fault lies offshore and through the San Francisco Peninsula. The San Andreas Fault is a transform (strike-slip) fault that runs a length of roughly 800 miles through California. It is the boundary between the Pacific Plate and the North American Plate.

The Hayward Fault is a geologic fault zone capable of generating significantly destructive earthquakes. The Hayward Fault is considered part of the San Andreas System, and it runs for 60 miles along the hills of the East Bay, cutting through the University of California Berkeley Memorial Stadium and skimming uncomfortably close to the Caldecott Tunnel and Highway 13, both which cross the Hayward Fault as do pipelines that bring water down from the snow-clad Sierra. There are hundreds of privately owned structures in the fault zone, the majority of which were built before the State passed a tough earthquake-zoning law in 1972.

²¹ California, State of. Fault Activity Map of California. Web. 13 Apr. 2017.
<http://maps.conservation.ca.gov/cgs/fam>.

The Calaveras Fault lies 19 miles to the east of the City. Although it has been known for some time that the Calaveras and Hayward faults merge in the South Bay region, recent geological studies suggest that the Calaveras and Hayward faults may even be more closely connected horizontally deep beneath the surface, angling toward each other with depth until they become a single fault. If true, this could have significant implications for the potential maximum strength of earthquakes on the Hayward Fault, since this strength is determined by the maximum length of the fault rupture and this rupture could extend beyond the juncture point to include some portion of the Calaveras.

Rogers Creek Fault is north of San Pablo Bay, and somewhat offset from the Hayward Fault, considered by many experts to be an extension of the Hayward Fault. In 2015, a survey of the floor of San Pablo Bay found that the ends of the two faults were smoothly linked between Point Pinole and Lower Tubbs Island. Here again, a major seismic event on either fault could involve movement on the other, either concurrently or within a short interval up to several months. The Rogers Creek is considered one of the most hazardous faults in northern California as it is believed to be entirely locked (i.e. no recognizable creep) and has not had a major historical earthquake.

HISTORY OF EARTHQUAKES IN THE BAY AREA

The Bay Area is in the heart of earthquake country. Major faults cross through all nine Bay Area counties. Every point within the Bay Area is within 30 miles of an active fault, and 97 of the 101 cities in the Bay Area are within ten miles of an active fault.²²

The Bay Area has experienced significant, well-documented earthquakes. In 1868, a significant earthquake occurred on the Hayward fault with an estimated magnitude of 6.8 – 7.0. The fault ruptured the surface of the earth for more than 20 miles and significant damage was experienced in Hayward and throughout Alameda County, and as far away as San Francisco, Santa Rosa, and Santa Cruz. The M7.8 1906 earthquake on the San Andreas Fault, centered just off the coast of San Francisco, devastated San Francisco and caused extensive damage in Oakland, San Jose, and Santa Rosa. More recently, the M6.9 1989 Loma Prieta earthquake caused severe damage in Santa Cruz and the surrounding mountains, where it was centered, as well as fatal damage 50 miles away in Oakland and San Francisco.²³

Moderate earthquakes are much more common in the Bay Area; twenty-two have occurred in the last 178 years averaging every eight years.²⁴ The 2014 South Napa earthquake reiterated that even a moderate magnitude 6.0 earthquake can produce a lot of damage in a localized area.

²² San Francisco Bay Area 2017 Risk Profile, Association of Bay Area Governments, ABAG Publication, #P17002EQK, Page 22

²³ Bay area Risk Landscape. Association of Bay Area Governments. Section 3.1. Page 8

²⁴ US Geological Survey (Ellworth, W.L.)

The Hayward fault has been relatively quiet for the past 156 years. Because the past five large earthquakes on the Hayward fault have been about 140 years apart, the Hayward and Rodgers Creek faults are the most likely faults to produce a large earthquake in the Bay Area. USGS scientists describe the Hayward fault as a tectonic time bomb, due anytime for another magnitude 6.8 to 7.0 earthquake. An earthquake of this magnitude would produce strong shaking and possible ground failure throughout the Bay Area.

Earthquake Related Declared Disasters in the Bay Area Since 1950

M6.0 South Napa Earthquake on August 24, 2014, caused \$362 million - \$1 billion in damage and affected both Napa and Solano Counties.

Tsunami resulting from M8.9 Honshu, Japan Earthquake on March 11, 2011. Resulted in \$39 million in damage affecting Del Norte, Monterey and Santa Cruz Counties, as well as minor damage in the Berkeley Marina.

M5.2 Napa Earthquake on September 6, 2000, caused \$15 – 70 million in estimated damage to Napa County.

M6.9 Loma Prieta Earthquake on October 18, 1989, caused \$5.9 billion in damage, with 23,408 homes damaged, 3,530 businesses damaged, 1,018 homes destroyed and 366 businesses destroyed.

M6.2 Morgan Hill Earthquake on April 24, 1984, resulted in \$7.265 million in damage to public, business, and private sectors in Santa Clara County.

EARTHQUAKE HAZARDS IN THE BAY AREA

Earthquakes can cause various types of seismic hazards in the City such as ground shaking, ground failure, surface fault ruptures, and liquefaction.

Ground Shaking

Ground shaking is both a hazard created by earthquakes and the trigger for other hazards such as liquefaction and landslides. When faults rupture, the slip generates vibrations or waves in the earth that are felt as ground shaking. This shaking can last for seconds or a minute or more. Ground shaking describes the vibration of the ground during an earthquake. Most earthquake damage results from the shaking caused by seismic waves passing beneath buildings, roads, and other structures. The intensity of ground shaking is based on the magnitude of the earthquake and other factors including the distance to the fault, the direction of the rupture and the type of soil (landfill vs. bedrock).

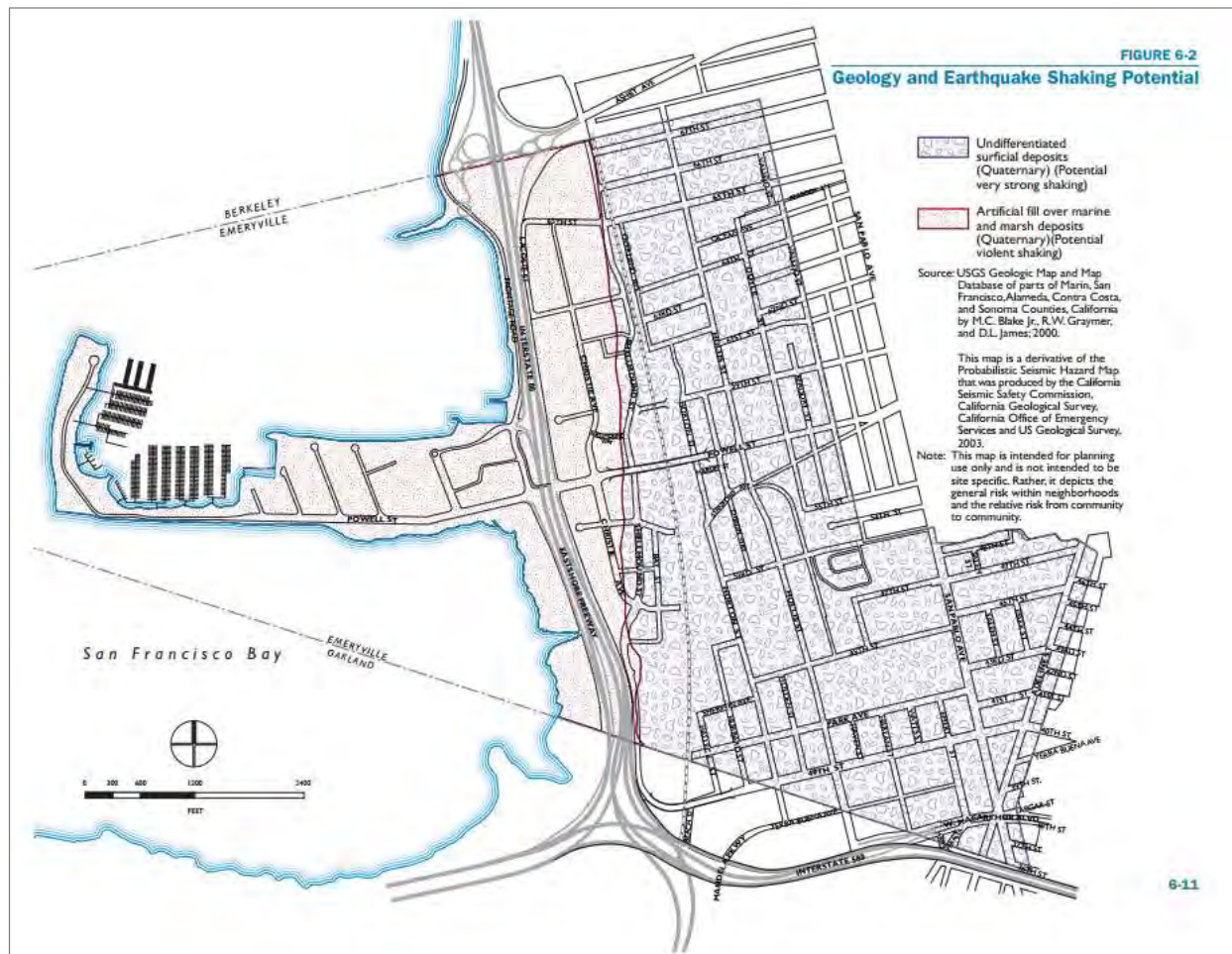


Figure 4.1.3.1(a). *Geology and Earthquake Shaking Potential*²⁵

The entire City of Emeryville is located in the highest two categories for shaking potential. This area includes four schools, three daycares, two fire stations, a police station, City Hall, the Senior Center, three senior housing facilities, the 40th Street and Powell Street vehicle overpasses, and the Amtrak and South Bayfront pedestrian bridges. In addition, Emeryville contains 11 “high rise” buildings with floors over 75 feet in height that include office, hotel, and residential uses. Since adoption of the previous plan, over 1,170 units, over 361,000 square feet of nonresidential space, and multiple public infrastructure projects have been developed, including:

1. Estrella Vista Apartments - 87 units
2. Avalon Public Market Apartments – 223 units
3. The Intersection - 108 units; 17,158 sf retail
4. Ocean Avenue Townhomes - 5 units
5. Bayview Emeryville Apartments -186 units

²⁵ City of Emeryville. Emeryville General Plan. City of Emeryville Planning Division. October 2009. Web. 17 Mar. 2017. Page 11. <http://emeryville.org/DocumentCenter/Home/View/1016>

6. The Emery - 500 units, 70,000 sf research and development
7. BioMed Building 2 – 261,000 sf research and development
8. Marketplace Research & Development - 30,000 sf research and development
9. Christie Park Expansion - 0.46-acre addition to public park
10. Huchiu Park - 3.53-acre public park
11. South Bayfront Pedestrian Bicycle Bridge (2021)

No City facilities have been retrofitted or received seismic upgrades since 2019. However, the City's adopted Capital Improvement Program (2023--2028) identifies a mandatory program related to the structural update and maintenance of the two pedestrian bridges and a possible seismic upgrade of a City-owned building at 4060 Hollis Street which is currently unoccupied. The City currently has a site demolition and remediation project underway which will enable seismic preparedness and resiliency by providing a location for a new Public Works Department maintenance facility and new police substation constructed to meet current seismic standards.

Liquefaction

Liquefaction is a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading. It is the conversion of soil into a fluid like mass during an earthquake or other seismic event. The instability of the soil can cause buildings or structures on the soil to sink, tip unevenly, or even collapse.

The Liquefaction Potential Index (LPI) is a measure of the likelihood and severity of liquefaction-related effects at the ground surface following an earthquake. Many factors affect the LPI value, including tide levels, sea level rise, depth of groundwater, and the ability of groundwater to rise through soil (hydraulic soil conductivity).²⁶

Over the next century, sea-level rise is predicted to cause pervasive inundation on a global scale, affecting coastlines, river deltas, and wetlands. Sea-level rise is also predicted to lead to rising water tables. High water tables can lead to an increased risk of soil liquefaction during earthquakes.

²⁶ Travis Poltras, Alex Grant, Ann Wein, Keith Knudsen, Kevin Betus, Monica Erdman, Kimber Petersen, "Liquefaction and Sea Level Rise: Sensitivity to Liquefaction Hazards from Sea Level Rise in the San Francisco Bay Area, California," USGS, 22 July 2024, <https://geonarrative.usgs.gov/liquefactionandsealevelrise/>

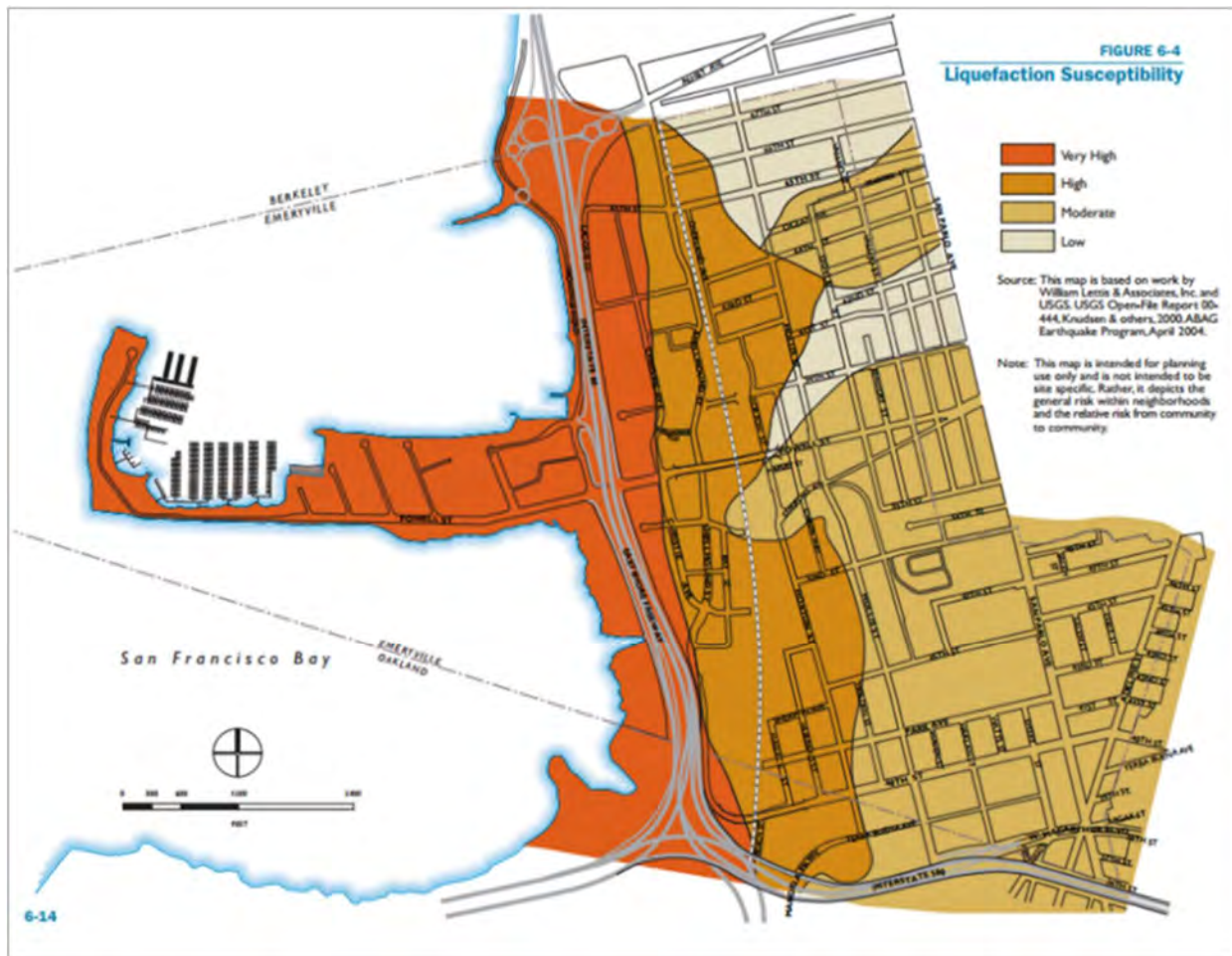


Figure 4.1.3.2(a). Liquefaction Susceptibility Map for Emeryville²⁷

The entire City lies within a liquefaction hazard zone as shown in Figure 4.1.3.2 (a). The peninsula has a very high susceptibility to liquefaction while the areas around the rail line and east have a moderate to low risk of liquefaction. The following buildings and infrastructure (City owned and private) are in moderate, high or very high liquefaction susceptibility:

- 200 acres are in areas of moderate, high or very high liquefaction susceptibility;
- Three miles of roadway are in areas of moderate, high or very high liquefaction susceptibility;
- Approximately 17 miles of roadway;
- Some city owned facilities (Fire Station 34, Emergency Operations Center/Fire Station 35, the City's one and only Police Station, Hong Kong East Ocean Restaurant, The Amtrak, and South Bayfront Pedestrian Bridges);

²⁷ City of Emeryville. Emeryville General Plan. City of Emeryville Planning Division. October 2009. Web. 17 Mar. 2017. <http://emeryville.org/DocumentCenter/Home/View/1016>.

- Approximately 7,899 housing units;²⁸
- 11 high rise buildings with floors over 75 feet in height;
- Major interstate freeway system (I-80);
- Sanitary Sewer lifting station.

In addition, the Land Use Element of the Emeryville General Plan establishes maximum residential densities, floor area, and height across the city. Areas where a higher intensity of development is permitted will likely have a greater concentration of residents, employees, and visitors in the future.

The areas with the highest density (between 70 to 170 units per acre) would be concentrated between Interstate 580 and Shellmound Street, and south of 40th Street. The areas with the greatest floor area ratio and height would be concentrated west of Peladeau Street and south of 40th Street (3.0 to 6.0 FAR, 50 to 100+ feet in height).

Figures 4.1.3.3(a) and 4.1.3.3(b) show the anticipated pattern of development.

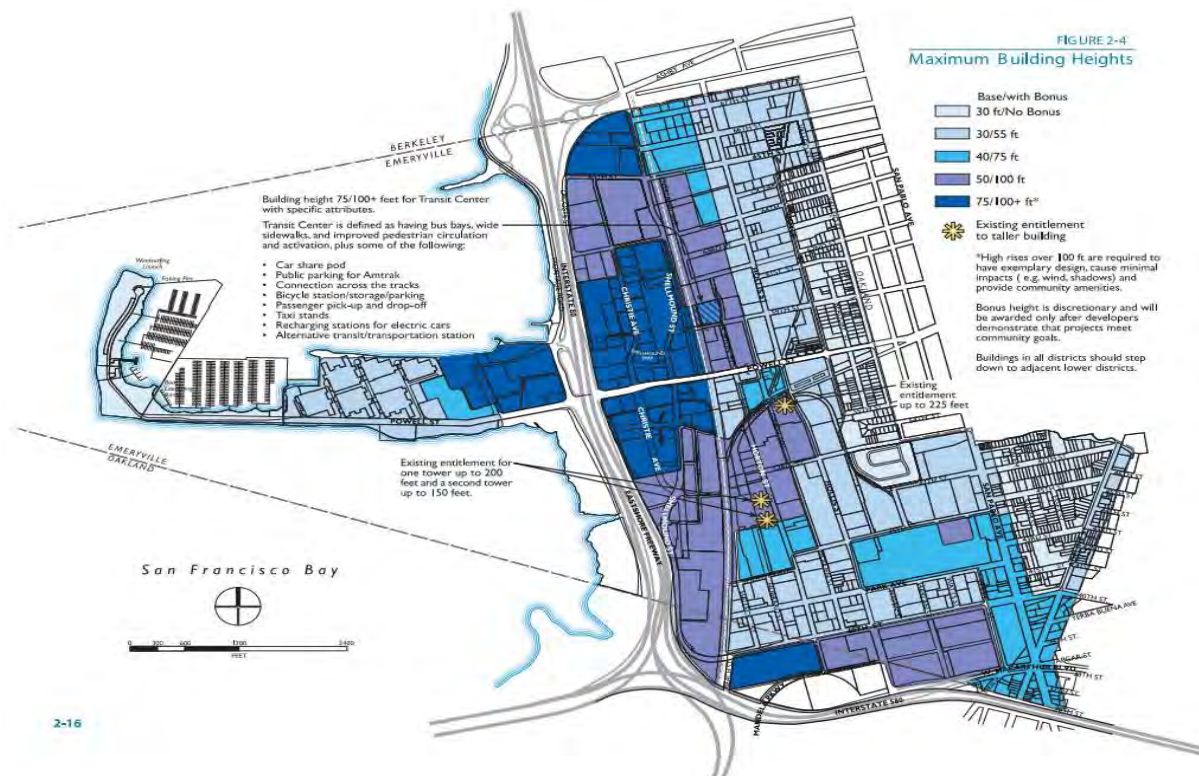


Figure 4.1.3.3(a) Maximum Building Heights Map for Emeryville²⁹

²⁸ City of Emeryville, Addresses [Shapefile]. August 2024. Web. 21 August 2024. Retrieved from City of Emeryville GIS Viewer.

²⁹ City of Emeryville. Emeryville General Plan. Land Use. Page 2-16. City of Emeryville Planning Division. October 2009. Web. 22 July 2024 <https://www.ci.emeryville.ca.us/DocumentCenter/View/1009/20-Land-Use?bidId=>

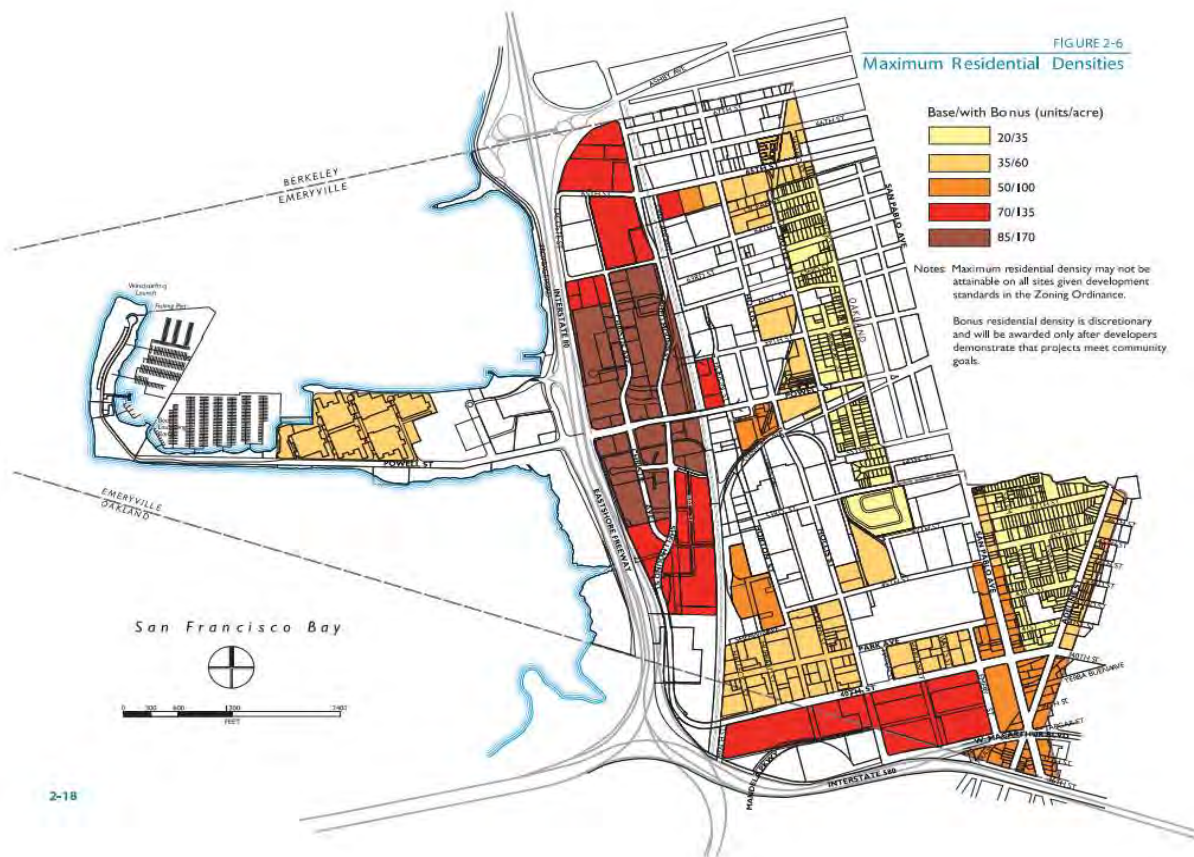


Figure 4.1.3.3(b) Maximum Residential Densities Map for Emeryville³⁰

These areas contain the highest intensity of residential and non-residential development in Emeryville and may be the location of future projects susceptible to liquefaction hazards.

The CDC/ATSDR Social Vulnerability Index (SVI) aggregates county-and tract-level data on 16 variables contributing to a community's reduced ability to prepare for, respond to, and recover from hazards.

- Below 150% Poverty
- Unemployed
- Housing Cost Burden
- No High School Diploma
- No Health Insurance
- Aged 65 & Older
- Aged 17 & Younger
- Civilian with a Disability

³⁰ City of Emeryville. Emeryville General Plan. Land Use. Page 2-18 City of Emeryville Planning Division. October 2009. Web. 22 July 2024 <https://www.ci.emeryville.ca.us/DocumentCenter/View/1009/20-Land-Use?bidId=>

- Racial & Ethnic Minority Status
- Multi-Unit Structures
- Mobile Homes
- Crowding
- No Vehicle
- Group Quarters
- Single-Parent Households
- English Language Proficiency

A higher SVI score indicates that the county or tract has a higher level of social vulnerability and is therefore at higher risk to the impacts of the identified hazards. As shown in Figure 4.1.3.3 (c), the southeast tract in Emeryville has a medium to high level of vulnerability.

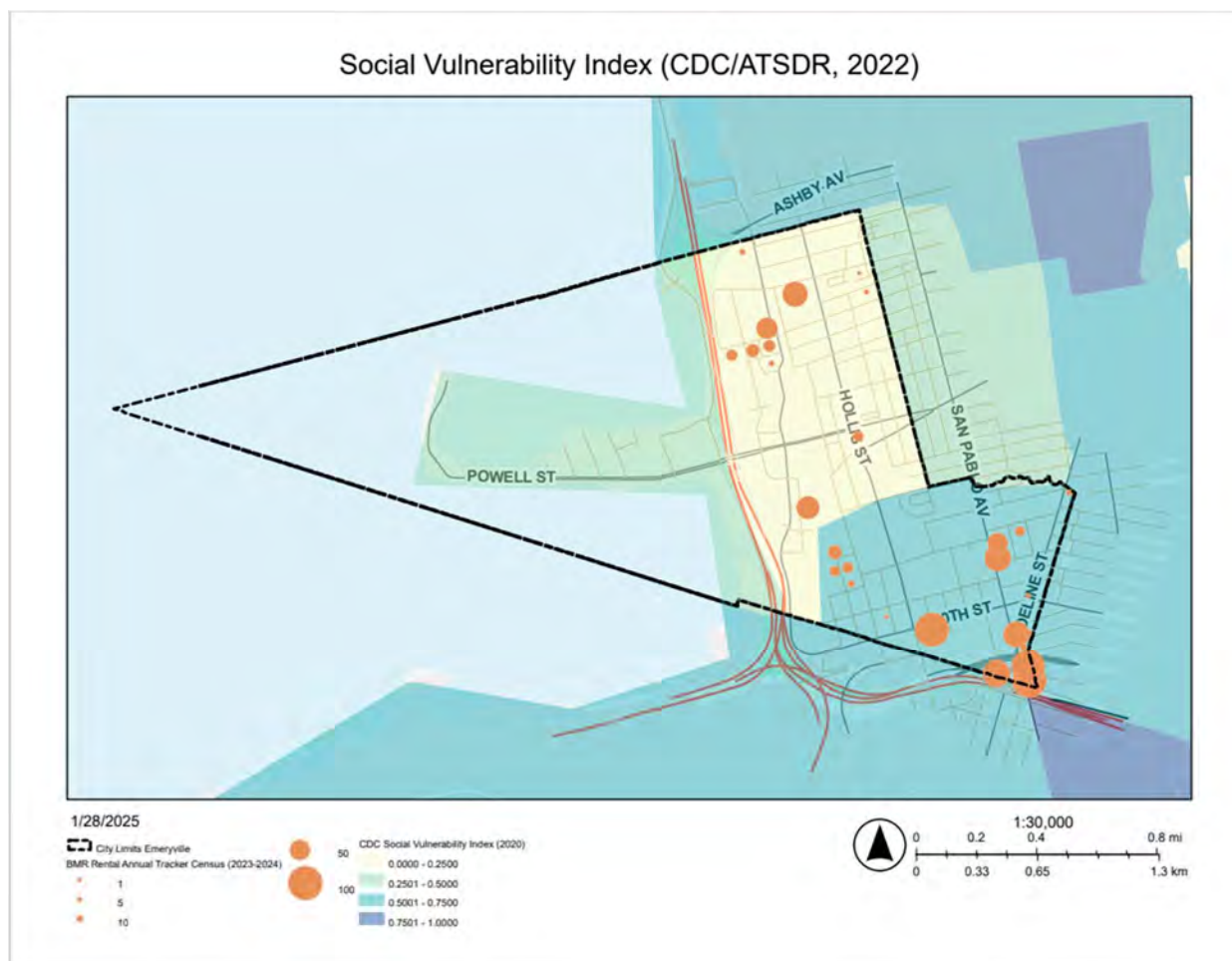


Figure 4.1.3.3(c) Social Vulnerability Index (CDC/ATSDR, 2022)

Emeryville has more than 690 affordable or below-market units – residents in these types of units may experience a greater risk of displacement during or after an earthquake hazard (or flood or fire) event because their housing options are more limited. Figure

4.1.3.3(c) shows the location and intensity of affordable housing development in Emeryville. Most affordable housing development is concentrated along San Pablo Avenue and at the southernmost boundary of the city.

Lake Temescal Dam, located approximately 3.5 miles upstream of Emeryville, may be susceptible to liquefaction. Liquefaction is a potential failure mode of dams which are loaded at the time of an earthquake. Depending on how frequently the dam is loaded will determine how susceptible it is to liquefaction.³¹

Any development in a liquefaction hazard zone requires adherence to the guidelines for evaluating and mitigating seismic hazards as required by the Public Resources Code Section 2695(a). Before a development permit can be granted for site within a Seismic Hazard Zone (which means anywhere in the City), a geotechnical investigation of the site must be completed, and appropriate mitigation measures must be incorporated into the project design. Mitigation of liquefaction hazards can include edge containment structures (e.g. berms, dikes, retaining walls, etc.), driving piles, removal or treatment of liquefiable soils, or modification of site geometry.

The City's Building Division implements and enforces the Emeryville Municipal Code and the California Building Code regulations relative to seismic risk to development. A City Ordinance specifies the need and establishes guidelines for the seismic upgrade of unreinforced masonry buildings. An increase in occupancy or intensification of use will trigger a requirement for a seismic upgrade.

Fire after an Earthquake

Significant portions of this section were originally developed for the City of San Francisco through the Community Action Plan for Seismic Safety (CAPSS) and described in detail in the City of Berkeley 2014 Local Hazard Mitigation Plan.³² Although the CAPSS report was developed for San Francisco, many of the report's findings are applicable to Emeryville as well.

Areas of liquefaction are more vulnerable to fire because of greater potential for underground gas mains to break due to ground displacements and because of water lines being damaged. Fires following earthquakes present a significant problem in dense urban environments like Emeryville, where many simultaneous ignitions can lead to a firestorm. In these cases, fire damage is even more severe than damage from earthquake shaking.

There are many examples locally and from around the world of fire following an earthquake:

³¹ Flood Risk Program Team - Dam Safety Planner, United States, Army Corp of Engineers June 7, 2018

³² Here Today Here Tomorrow: The Road to Earthquake Resilience in San Francisco. San Francisco Department of Building Inspection, 2010. Web. 17 Mar. 2017.
<https://sfgov.org/esip/sites/default/files/FileCenter/Documents/9757-atc522.pdf>.

- **2014 South Napa Earthquake.** Six fires broke out in the immediate aftermath of the 6.0 earthquake. One of those fires, due to a gas line break, was in a Mobile Park destroying four mobile homes. Firefighting efforts were hampered by water main breaks occurring in the same area.
- **1995 Kobe Earthquake.** More than 100 fires broke out following the 1995 Kobe earthquake, during which broken water mains left the fire department helpless, and fires destroyed more than 7,000 buildings. Fire was also a major contributor to the death toll.
- **1994 Northridge Earthquake.** More than 100 fires broke out following the 1994 Northridge earthquake, severely impacting area fire departments, even though it largely affected only the edge of greater Los Angeles.
- **1989 Loma Prieta Earthquake.** Thirty-six fires broke out in San Francisco. A natural gas line rupture was responsible for some of the fire ignitions. Failure of the City's electrical systems may have actually reduced the number of fire ignitions. Fires in the Marina District claimed four structures in the area, but lack of wind that night assisted in preventing the fires from spreading. Overall, the shaking experienced in the Loma Prieta earthquake was moderate as the epicenter was 70 miles away.
- **1906 Great Earthquake.** The 1906 earthquake was followed by a firestorm that lasted for three days and in that time swept over an area of over 3.5 miles.³³ It is estimated that 80 percent of San Francisco's property value was lost in the fire.

Another added concern in Emeryville is the potential for explosions or the potential of toxic smoke being released due to hazardous materials stored at industrial facilities and labs located in the City.

Since the last plan, several additional biotech companies have taken up residence in Emeryville. From January 2020 to June 2024, the City received 14 business permit applications for research and development uses related to biotechnology which brings the number of biotech companies in Emeryville to 30.

Alameda County Fire Department (ACFD) provides fire services to the City. At any one time, ACFD may have six to seven firefighters on duty in Emeryville. It is anticipated that after any major earthquake in the Bay Area, on-duty fire personnel will be overwhelmed very quickly. Departments in nearby cities will be struggling to respond to the needs of their own community and will be unable to provide mutual aid to Emeryville. State and Federal resources may not be available for many hours or even days. Fires could quickly burn out of control and threaten the City. Fire damage could add to the City's overall damage making recovery more difficult and lengthier.

³³ "1906 San Francisco Fire Underwriters' Report." 1906 San Francisco Fire Underwriters' Report. Engineering News, 9 Aug. 1906. Web. 17 Mar. 2017. <http://sfmuseum.org/conflag/underwriters.html>.

Landslides

Since Emeryville is relatively flat, it is not susceptible to earthquake triggered landslides.

Exposure and Vulnerability of Built Environment

Earthquake damage to structures can be caused by ground rupture, liquefaction, ground shaking, and possibly inundation from tsunamis. The level of damage in Emeryville resulting from an earthquake will depend upon the magnitude of the quake, the epicenter distance from the City, the response of geologic materials, and the strength and construction of quality structures.

City Buildings

The City of Emeryville owns approximately 10 buildings. The City does not own any part of the Emeryville Center for Community Life (the City leases space). The property is owned and maintained by the Emeryville Unified School District. Each of the City's buildings have been assessed for seismic safety and, when possible, have been strengthened.

Privately Owned Homes or Housing Units

According to the California Department of Finance, as of January 1, 2024, Emeryville had an estimated 8,356 housing units. Many of the units are located in both the highest two categories for shaking potential and liquefaction from an earthquake. As estimated by the California Department of Finance in 2020, an estimated 11% (919 out of 8,356) of the housing units in Emeryville are single family detached homes. As of March 2024, 27 single family wood frame properties (14 additional since 2014) had taken advantage of the City's Program for Voluntary Seismic Retrofit for Wood Framed Buildings to seismically upgrade their foundations and exterior walls.

Soft Story Structures

A soft story building is a multi-story building with one or more floors that are "soft" due to its structural design. These buildings are characterized by having a story with lots of open areas. An example of a "soft story" structure is an apartment building with a store, restaurant or garage on the first floor. These buildings can be especially dangerous in earthquakes, because they cannot cope with the lateral seismic forces caused by the drift of the building. As a result, the building may fail, causing what is known as a "soft story collapse." Many of the buildings that were damaged in the Marina district in the 1989 Loma Prieta earthquake and in Southern California during the Northridge earthquake in 1994 were "soft story" structures.

In an informational report to the City Council in December 2014, the City identified seven buildings that potentially could be characterized as a soft story design. There is no State mandate to inventory and retrofit soft-story structures. However, in Fiscal Year 2024/2025, the City's Building Division will be seeking grant opportunities from the

State/FEMA (e.g., BRIC-Building Resilient Infrastructure and Communities) to assist residential property owners to seismically upgrade their respective soft-story buildings with a City ordinance to follow.

Unreinforced Masonry (URM)

In 1986, California passed an Unreinforced Masonry (URM) building law requiring local governments to identify URM buildings within each jurisdiction and establish loss reduction programs for URM buildings by 1990. To that end, the Emeryville City Council approved the Seismic Hazard Identification and Mitigation Program for Unreinforced Masonry Buildings in August 1990 (Ordinance No. 90-6) with an update to this ordinance adopted in 1994 (Ordinance No. 94-1). The purpose of this ordinance was to promote public safety by identifying those unreinforced masonry buildings in the City which were most susceptible to earthquake damage and to require certain mitigation measures to protect the lives of persons working and residing in Emeryville. As required by State Law, the Building Division maintains an inventory of Unreinforced Masonry Buildings located in the City. The City has identified 103 unreinforced masonry buildings in the City and the following is a summary of the status of these Unreinforced Masonry (URM) buildings:

| | |
|--|------------|
| Removed from List – Mitigation to UCBC or Better Completed | 39 |
| Removed from List - Other | 43 |
| Only Minimum Measures Installed | 21 |
| TOTAL | 103 |

This program has brought considerable increase in safety, and as of 2014, 100% percent of the URM buildings identified by the City have been seismically retrofitted, demolished or demonstrated to have complied with minimum mitigation measures.

Exposure and Vulnerability of the City's Infrastructure

This section examines the earthquake and exposure and vulnerability of Emeryville's infrastructure focusing on utilities, transportation and communications. Infrastructure described in this section provides the foundation for day-to-day life in Emeryville. Functional infrastructure systems are necessary for achieving community resilience. The consequence of infrastructure damage cascades well beyond the costs to repair the immediate damage. The failure of one system can limit the functionality of other key assets not only for the City but for the region as a whole. Degrading infrastructure systems and future large earthquakes with epicenters near Emeryville could result in system outages that last weeks for the most reliable systems, and multiple months for others.³⁴

³⁴ "Cascading Failures: Earthquake Threats to Transportation and Utilities." Association of Bay Area Governments Resilience Program. Association of Bay Area Governments, Dec. 2014. Web. 17 Mar. 2017. http://resilience.abag.ca.gov/projects/transportation_utilities_2014.

The City has responsibility for storm drains, retaining walls in the right-of-way, a sanitary sewer collection system that links to EBMUD's system, creeks, open channels and creek culverts in the right-of-way and on City property (except for the Temescal Creek flood control channel and a storm culvert line on 62nd Street – Alameda County Flood Control has responsibility for those), street lights and traffic lights on poles or utility poles and above and below ground conduits supplied by PG&E.

Electrical, natural gas, petroleum, telecommunications and potable water supply infrastructure are not under the City's control, but are owned and managed by other quasi-governmental, private or special district entities.

EBMUD has responsibility for potable and fire suppression water supply system consisting of pipelines, flow/pressure control facilities, and storage tanks and reservoirs owned by the East Bay Municipal Utilities District as well as sanitary sewer transmission pipeline (EBMUD wastewater interceptor) and pumping station.

PG&E has responsibility for the electric distribution system including substations, mains, laterals and meters, owned by the Pacific Gas and Electric Company, the natural gas distribution system including main pipelines, lateral pipelines and meters.

AT&T, Comcast, Verizon and other telecommunication companies have responsibility for telecommunication aerial and underground conduits.

Liquefaction is a significant contributor to utility failure after an earthquake. As the entire City lies within a liquefaction hazard zone, there is potential for significant damage to infrastructure lines such as water, natural gas, sewage, storm, electrical and telecommunication systems in the City.

Liquefaction caused by earthquakes may subject pipelines to significant displacement, causing the pipelines to develop leaks or breaks. Buried tanks, pipelines, conduits and manholes may float in the liquefied soil due to their buoyancy.

The following sections on Utilities, Transportation and Communications describe in detail these key infrastructure systems and their vulnerabilities.

Water System – Key Partner: East Bay Municipal Utility District³⁵

The East Bay Municipal Utility District (EBMUD) provides drinking water to approximately 1.4 million people and sewer services to 740,000 in the East Bay. After an earthquake, EBMUD will be responsible for repairing and reconnecting water and sewer services for its customers, including water for post-earthquake fire suppression.

³⁵ Information provided by Heidi Benenson, Emergency Preparedness & Business Continuity Administrator at East Bay Municipal Utility District.

EBMUD relies on a network of reservoirs to collect local watershed runoff and store imported water.³⁶ It draws its imported water from the Mokelumne Water System and transports it to the Bay Area via aqueducts. If there is an interruption to this imported water source, EBMUD would need to rely on local sources and storage until repairs were made to restore the transmission supply. However, this would only work if the local pipelines remained intact. EBMUD's aging distribution system makes it particularly vulnerable to damage in an earthquake.

EBMUD has studied the impacts of earthquake shaking, liquefaction, landslides and fault rupture on most of its infrastructure. In a major seismic event, an earthquake induced landslide in either the Oakland or Berkeley Hills could affect water lines reducing water availability for firefighting in Emeryville. If there is an actual fault rupture, water lines within the fault rupture could be broken. Liquefaction may cause the greatest number of pipe failures associated with a significant seismic event. As the entire City of Emeryville lies within liquefaction zones, a large event earthquake could severely impact water service to the City of Emeryville.

After a major seismic event, it could take seven days or more to restore basic services to the majority of customers; however, full service may not be restored for up to six months according to the United States Geological Survey's (USGS), *The Haywired Earthquake Scenario Report – Engineering Implications, Volume II*. EBMUD will work with the City to support our disaster recovery efforts, while focusing on infrastructure repairs so water service can be restored as quickly as possible.

If water service to the City is compromised, the City will collaborate with the Alameda County Office of Emergency Services to establish a centrally located water distribution site (Commodity Point of Distribution or C-Pod) to distribute water to the community. EBMUD will assist with this endeavor by supplying water through their hydrant manifold system.

EBMUD Notable Mitigation Activities

EBMUD has taken aggressive steps to strengthen its water and wastewater systems. Since the 1989 Loma Prieta Earthquake, EBMUD undertook the development of a Seismic Improvements Program and has invested more than \$350 million in seismic improvement projects, including but not limited to pumping plants, water treatment plants, distribution reservoirs and pipeline improvements to provide greater resiliency in case of a major earthquake. In addition, EBMUD has performed a seismic retrofit of its main administration building and retrofits of its major dams, including evaluation of Pardee and Camanche, and upgrades to Chabot and San Pablo earthen embankment dams, and retrofits to the structural outlet works at Briones, Upper San Leandro, and Chabot reservoirs to ensure facilities are resilient and remain in operation after a large

³⁶ "Cascading Failures: Earthquake Threats to Transportation and Utilities." Association of Bay Area Governments Resilience Program. Association of Bay Area Governments, Dec. 2014. Web. 17 Mar. 2017. http://resilience.abag.ca.gov/projects/transportation_utilities_2014.

earthquake. In 2014, a Tsunami Response Plan was developed for the Main Wastewater Treatment Plant and Dichlorination Facility.

Since 2017, EBMUD has undertaken a comprehensive condition assessment of all their concrete spillways in the East Bay. EBMUD performs monthly inspections of all dams and major facilities and assesses the integrity of key facilities after significant ground shaking. EBMUD has also improved system redundancy with a network of pumping plants, tank reservoirs, pressure regulators, and continues to upgrade distribution facilities with modern materials and design practices.

From 2018-2021, for critical wastewater infrastructure and facilities, in depth seismic assessments were conducted that updated structural and geotechnical evaluations, risk assessments, conceptual retrofit designs and recommendations. High risk wastewater pumping stations, Main Wastewater Treatment Plant structures, and interceptor pipe segments rehabilitation projects are in design, including rehabilitation of the North interceptor in Emeryville with construction planned within the next year.

Electricity and Natural Gas Systems Key Partner: Pacific Gas and Electric Company (PG&E)³⁷

Pacific Gas and Electric (PG&E) provides electricity and natural gas to 16 million people throughout a 70,000 square-mile service area in northern and central California. They have a staff of 23,000 employees who carry out PG&E's primary business of the transmission and delivery of energy.³⁸ Their staff is prepared to respond to restore electrical and natural gas service after disasters and storms. They also have a well-established priority system for restoring power to emergency services before other community needs. PG&E recognizes that large earthquakes may damage key facilities, and that electric power might be lost for limited periods of time. The potential for a loss of power means that emergency and critical uses should have dedicated emergency power sources.

The electrical system is vulnerable to many different hazards. In storm events downed trees or high winds can damage overhead lines. In earthquakes, overhead lines are not typically damaged, but electrical substations components can be destroyed by strong shaking, often requiring more extensive and time intensive repairs to return service.

Natural gas is subject to damage and disruption in areas with soil failure, for example landslides and liquefaction. Broken lines can create fires if ignited until the fuel supply is exhausted. The repair of damaged underground lines will take time. Following the Loma Prieta earthquake, it took about 30 days to repair damaged lines in the San Francisco Marina.

³⁷ Information provided by Les Putnam, Senior Public Safety Specialist – Gas, from PG&E.

³⁸ "Company Profile." www.pge.com, www.pge.com/en/about/company-information/company-profile.html.

The large-scale natural gas transmission lines that service the cities along the East Bay shoreline of Alameda County are primarily located near the Bay shore. The transmission line runs along a single corridor through Albany, Berkeley, and Emeryville before splitting into two parallel lines in Oakland that run through Oakland, San Leandro and Hayward. Across the entirety of the natural gas line between Albany and Hayward the natural gas transmission line(s) pass through medium-level susceptibility zones with some lines passing through very high liquefaction susceptibility zones in East Oakland and San Leandro. The thousands of miles of natural gas distribution lines are also at risk to damage from liquefaction. Neighborhoods that experience significant liquefaction are not likely to have gas service for a significant amount of time.

PG&E Notable Mitigation Activities³⁹

PG&E has assessed the seismic vulnerability of many elements of its system and has taken steps to improve its functionality after an earthquake, such as replacing bushings on high voltage lines, anchoring substation equipment and replacing old gas lines with more flexible alternatives. In addition, PG&E is installing next-generation technology on its gas transmission lines to be able to more accurately determine the full-length strain profile on affected pipelines from seismic activities.

Since the last plan update, PG&E has also created a 24/7 Gas Control Center that monitors nearly 8,000 points on its system along with automated or remote-controlled shut-off valves.

Additionally, PG&E has a First Responders Safety website, which provides secure access to maps and information on their natural gas transmission lines, natural gas storage facilities, valve and regulator locations and current size and pressure within the pipes as well as access to an electronic version of their Gas Emergency Response Plan.

Communication Systems Key Partners: Comcast, AT&T, Verizon, TPx Communications/Paxio, Inc.

The telecommunications industry delivers telephone, television, Internet, and other services to the local community. They provide the primary means of communication to virtually all businesses, households, and individuals in the City. They are an essential service to the residents, businesses and the economy of the City.

Hundreds of fiber optic cables cross the Hayward Fault. Strong shaking, liquefaction, and fire can affect cellular sites on buildings, monopoles, central offices, and public safety answering points. However, power outages will likely cause more equipment failures than equipment damage.⁴⁰

³⁹ "PG&E Installing New Technology to Enhance Pipeline Safety during Seismic Activity." www.pgecurrents.com, www.pgecurrents.com/articles/3815-pg-e-installing-new-technology-enhance-pipeline-safety-seismic-activity. Accessed 26 Nov. 2023.

⁴⁰ USGS, "The HayWired Earthquake Scenario, Societal Consequences," Fact Sheet 2021-3054, October 2021, <https://pubs.usgs.gov/fs/2021/3054/fs20213054.pdf>

Communication infrastructure is spread throughout the City and thus is exposed to all earthquake ground failure hazards. As has been reported, the entire City lies within the two highest liquefaction zones which makes it very vulnerable to infrastructure damage.

Telecommunications and cable communications systems are both above and below ground in Emeryville. The cellular phone system relies on the integrity of antennas that are mostly located on building tops. Earthquake shaking can topple or break utility poles and cell towers and falling trees or collapsing structures can damage utility lines.

Additionally, Emeryville's underground utilities include communications conduits. Underground systems are particularly vulnerable to damage from ground failure in earthquakes. A catastrophic earthquake could rupture these systems, compromising these lifelines unless redundant connections unaffected by the earthquake are available. Ground movement due to liquefaction could severely impact these systems. Liquefied areas may move laterally, breaking underground cables and damaging communication lines. Underground damage is harder to detect and repair and the length of service losses may be greater than for above-ground systems.

It is anticipated that after a major earthquake in the Bay Area, telephone services, including mobile phone and internet will be down for days to a week or longer. An overload of post-earthquake calls in the region will make phoning difficult. Carriers will block calls coming into the region to relieve circuit overload; however, outbound calls as well as text messaging are likely to be available.

Key Partner: Comcast⁴¹

Comcast provides voice (wireline telephone service), video (television), data (high-speed internet, Wi-Fi hotspots, cellular backhaul services), and home security/home automation services to the Emeryville community.

Comcast's distribution telephony network depends on other communication providers. If supporting providers' networks are operational, Comcast will maintain connectivity to all its customers. If an individual network should fail, Comcast will lose its connection to the customers using that particular network.

To protect its infrastructure in earthquakes and other disaster, Comcast has hardened its sites. Additionally, all sites are connected via redundant fiber networks to maintain service to greater service areas. Major metro fiber routes are backed up by redundant routes and failover technologies.

After a catastrophic earthquake, Comcast will follow specific procedures to restore services to affected areas. They will prioritize critical infrastructure, such as

⁴¹ City of Berkeley. Local Hazard Mitigation Plan. City of Berkeley Fire Department, 1 June 2014. Web. 17 Mar. 2017, pgs 3-59 to 3-60. http://www.ci.berkeley.ca.us/uploadedFiles/Fire/Level_3_-_General/2014%20LHMP.pdf.

communication hubs and network nodes to restore connectivity. The restoration timeline will vary depending on the severity of the damage and the availability of resources.

Comcast services require commercial power to operate. Internet and video, as well as landline and even mobile phone services for homes and businesses, may stop functioning within hours after commercial power is shut off. Technicians will need to wait for power to be restored before they can determine if repairs to their network are needed. In the event of a power outage, Comcast may use battery backup to maintain services for up to eight hours. Comcast monitors its power supplies, and in the event of the backup batteries being depleted, generators may be available to maintain service.

Key Partner: AT&T

AT&T provides and maintains telephone service to Emeryville residents, along with internet access, mobile telephone service, and other business services. The telephone wires, conduits, coaxial cables and fiber optic lines have been tested and designed to be highly resistant to earthquake shaking, and easy to reroute should problems occur. AT&T expects some telephone outages, including mobile phone service after a major earthquake and service restoration could take hours to days, depending on the radius.

AT&T Notable Mitigation Activities⁴²

In 2015, AT&T became the first telecom service provider to be certified under the new International Business Continuity Management Standard (IS) 22301:2012) for the Voluntary Private Section Preparedness Program. AT&T has extensive experience in planning for and responding to crises. AT&T developed its network disaster recovery (NDR) capability specifically to allow rapid service recovery following a catastrophic event. The AT&T NDR team has managers, engineers, and technicians who receive special training in physical recovery of AT&T's network. Members participate in several recovery exercises each year to test, refine, and strengthen AT&T's business continuity and disaster response services in order to minimize network downtime.

Verizon provides backup for first responders to stay connected during planned events and in an emergency.

AT&T also has a fleet of specially designed semi-tractor trailers that contain the same type of equipment that is normally installed in a permanent AT&T office. The technology trailers can be interconnected to recover capabilities of a network office that has been heavily damaged or destroyed. The equipment is maintained in and deployed from warehouses strategically located in the U.S. and abroad.

AT&T can also establish broadband and wireless voice and data connectivity from disaster sites using one or more Emergency Communication Vehicles (ECV). An ECV uses a satellite link to provide NDR with command communications during the initial

⁴². AT&T Network Disaster Recovery: Our NDR Program, <https://about.att.com/pages/disaster-recovery/network-recovery>, 2024

phase of the recovery effort. The ECV's can also be used to provide command and humanitarian relief communications capability to other emergency responders.

AT&T also uses Cells on Wheels (COWs) and Cells On Light Trucks (COLTs) which are self-contained mobile cell sites and can provide extra cellular capacity to restore communications after a disaster. These mobile sites can be used to replace the service of a failed permanent cell site and/or they can be used to supplement the cellular capacity of an area that has increased demand.

Key Partner: Verizon Wireless⁴³

Verizon Wireless serves its individuals, government, and business customers with voice and/or data services via Verizon's wireless cellular network. Verizon prepares year-round for natural disasters and other emergencies. Verizon's year-round preparations include emergency drill exercises, network infrastructure enhancements, and resource staging for rapid response.

Verizon has a foundation of 148 switching facilities nationwide. One of those switching stations is located in Fairfield, California. The Fairfield switch routes calls and data for thousands of Northern California customers from Mendocino to Palo Alto. Verizon has designed and built its network with day-to-day reliability and disaster resilience in mind. Battery power backs up all of the facilities, and generators stand ready at all switching facilities and many cell site locations to help keep the network running during power outages.

Verizon Wireless also has a fleet of over 550 portable network assets spread across the country for rapid deployment, including generator-powered cell sites, drones, and a fixed-wing aircraft for aerial support. Verizon also has 200 satellite-based portable network assets that can provide crucial connectivity in scenarios where the fiber connections are compromised.

Verizon Frontline Crisis Response Team provides on-demand, emergency assistance to government agencies and first responders to help maintain mission-critical communications during emergency response operations.

Key Partner: TPx Communications/Paxio, Inc.

The City utilizes multiple, redundant ISP for internet connectivity. The TPx and Paxio, Inc. networks are the backbone for the City's SD-WAN connectivity. Primary City sites have redundant services, while smaller, satellite sites rely on a single provider.

The City's telephone system runs on Microsoft Teams, hosted on Microsoft's Government Cloud. CallTower is the City's provider for Public Switch Telephone Network (PSTN) dial tone.

⁴³ "Verizon Stands Ready to Respond During Severe Weather Season and Beyond," <https://www.verizon.com/about/news/news-release> Updated 2024 April 17

Aviation Fuel Pipeline – Key partner: Kinder Morgan Corporation⁴⁴

Two aviation and multi-purpose pipelines run along the railroad tracks from Richmond to the Oakland Airport through Emeryville. The pipes are made of high-pressure welded steel, installed primarily in the 1960s, although a few segments were installed in the 1950s. The company has not conducted a study of the impacts of an earthquake on the Hayward fault. This type of pipeline, however, is known to have performed well, due to its ductile nature, in earthquakes elsewhere in the world. Kinder Morgan has focused on developing procedures to respond immediately after a disaster to shut down the pipeline. Each pipeline has automatic, remote control and other manual valves along its length and the flow can be shut down within minutes. Kinder-Morgan reported that after the 1989 Loma Prieta earthquake, these pipelines were shut down and monitored for leaks, breaks and changes in pressure. No damage was found.

Transportation Systems Key Partners: Caltrans, BART, Emery Go-Round, AMTRAK/Union Pacific

Roadways are typically divided into two components: roads and bridges. In past earthquakes, both have experienced catastrophic failures. In Loma Prieta, there was a collapse of both the Cypress Street Viaduct in Oakland and the Bay Bridge deck. The entire City of Emeryville is located in the highest two categories for shaking potential as well as within a liquefaction hazard zone as previously shown in Figures 4.1.3.1 (a) and 4.1.3.2 (a). In the event of a catastrophic earthquake, vehicle movement through and in the City could be severely impacted. Transportation on the peninsula (west of Interstate 80) is especially vulnerable to liquefaction and could be severely impacted.

The City controls all local roads, curbs, paths and sidewalks except for San Pablo Avenue (State Route 123) and West MacArthur Boulevard, which are controlled by Caltrans. The City is also responsible for the Powell Street and 40th Street bridges as well as two pedestrian bridges, the Pedestrian Bridge at the AMTRAK Station and the South Bayfront Bridge. The 40th Street Bridge was built in 1992, the Powell Street Bridge was retrofitted in 1993, the Pedestrian Bridge at AMTRAK was built in 1994, and the South Bayfront Pedestrian and Bicycle Bridge was opened in December 2021.

Key Transportation Partner – Caltrans⁴⁵

Interstate 80 sits entirely in a very high liquefaction zone. In the scenario of a 7.1 earthquake on the Hayward Fault, the ground underneath Emeryville's portions of Interstate 80 is predicted to liquefy. Interstate 80 bisects the City and is a major thoroughfare for not only Emeryville but for the whole Bay Area. If the portion of Interstate 80 that runs through Emeryville should fail, the peninsula could find itself isolated from the rest of the City. The City's only Police Station is located on the peninsula.

⁴⁴ Information provided by Nicole Stewart, Prior Area Manager for Brisbane Terminal and Richmond Station.

⁴⁵ Information provided by Bob Braga, PE, Branch Chief – Maintenance Services; Emergency Management: Planning and Training, Caltrans – District 4.

Caltrans is responsible for constructing and maintaining the statewide highway system which includes Interstate 80 and State Route 123 (San Pablo Avenue). The 1989 Loma Prieta earthquake caused significant damage to Caltrans structures, such as bridges, overpasses and on-ramps.

Caltrans Notable Mitigation Activities

After Loma Prieta, Caltrans launched a comprehensive review of earthquake safety on highways throughout the State. A program to retrofit all vulnerable structures was started and the overpass structure over Powell Street was widened and subsequently retrofitted to the “non-collapse” criteria as of 1998. Caltrans seismic design of structures involves utilizing site specific geological conditions and selecting a ‘maximum credible quake’ expected to impact the structure.

Caltrans has done some rough modeling on structure response (damage) in the San Francisco Bay Area according to a few likely quake scenarios. The Powell Street structure indicated ‘low to moderate’ damage expected at worst, which most likely would result in imposing ‘load restrictions’ on the structure until damages are repaired but was not expected to be in danger of a collapse.

After a significant quake, the City can contact Caltrans directly for a priority inspection of the Powell Street structure for purpose of ‘life and safety’ operations and to promptly resolve securing access across Interstate 80 if the passing under the overpass is prohibited.

Key Transportation Partner – Bay Area Rapid Transit (BART)⁴⁶

Although BART does not run through the City directly, it provides an important transportation link to the City of Emeryville. BART is one of the San Francisco Bay Area’s most vital transportation links throughout the East Bay and between the East Bay and San Francisco. Prior to the COVID-19 pandemic BART carried about 400,000 riders every weekday; however, ridership fell dramatically during the pandemic.

BART Notable Mitigation Activities

In 2002 BART completed a study of the earthquake vulnerability of the entire system, analyzing multiple earthquakes, predicting damage, and assessing cost-effectiveness of retrofits. This study was the most comprehensive evaluation of BART facilities since the original construction of the system. It involved one and one-half years of engineering and statistical analyses. The study also incorporated information from the 1994 Northridge, California and 1995 Kobe, Japan earthquakes.

The results of the Seismic Vulnerability Study indicated that if the BART system was not strengthened, it would take years to restore service after a major earthquake. The study

⁴⁶ City of Berkeley. Local Hazard Mitigation Plan. City of Berkeley Fire Department, 1 June 2014. Web. 17 Mar. 2017. Pages 3-55 – 3-56. http://www.ci.berkeley.ca.us/uploadedFiles/Fire/Level_3_-_General/2014%20LHMP.pdf.

found that portions of the system most susceptible to earthquake damage included the Transbay Tube, various aerial structures, stations and equipment.

The study recommended that priority be given to the Transbay Tube, where soil backfill is prone to liquefaction. Though the consequences of liquefaction on the Tube are uncertain, a worst-case scenario could cause excessive movement of the seismic joints and structural stress that could result in significant damage.

BART worked with earthquake retrofit specialists to develop a retrofit design, which centered around the installation of an inner steel liner and new water pumping system. The installation of the inner liner began in 2017 with a second phase, beginning in 2019. The retrofit will install a curved inner steel lining to key sections of the 3.6-mile log tube. It will also install an upgraded pumping system to allow larger quantities of water to be removed quickly from the tube.⁴⁷

Through its Earthquake Safety Program, BART is working to prepare the entire BART system to better withstand future earthquakes. Upgrades to the system were funded by \$980 million in General Obligation Bonds, authorized by voters in Alameda, Contra Costa, and San Francisco counties, supplemented with an additional \$240 million from other sources. BART anticipated the completion of all earthquake upgrades by 2022.

BART's investment in earthquake retrofit is strengthened by its earthquake early warning system. BART was an early adopter of the ShakeAlert Earthquake Early Warning system which has been in place since 2012. When an earthquake larger than magnitude 4 or 5 is experienced within the BART system, the server will automatically signal trains to reduce speeds. The length of advance warning depends on how far away the earthquake originates.

BART has an Earthquake Emergency Response Plan and holds several drills a year to ensure staff are trained and ready to respond. Following an earthquake, BART trains are held in place (except for trains in the Transbay Tube and BART Caldecott Tunnel) until it is determined that it is safe to move the train to the nearest station for offboarding.⁴⁸

Key Transportation Partner – Emery Go-Round

The Emery Go-Round is a fare-free shuttle service, open to all Emeryville residents, shoppers, visitors and employees of Emeryville businesses. Emery-Go-Round is a service of the Emeryville Transportation Management Association, a non-profit organization whose primary objective is to increase access and mobility to, from and within Emeryville while alleviating congestion through operation of the shuttle program. The Emery-Go-Round connects key job and activity centers in the City with BART and AC Transit transportation hubs. The shuttle service carries passengers on seven shuttle routes. Since BART does not have a station in Emeryville, the Emery-Go-Round provides

⁴⁷ [Transbay Tube Retrofit | Bay Area Rapid Transit \(bart.gov\)](https://www.bart.gov/news/articles/2020/news20201230)

⁴⁸ BART and USGS Extend ShakeAlert Agreement, 2020 December 30
<https://www.bart.gov/news/articles/2020/news20201230>

essential connectivity to points within and outside Emeryville. If roads are impassible, the Emery Go-Round shuttle could be affected.

Key Transportation Partner – AMTRAK/Union Pacific⁴⁹

Rail service in Emeryville is provided along the Union Pacific (UP) right-of-way. The rail corridor in Emeryville, which is approximately one mile in length, is located on the west edge of the City between Shellmound Street and Hollis Street. It is an important link in the region's freight and passenger rail network. Local and regional freight and passenger traffic traveling from the Bay Area to Sacramento, the Central Valley, and all along the West Coast from Seattle to Los Angeles and across the nation to Chicago, all rely on use of this corridor to move goods and people.

The UP right-of-way contains two main tracks through Emeryville along with parallel support trackage on each side. The parallel support trackage is considered part of the West Oakland Railroad Yard also known as Desert Yard. As such, on any given day one can find a long line of rail cars including tanker cars parked on the track in Emeryville.

Approximately 30 freight trains pass through Emeryville every day. There are no rail shippers within the City, and so all freight traffic is through traffic. Trains in the northbound direction are primarily headed for UP's major Northern classification yard in Roseville or for transcontinental destinations such as Chicago, Kansas City or St. Louis. Southbound, most trains are headed to the Port of Oakland or UP's Oakland classification yards. Trains are also bound for shippers along the East Bay rail routes to San Jose and to Southern California. Freight trains include various sorts of traffic, from containers and trailers on flatcars or double-stack intermodal cars, to set up automobiles and general carload traffic, such as boxcars, gondolas, tank cars and lumber carriers.

Amtrak has rights under federal law to operate intercity and long-distance passenger rail service on the UP tracks through Emeryville. Long distance operations occur once a day in each direction on both the California Zephyr (Emeryville to Chicago) and the Coast Starlight (Seattle to Los Angeles). Regional Service is provided daily on the Capitol Corridor (Sacramento – San Jose) and San Joaquin (Bakersfield – Oakland) services. All these passenger services stop at the Emeryville Amtrak Station which is located south of 65th Street and North of the Powell Street overcrossing. Approximately, 44 passenger trains run through Emeryville daily, about four to five trains per hour in both the AM and PM peak hours.

Of the 76 California stations served by Amtrak, Emeryville was the fourth busiest station in fiscal year 2023, boarding or detraining 471,695 passengers for an average of approximately 1,292 passengers daily.⁵⁰

⁴⁹ Wilbur Smith Associates, and Adavant Consulting. Emeryville Railroad Quiet Zone Study Draft Report. Page 1-3 to 1-5. 2 June 2008.

⁵⁰ Amtrak Fact Sheet, Fiscal Year 2023, State of California. Amtrak, March 2024, [Amtrak FY23 Fact Sheet - State of California](#)

All trackage is located in the two highest zones for shaking and liquefaction potential. A train passing through the City during a large earthquake could potentially derail.

Sanitary Sewer System

The City of Emeryville's sanitary sewer system is 15 miles. The collection system serves the entire City. In addition, approximately 11 miles of sanitary sewer mains from 370 acres of primarily residential property in the City of Oakland and .25 acres of residential property in the City of Berkeley drain into Emeryville's sanitary sewer system.

The City is responsible for the sanitary sewer collection system. This system links to EBMUD's wastewater interceptor line, which runs under Shellmound Street, to their wastewater treatment facility located near the eastern side of the Bay Bridge. All of the City's sanitary sewer system is located in the two highest liquefaction zones. Liquefied areas may move laterally causing breaks in the City's underground sanitary sewer pipelines. Depending on the severity of earth movement, water and sewer lines could break, and the safety of the drinking water could also be compromised. Liquefied areas could also compromise EBMUD's wastewater interceptor line. Damage to either system would interrupt the systems' ability to convey sewage.

The City's sanitary sewer system relies on water to function. If EBMUD's water system is compromised, the sewer sanitary collection system will be useless. The City's sanitary sewer pump is located on the peninsula. Without power, it could fail, leading to major sewage overflows. The City is currently in the midst of installing a permanent backup generator for the lift station that should be operational by winter of 2025.

Storm Drains

Liquefaction could also cause significant damage to the City's storm drainage system. If the next earthquake occurs during or shortly before a rainstorm, the City could experience significant flooding in areas that have not seen floodwaters previously.

CLIMATE CHANGE⁵¹

PROBABILITY – HIGH

SEVERITY – HIGH

Climate change is the greatest environmental challenge of the 21st century. It poses a serious and significant issue for the entire City. Scientists expect that with the current trends in fossil fuel use, Californians may see more intense heat waves, droughts, rainstorms, floods, wildfires and landslides in the future. These impacts affect our natural

⁵¹ Emeryville Climate Hazard Analysis. Four Twenty Seven Climate Solutions. August 2016.

environment, our built infrastructure, and the health and safety of the people in our community, especially people of color and the poor.⁵²

The City of Emeryville has been an active environmental player in the last two decades. In 2008, Emeryville was among the first wave of US Cities to adopt a climate action plan (CAP) to reduce greenhouse gas (GHG) emissions.

The Emeryville Climate Action Plan 2.0 updated and adopted in 2016, set a path for reaching Emeryville's 2030 and 2060 goals, creating a vision for a carbon-neutral City, and preparing the City for the impacts of climate change.

The City has made progress towards these goals with the installation of solar panels on several city facilities, street lighting upgrades, increased support for clean transportation including bike/ped infrastructure and public shared mobility, adoption of an eco-foodware ordinance, and city-wide multi-stream recycling and compost collection along with other waste management requirements.

The City's fleet is rapidly converting to electric vehicles where the technology is available. Currently the City has the following electric vehicles

- Five (5) F150 Lighting EV vehicles with 4 more on order but not yet received
- Two (2) GO-4 EV Model Parking Enforcement Vehicles
- Four (4) Police Administration Mach EV Vehicles
- Two (2) EV Vans in the Community Services Department;
- Two (2) Hybrid Patrol Vehicles
- One (1) EV Chevy Bolt – City Hall Pool Vehicle

In addition, a city-wide urban greening program to add street trees is underway.

This section identifies three main impacts of Climate Change on the City of Emeryville – Drought, Sea Level Rise and Extreme Weather.

DROUGHT

PROBABILITY – HIGH

SEVERITY – HIGH

California and the Bay Area are no stranger to drought conditions. While California has experienced prolonged droughts in the past, notably 1973, 1975-77, 1987-1992, and

⁵² Morello-Frosch, R., M. Pastor, S. Shonkoff, and J. Sadd. "The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap PERE USC Dana and David Dornsife College of Letters, Arts and Sciences." The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap PERE USC Dana and David Dornsife College of Letters, Arts and Sciences. May 2009. Web. 17 Mar. 2017. <http://dornsife.usc.edu/pere/climategap>.

2007-2009, the most recent drought period from 2012 – 2017 was one of the most severe and costliest droughts of record in California.

In 2014, the Governor declared a State of Emergency in California in response to the State's drought conditions which had begun 2012. A wet winter in 2016/17 helped ease enough of the drought conditions to have the Governor declare the end of the drought in April 2017. Another State of Emergency was declared by the Governor in 2021 but was rescinded in 2023. As of January 21, 2025, 27.4% of California is abnormally dry, 6.5% is in a moderate drought, 21% in a severe drought, 11.9% is in an extreme drought.⁵³

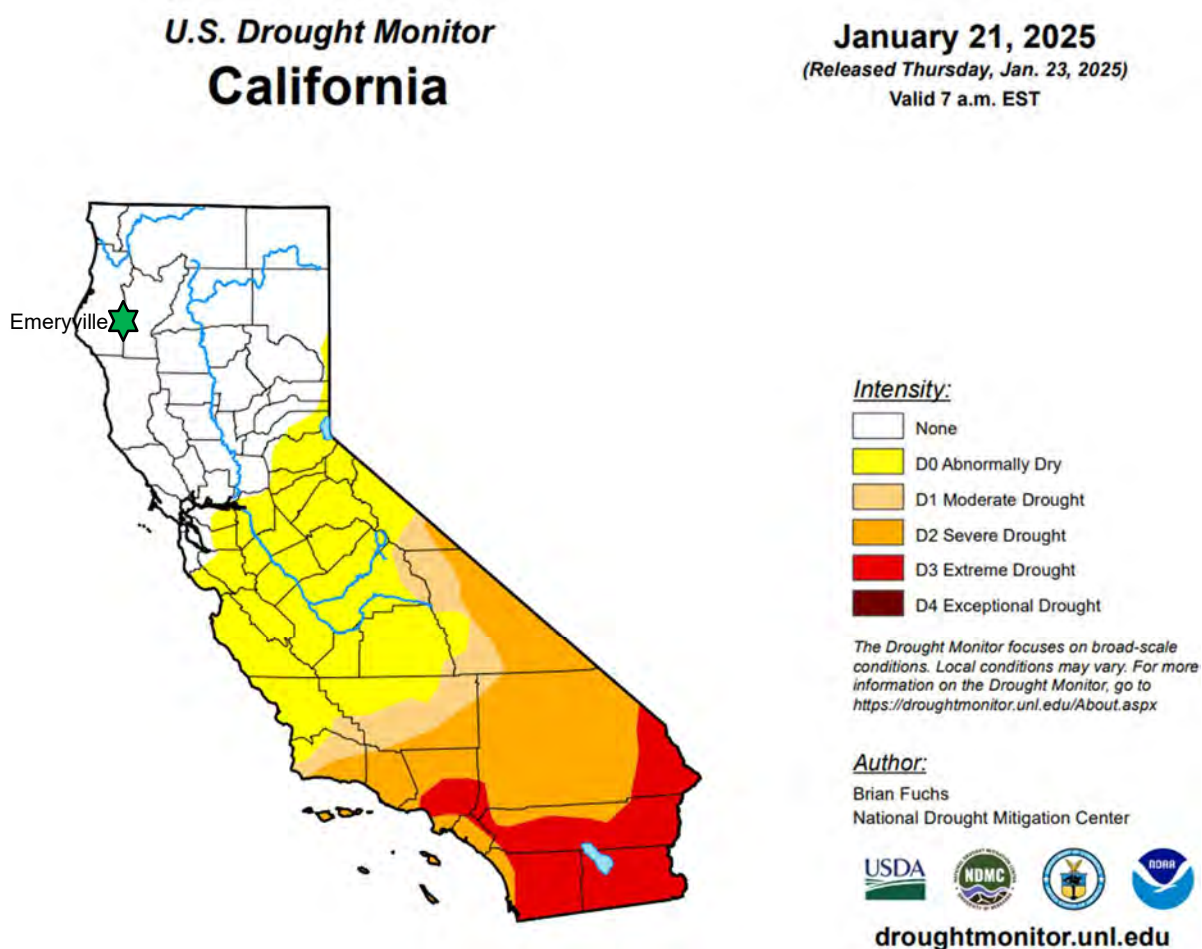


Figure 4.3.1(a). California Drought Monitor as January 21, 2025

Drought conditions are likely to become more frequent and persistent over the 21st century due to climate change.⁵⁴ With this scenario, California faces an uncertain water future as climate change will likely increase the number and severity of future droughts. The cumulative impact of climate change will result in drier conditions and could alter the

⁵³ Current California Drought Maps, U.S. Drought Monitor, (2025, Jan 21), [California | Drought.gov](https://droughtmonitor.unl.edu), accessed 2025 Jan 29

⁵⁴ 2009 California Climate Statewide Adaptation Strategy. California Natural Resources Agency, 2009.

timing and efficiency of the Bay Area water supply. An increase in temperature and a reduction in snowpack are the two most direct effects of climate change that will result in a drier state with fewer natural water resources than historically have been available.⁵⁵

Drought can increase wildfire hazards, reduce water supply for crops and livestock, and can cause subsidence due to a lowering water table. Past experiences with California droughts indicate that drought impacts are felt first by those most dependent on or affected by annual rainfall or snowpack, including firefighting agencies, ranchers engaged in dryland grazing, farmers growing crops in arid zones, rural residents relying on wells in low-yield rock formations, or small water systems lacking a reliable water source. More recently, increased tree mortality, exacerbated by drought, has resulted in millions of dead trees around the State causing hazards to people, property, and infrastructure and creating a greater risk of wildland fires.⁵⁶

Between 2002 and 2021 droughts affected more than 1.4 billion people. As of 2022, roughly half the world's population experienced water scarcity for at least part of the year, while one quarter faced "extremely high" levels of water stress. Climate change is projected to increase the frequency and severity of droughts worldwide⁵⁷

Hard-hit regions include Southern and Central Asia, and North Africa, where the situation is considered critical. Even countries with highly developed infrastructure, like the United States, are seeing water levels drop to record lows.

The Island of Oahu, Hawaii is facing a triple threat to their sole freshwater source. Less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating their water systems have significantly limited available water use for locals, and tourism may be making the situation worse.

Currently, the entire island of Oahu is considered "abnormally dry," according to the U.S. Drought Monitor. The drinking water supply is almost entirely from groundwater, which means shifting weather patterns can pose a major problem and Hawaii has been getting drier and drier, particularly since the 1980's with the consecutive dry days becoming longer and longer.⁵⁸

Mexico City is another example of what the future could possibly bring to the entire City of Emeryville, the Bay Area and the State of California. Mexico City is also on the brink of a profound water crisis.

Years of abnormally low rainfall, longer dry periods and high temperatures have added stress to an already straining water system that serves 22 million residents. Many

⁵⁵ Bay Area Landscape Draft. Association of Bay Area Governments. 2015.

⁵⁶ California State Hazard Mitigation Plan|September 2018, Section 9.1 – Page 596

⁵⁷ Water crises threaten world peace (report), 22 March 2024, [Water crises threaten world peace \(report\) | UNESCO](#)

⁵⁸ Hawaii is "on the Verge of a Greater Catastrophe," Locals Say as Water Crisis Continues" CBS News, by Li Cohen 11 April 2024, [Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues - CBS News](#)

neighborhoods only have running water part of the day, and some experts believe that the situation in Mexico City has reached such critical levels that the City could only be months away from taps running dry for huge swaths of the City.⁵⁹

Before reaching a crisis level, a prolonged drought in Emeryville could have economic, environmental and social impacts for the City. Water companies may have to spend more money on new or additional water supplies resulting in increased costs for the consumer.

Lower levels of water could cause more wildfires and loss of wetlands. There could be a threat to public safety in the form of health problems related to dust, lower water flows and poor water quality. Other possible impacts include recreational risks, effects on air quality, diminished living conditions related to energy, air quality and hygiene, compromised food and nutrition, and increased incidence of illness and disease (Centers for Disease Control and Prevention, 2012).⁶⁰

There also could be damage to landscaping and city trees as well as an increased fire hazard. At a crisis level, the City along with all the Bay Area would be severely impacted. This could result in water rationing. Water rationing would affect everyone in Emeryville - residents, businesses, the old and young and everyone in between.

SEA LEVEL RISE⁶¹

PROBABILITY – HIGH

SEVERITY – HIGH

Sea level rise will increase the likelihood and intensity of flooding in Emeryville, including more frequent storm surges, coastal flooding during high tides, rising groundwater and rapidly increasing shoreline erosion and as sea levels continue to rise the City will need to adapt the shoreline to create greater social, economic, and ecological resilience.⁶²

As identified in the City of Emeryville Climate Action Plan 2.0 2016, the 2012 National Research Council (NRC) Report Sea Level Rise for the Coasts of California, Oregon and Washington: Past, Present and Future, identified likely sea level rise estimates throughout the 21st century for the west coast of the United States based on moderate greenhouse gas emissions and continued acceleration of glacial melt patterns.

The projections applicable to Alameda County are six inches of sea level rise by 2030 (range: 2 – 12 in), 11 inches by 2050 (range: 5-24 in), and 36 inches by 2100 (range 17-

⁵⁹ “One of the World’s Biggest Cities May Be Just Months Away from Running Out of Water,” Laura Paddison, 25 Feb 2024, <https://www.cnn.com/2024/02/25/climate/Mexico-city-water-crisis-intl/index.html>

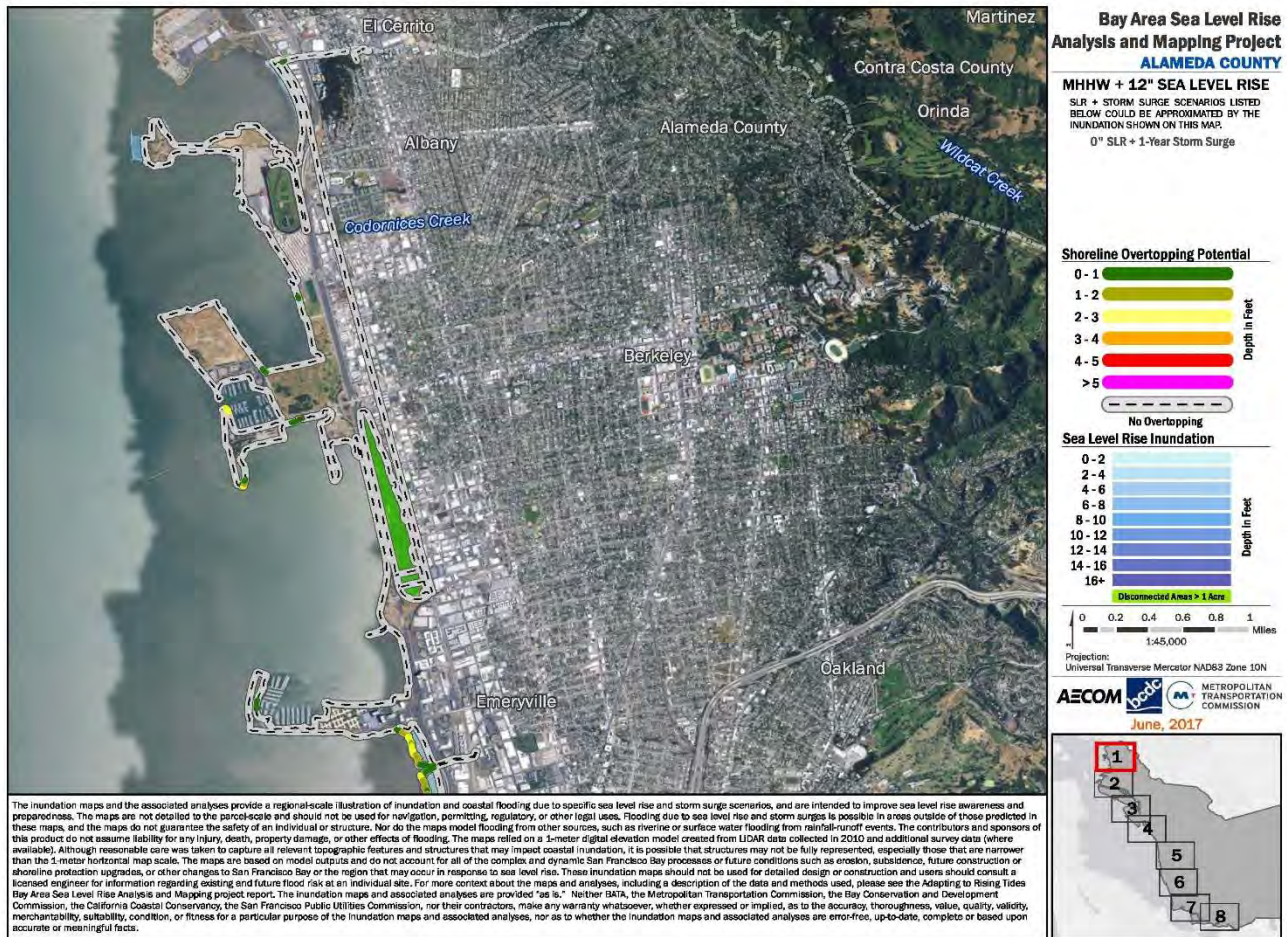
⁶⁰ City of Oakland Local Hazard Mitigation Plan, 2021 – 2026, by Tetra Tech, page 8-9 to 8-10

⁶¹ City of Emeryville. Climate Action Plan 2.0 2016. 2016. Web 17 Mar. 2017. Pages 46 – 47. <http://www.ci.emeryville.ca.us/DocumentCenter/Home/View/9327>.

⁶² SFEI Aquatic Science Center. Shallow Groundwater Response to Sea Level Rise <https://www.sfei.org/projects/shallow-groundwater-response-sea-level-rise>

66 in) relative to the year 2000.⁶³ The assets most at risk from sea level rise in Emeryville include those structures and roads located on the marina and shoreline, along with those areas neighboring the railroad to the southwest.⁶⁴ These assets include the police and fire Stations, several restaurants, high-rise office buildings, a hotel, and residential condominiums on the peninsula; the railway flooding would extend into Southern Emeryville and impact a few blocks of the area to the east of the railway, as well as a section of the Bay Street shopping center to the west.

Maps of Projected Sea Level Rise⁶⁵

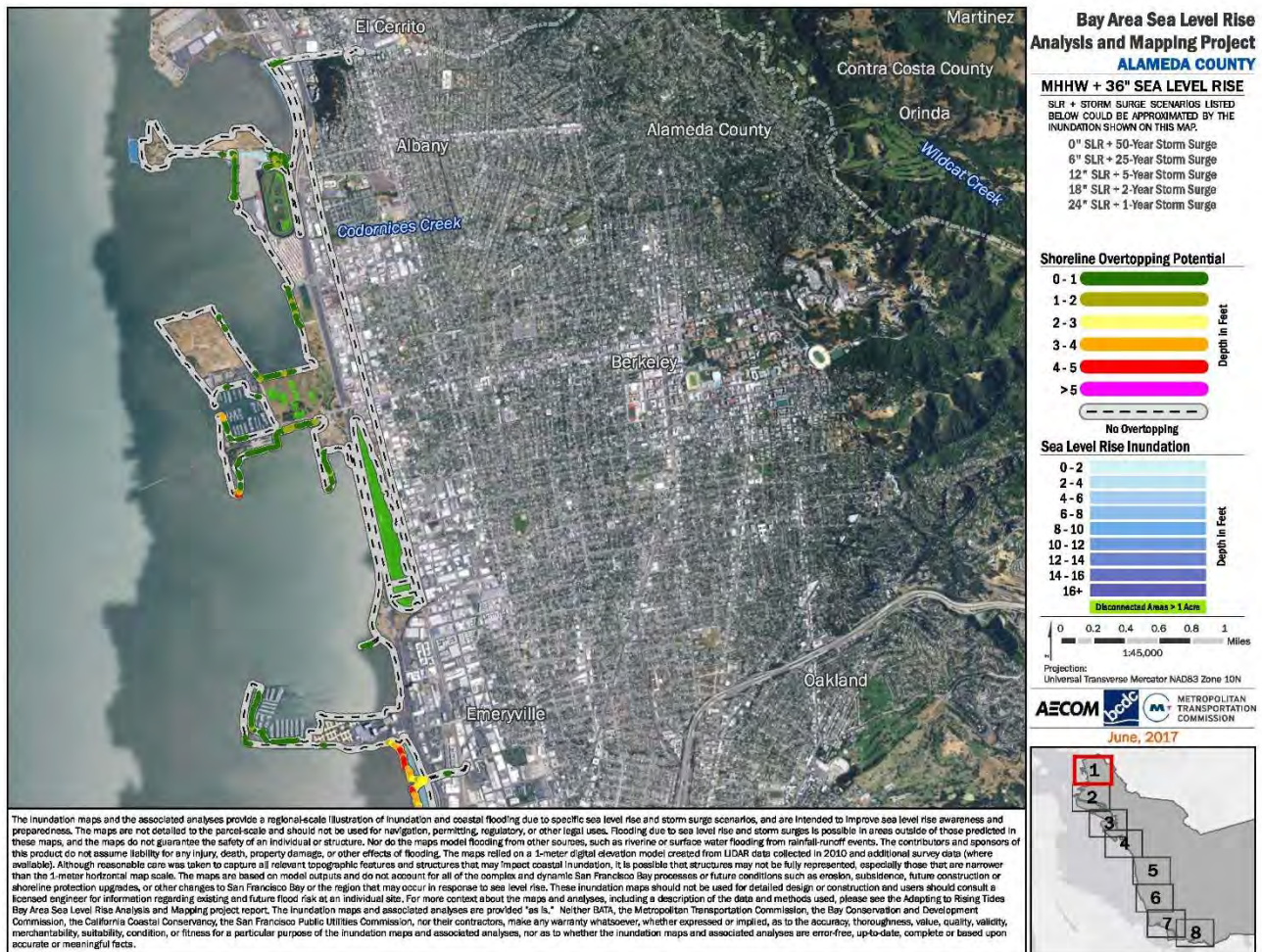


4.3.2.a (i). Projected 1 Ft of Sea Level Rise

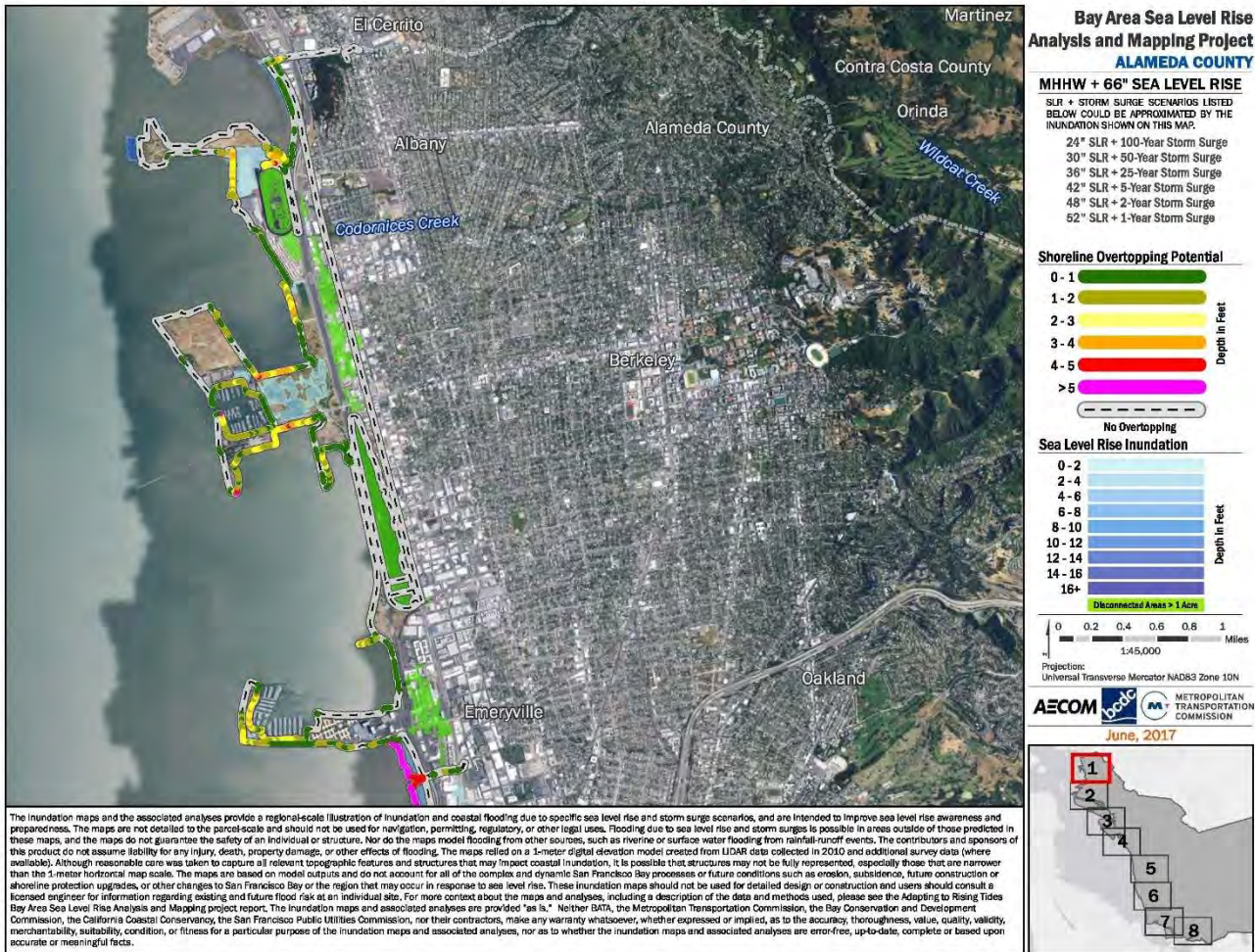
⁶³ National Research Council; Division on Earth and Life Studies; Board on Earth Sciences and Resources; Ocean Studies Board; Committee on Sea Level Rise in California, Oregon, and Washington. "Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future." The National Academies Press. 22 June 2012. Web. 17 Mar. 2017. <https://www.nap.edu/catalog/13389/sea-level-rise-for-the-coasts-of-california-oregon-and-washington>.

⁶⁴ Emeryville Climate Hazard Analysis. Four Twenty Seven Climate Solutions. August 2016.

⁶⁵ Adapting to Rising Tides. June 2017. <https://www.adaptingtorisingtides.org/maps-and-data/>



4.3.2.a (ii). Projected 3 Ft of Sea Level Rise



4.3.2.a (iii). Projected 5.5 Ft of Sea Level Rise

At this time, there is no documented measurable sea level rise along the Emeryville Marina. However, shoreline areas are suffering from erosion and eroded riprap sections which include the Emeryville crescent, the Powell Street peninsula's northerly shoreline, and the City's western shoreline extending to Point Emery, next to the West Frontage Road.

Pictures of Emeryville Shoreline Erosion



4.3.2.b Photo of Shoreline Erosion taken by Louise Engel in 2024



4.3.2.c Photo of Shoreline Erosion taken by Louise Engel in 2024

Impacts on Shallow Groundwater

As sea levels rise, the saltier groundwater that is connected to the Bay migrates landward. This pushes the inland groundwater table upwards toward the ground surface. The higher groundwater table causes groundwater to infiltrate into the storm drain system, reducing its flood conveyance capacity and placing the area at greater risk of flooding during a rainfall event.

Beyond flooding, researchers have found that groundwater rise is likely to corrode and disrupt below-grade infrastructure, increase pollution entering the San Francisco Bay, mobilize soil contaminants, and raise the risk of soil liquefaction during earthquakes.

Further sea level rise can push the groundwater table above the ground surface.

EXTREME WEATHER

PROBABILITY – HIGH

SEVERITY – HIGH

There have been changes in some types of extreme weather events in the United States over the last several decades, including more intense and frequent heat waves, less frequent and intense cold waves, and regional changes in floods, droughts and wildfires.⁶⁶ As greenhouse gas emissions increase, temperatures are expected to increase globally, placing growing stress on human health, water resources, energy systems and other critical assets.⁶⁷

Extreme Heat

The U.S. Environmental Protection Agency (EPA) defines extreme heat events as “periods of summertime weather that are substantially hotter and/or more humid than typical for a given location at that time of year.”⁶⁸ From 1970 to 2000, Emeryville experienced a daily average temperature of about 59° F, an average maximum temperature of 66.5°F and an average minimum temperature of 51.5°F. According to Climate Change models, temperatures in the Bay Area are tending toward warmer average temperatures, which translates to more extreme temperatures. In the Bay Area temperatures are expected to increase between three degrees (in a low emission scenario) and six degrees Fahrenheit (in a high emission scenario).⁶⁹

Each year, approximately 20 people die in the State of California from heat-related emergencies. In the summer of 2006, a severe heatwave resulted in 655 deaths and over 16,000 emergency room visits throughout the State over a 13-day period.⁷⁰

On September 1, 2017, San Francisco broke its all-time heat record with a temperature of 106° F. Temperatures topped out in the Oakland/Emeryville area at 101° F.

In early September 2022, a record setting heat wave occurred in California and even broke records in the Bay Area. Fairfield and Livermore both recorded 116°, Santa Rosa 115°, Napa 115 ° and Redwood City 110°. The Oakland/Emeryville area experienced

⁶⁶ Melillo, Jerry M., Terese C. Richmond, and Gary W. Yohe. "Climate Change Impacts in the United States: The Third National Climate Assessment." GlobalChange.gov. US Global Change Research Program, 2014. Web. 17 Mar. 2017. <http://www.globalchange.gov/browse/reports/climate-change-impacts-united-states-third-national-climate-assessment-0>.

⁶⁷ Emeryville Climate Hazard Analysis. Four Twenty Seven Climate Solutions. August 2016. Page 10.

⁶⁸ US Environmental Protection Agency. Excessive Heat Events Guidebook. 2006. Web. 17 Mar. 2017. <https://www.epa.gov/heat-islands/excessive-heat-events-guidebook>.

⁶⁹ California Energy Commission. Climate Change Scenarios and Sea Level Rise Estimates for the California 2008 Climate Change Scenarios Assessment. By Dan Cayan, Mary Tyree, Mike Dettinger, Hugo Hidalgo, Tapash Das, Ed Maurer, Peter Bromirski, Nicholas Graham, and Reinhard Flick. California Climate Change Center, 2009. Web. 17 Mar. 2017. <http://www.energy.ca.gov/2009publications/CEC-500-2009-014/CEC-500-2009-014-D.PDF>.

⁷⁰ Be Prepared for Hot Weather in California and Beat the Heat. Web. 2019 State of California. <https://www.caloes.ca.gov/ICESite/pages/summer-heat-resources.aspx>

several days of over 90° topping out at 102° on September 6th. According to data from the National Oceanic and Atmospheric Administration, September 2022 was the second warmest September over the past 130 years. July 2024 was a brutally hot month and the hottest month on record for Alameda County in the past 130 years.⁷¹

Historically, Emeryville averages less than one day per year exceeding 90°F; however, this number could climb exponentially after mid-century. According to the City's Climate Action Plan 2.0 2016, by century's end the number of days per year above the 90°F could be up to 32 days a year if no changes are made in greenhouse gas emissions.

As most homes in Emeryville and other communities by the Bay do not have air conditioning, this increase in the number of extreme heat days would impact a larger number of households in the area, especially as the population ages. Although extreme heat will affect the entire Emeryville community, those most impacted in the City would be the very young, the elderly and the homeless. Heat-related illnesses can range from heat cramps to heat exhaustion to a life-threatening heat stroke. In the event of a heat wave, the City will need to prepare to open additional cooling centers to accommodate more individuals.

Freeze

Freezing temperatures in Emeryville are rare, and the number of very cold days is expected to decrease as temperatures increase. Under both high and low emissions scenarios, Emeryville is unlikely to experience a freeze throughout the entire century.

Atmospheric Rivers

Atmospheric rivers are narrow corridors of concentrated water vapor in the atmosphere that can produce intense rainfall or snowfall. As global temperatures rise, the City of Emeryville can expect more intense atmospheric rivers, leading to an increase in heavy precipitation events. These heavy downpours can cause flooding, mudslides and avalanches in California.

California experienced a historic run of nine consecutive atmospheric rivers in the span of three weeks in December 2022 and January 2023.⁷² As a result, the County of Alameda issued a Proclamation of a Local Emergency on January 6, 2023. On January 9, 2023, the City of Emeryville issued their own Emergency Proclamation of Existence of a Local Emergency for these two storms. On January 14, 2023, amended on January 17, 2023, the President declared a major disaster for the State of California (FEMA-4683-DR-CA). However, at that time, Alameda County was not included in the disaster declaration. Subsequently, on September 11, 2023, FEMA issued a public notice (DR-4683-CA Public Notice 005) that Alameda County was one of the counties now

⁷¹Porter, G., "July Scorches State as Counties Set Records," San Francisco Chronicle, page A5, 11 Aug 2024

⁷² Cao, Qian & The Conversation US, (2024 Feb 4), What are Atmospheric Rivers, and How are They Changing?, Scientific American <https://www.scientificamerican.com/article/what-are-atmospheric-rivers-and-how-are-they-changing/>

designated as being eligible for public assistance as a result of the above-mentioned storms.

Another bomb cyclone struck parts of California in March 2023. This storm brought damaging wind, downed trees and power outages affecting the Bay Area and other regions. These storms caused severe flooding, record snowfall, and copious rainfall across California and caused \$4.6 billion in damages.⁷³

HAZARDOUS MATERIALS

PROBABILITY – LOW

SEVERITY – HIGH

Hazardous materials consist of substances that by their nature, lack of containment, and reactivity, have the capability of inflicting harm. Hazardous materials pose a threat to the public's health as well as to the environment when improperly managed and can be toxic, corrosive, flammable, explosive, reactive, an irritant or a strong sensitizer. Hazardous material substances also include certain infectious agents, radiological materials, oxidizers, oil, used oil, petroleum products, and industrial solid waste substances.

Hazardous materials can pose a threat where they are manufactured, stored, transported or used. They are used in almost every manufacturing operation and by retailers, service industries and homeowners. The City historically had a high concentration of industrial and manufacturing facilities. However, most of these facilities and industries ceased operations in the 1970's. This left the City with a lot of contaminated land that could not be redeveloped without remediation. In 1995, the US EPA initiated a program to help states, communities and others to redevelop abandoned contaminated land. The City was able to take advantage of this program and as of 2008, more than 40 sites totaling 240 acres had been targeted for cleanup and have been or are identified for redevelopment. These properties have been largely converted or will be converted to other uses, such as office, commercial retail, and residential.⁷⁴

A hazardous materials release in the City of Emeryville could occur by a ruptured gas or petroleum pipeline, illegal dumping into the sewer or storm-drain system or into Temescal Creek, legal transportation of chemicals by railroad (train derailment), commercial truck carrier (accident on a City street or on Interstate 80/580), a spill from a commercial or recreation vehicle in the Bay, or the handling of chemicals at a licensed facility.

⁷³ 2024 June 26, Office for Coastal Management. Hurricane Costs. 2023: Nationwide Weather Events. <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html#:~:text=West%20Coast%3A%20Late%202022%20through,Total%20costs%3A%20%244.6%20billion.https://coast.noaa.gov/states/fast-facts/huricae-costs.html>

⁷⁴ City of Emeryville. Emeryville General Plan. City of Emeryville Planning Division. October 2009. Web. 17 Mar. 2017. Pages 6 – 15. <http://emeryville.org/DocumentCenter/Home/View/1016>.

PIPELINES

As previously noted, there are two aviation and multi-purpose pipelines that run through Emeryville, along the railroad tracks from Richmond to the Oakland Airport. These pipes are made of high-pressure welded steel, installed primarily in the 1960s, although a few segments were installed in the 1950s. Each pipeline has automatic, remote control and other manual valves along its length and the flow can be shut down within minutes.

The City has a natural gas transmission line, similar to the gas transmission line that exploded in San Bruno in 2010, that runs through the City underneath the railroad tracks alongside the jet fuel line. As a consequence of the San Bruno rupture, PG&E transformed their gas operations to prevent a similar incident from happening again.

TRANSPORTATION – RAIL, ROADS AND VESSELS

Approximately 30 freight trains pass through Emeryville every day. At this moment in time, no oil or coal is carried through the City, but other hazardous materials are transported on a daily basis. Over the past 2 decades, many multi-family housing units have been built on either side of the railroad tracks. The following multi-unit housing developments are located next to or within a block of the railroad tracks:

- 45th Street Artist Cooperative (Founded in 1973; 3 buildings, 60 studios)
- Bridgewater Condominiums (Built in 1988; 3 stories, 424 Units)
- Artistry Apartments (Built in 1989; 5 stories, 261 units)
- Emeryville Warehouse Lofts (Built in 1999; 5 stories, 141 units)
- The Terraces at Emery Station (Built in 2003; 5 stories, 101 units)
- Courtyard Apartments (Built in 2004; 4 stories, 331 units)
- Bay Street (Built in 2007; 4 stories; 284 units)
- Blue Star Corner Townhomes (Built in 2007; 20 three level townhouse units)
- Emme Apartments (Built in 2014; 4 stories, 190 units)
- Avalon Apartments (Built in 2021; 6 stories; 289 units)
- Bayview Emeryville Apartments (Built in 2023; 7 stories; 186 units)
- The Emery Apartments (built in 2023; 5 to 7 stories; 500 units)

In addition, IKEA, Bay Street Shopping Center, Hyatt House Hotel, Hyatt Place Hotel, Grifols pharmaceutical laboratories, Novartis pharmaceutical laboratories, the EmeryStation Office and Laboratory complex and the Public Market are also located in close proximity to the railroad tracks.

On April 19, 2020, six train cars derailed in Emeryville. Thankfully, three of the cars were refrigerated box cars and the other three were empty tanker cars so there was no threat to the community.

On July 29, 2020, in the State of Arizona a freight train carrying hazardous materials derailed and caught fire on a bridge, causing the south side of the bridge to collapse.

On October 18, 2021, a freight train derailed near the Port of Oakland toppling four cars carrying sulfuric acid. Fortunately, the dangerous chemicals did not leak onto the tracks.

However, the community of East Palestine, Ohio was not as lucky. On February 3, 2023, 50 cars of a freight train carrying hazardous materials derailed near the village of East Palestine, Ohio, sending toxic chemicals into the air, soil and creeks in the area. Eleven of the derailed cars were transporting hazardous materials, five of which contained vinyl chloride, a highly volatile colorless gas produced for commercial uses. Several other cars were carrying ethyl acrylate and isobutylene, which are considered to be very toxic and possibly carcinogenic, according to the Centers for Disease Control and Prevention and the National Institutes for Health.⁷⁵

Residents were forced to evacuate their homes due to the risk of toxic exposure. In the immediate aftermath, emergency responders warned local residents to stay indoors and avoid exposure to the toxic fumes. On February 6, three days after the accident, the railroad company began a “controlled release” of chemicals that were in five of the cars, warning people in certain areas to evacuate to avoid serious injury, illness or death.⁷⁶

A train derailment anywhere along the City’s one mile of train track could pose a significant risk to Temescal Creek, to those living and or working in close proximity to the tracks (approximately 2,526 units) as well as to the community as a whole.

Hazardous materials transported through Emeryville by truck can also pose a significant public safety hazard. Interstate 80 is located at the foot of the Bay Bridge and the MacArthur Maze which makes it vulnerable to both rail and truck accidents involving hazardous materials. It is one of the most heavily traveled roads in the Bay Area. The risk of a transportation related accident is mitigated by the many federal and state safety precautions and regulations, and by the fact that accidents on freeways are likely to be detected and reported quickly.⁷⁷ In the event of a spill, or other accidental release on Interstate 80/580, the Alameda County Fire Department and/or Oakland Fire Department would be the first responders, while Caltrans would assume responsibility for the subsequent cleanup.

Hazardous materials incidents from spills from commercial or recreational vessels in the Bay have impacted the San Francisco Bay Area from time to time. On November 7, 2007,

⁷⁵ Deliso, M. (2024, June 25). East Palestine Derailment: Timeline of Key Events in Toxic Train Derailment. ABC News. Retrieved July 29, 2024, from <https://abcnews.go.com/US/east-palestine-derailment-timeline-key-events-toxic-train/story?id=97522161> <https://abcnews.go.com/US/east-palestine-derailment-timeline-key-events-toxic-train/story?id=97522161>

⁷⁶ Lucas, J. (2023 April 4), Impacts of the East Palestine Train Derailment Mapped, UrbanFootPrint, Retrieved July 29, 2024, from [Impacts of the East Palestine Train Derailment Mapped | UrbanFootprint](https://www.urbanfootprint.com/impacts-of-the-east-palestine-train-derailment-mapped)

⁷⁷ City of Oakland. 2016-2021 Local Hazard Mitigation Plan. 7 June. 2016. Web. 17 Mar. 2017. Page 96. <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak058455.pdf>.

the container ship Cosco Busan struck the Delta Tower of the San Francisco Bay Bridge during a thick fog. Over 53,569 gallons of heavy fuel oil spilled into the San Francisco Bay affecting birds, marine mammals, fish and humans. Several months later in January 2008, oil from this spill turned up on the Emeryville peninsula shoreline.

BIOTECH

Several large office complexes with state-of-the-art laboratories have been built in the City over the past 27 years. The Berkeley-Emeryville Bio Cluster has one of the largest concentrations of biotech firms in the state. Some 100 firms occupy more than 1.45 million square feet of commercial bio-lab space between the two cities. As of 2024, there are 30 biotech facilities operating in the City, some of which use hazardous materials in their work. An accident in these types of biotech facilities could have an impact on the surrounding housing and other businesses.

DEVELOPMENT DUST / HAZARDOUS WASTE

The City of Emeryville has been under constant development since the 1970s when the City's make-up began to change. As older industries began to move out of the City or close up shop altogether, new development took their place, with construction still continuing in the City to this day. Even though construction projects are typically short-term or temporary in duration, project generated emissions could impact the air quality and/or global climate change.

The U.S. EPA, the California Air Resource Board and the Bay Area Air Quality Management District all have guidelines and regulations to control development dust at construction sites. In addition, the City also has conditions of approval regarding construction dust and waste that all development projects must adhere to when working on a development project.

INFRASTRUCTURE / UTILITY FAILURE

PROBABILITY – HIGH

SEVERITY – HIGH

Disruptions to communications, water, and transportation networks can cause emergencies to cascade into disasters. In day-to-day operations, the City is heavily reliant on local, regional, state and interstate utility and transportation systems. For the City to remain functional, it must be connected to operating water, power and sewer systems. Nearly all water, wastewater and communication utilities rely on electricity to function.

ENERGY SHORTAGE

Although California has one of the lowest rates of per capita energy consumption in the country (mainly because of our mild climates and energy efficiency initiatives), we still have the second highest total energy demand in the country due to our large population. As such, California imports more electricity than any other state.

Over half of electricity consumption in California is fueled by natural gas, 14% comes from hydroelectric power, 11% comes from renewable resources and a small percentage is generated using nuclear power.⁷⁸ A malfunction in any one of these systems, i.e. a failure of a transmission line of natural gas or a drought that decreases the amount of electricity available from a hydroelectric plant could result in an energy shortage.

The State has periodically experienced energy shortages that resulted in a disruption of services and/or rolling blackouts. For example, in 2000 and 2001, the state suffered a series of rolling blackouts as a result of several factors, including deregulation of electric utilities and a drought in the Pacific Northwest. In 2005, approximately 500,000 customers were left without power when a transmission line failed. In September 2011, a minor short circuit during a repair of a substation in Arizona left 1.4 million people in the San Diego area without power.

In 2016, Southern California residents were being asked to conserve electricity because without conservation, power plants could run out natural gas fuel and trigger rolling blackouts. In August 2020, hundreds of thousands in California lost power in rolling blackouts amid a heat wave, the first-time outages were ordered in the State due to insufficient energy supplies in nearly 20 years.

The City still remains susceptible to energy supply disruptions that can occur as rolling blackouts where customers temporarily lose power, as well as brownouts where the voltage level falls below the normal minimum level specified for the system. However, the threat of such disruptions has lessened since the State of California implemented emergency technology and energy conservation programs and adopted measures to mitigate energy market manipulation and reduce distribution bottlenecks. However, as the City relies on energy as a critical infrastructure for its day-to-day business activities, any unplanned or rolling blackout could have a significant impact on the City's operations and its level of productivity.

PUBLIC SAFETY POWER SHUTOFFS

Over the last decade, the State of California has experienced increased, intense, and record-breaking wildfires due to climate change. These wildfires have resulted in a devastating loss of life and billions of dollars in property and infrastructure damage. Since

⁷⁸ Smilinich, S., Dias, S , (3 April 2024), *Case Study: California Blackouts*, National Geographic Education, Retrieved July 27, 2024, from [Case Study: California Blackouts \(nationalgeographic.org\)](https://www.nationalgeographic.org/education/case-study-california-blackouts/)

2017, utility lines and/or equipment have been blamed for more than 30 wildfires that destroyed more than 23,000 homes and businesses and killed more than 100 people.

The most destructive was the Camp Fire in 2018. The Camp Fire caused 85 civilian fatalities and injured 12 civilians and five firefighters. It destroyed more than 18,000 structures and most of the town of Paradise.

As a result, in 2019 PG&E instituted their Public Safety Power Shutoffs (PSPS) Program where they will preemptively turn off customers' power in areas with heightened fire risk when weather forecasts indicate gusty winds and dry conditions.⁷⁹

PSPS events can leave communities and essential facilities without power which can cause hardships, especially for vulnerable communities or those with access and functional needs.

Due to Emeryville's topography, PSPS events are rare in Emeryville.

TERRORISM (UTILITY / INFRASTRUCTURE)

In 2013, someone with knowledge of how a major electrical substation works, snuck into a sensitive area of a Pacific Gas & Electric (PG&E) substation near San Jose in the middle of the night, cut fiber cables to knock out 911 and cell phone service, and then took more than 100 shots from a high-powered rifle which caused the transformers to overheat and shut down, knocking out the substation. This "attack" caused \$15 million in damage.

Although it was later determined that this was not a "terrorist" attack according to the FBI, it did raise awareness of the grid's vulnerability to physical attack. After this shooting attack, PG&E enhanced its security measures at multiple substations in the Bay Area. PG&E Substations D & L serve Emeryville and are located in Oakland in the Temescal and West Oakland neighborhoods respectively.

FLOODS

PROBABILITY – LOW

SEVERITY – MEDIUM / HIGH

Emeryville lies in the Central Basin within the San Francisco Bay hydrologic area. Although the topography of the City is generally flat, its elevations range from 0 to 60 feet above mean sea level and slopes down slightly to San Francisco Bay, which is a major receiving body. The other surface water feature in the City is Temescal Creek which flows west from the East Bay Hills into San Francisco Bay.

⁷⁹ Flores, J., (2021 October 10), San Francisco Chronicle, *PG&E Public Safety Shutoffs: What You Need to Know*, (accessed July 31 2024), [PG&E public safety power shut-offs: What you need to know \(sfchronicle.com\)](https://www.sfchronicle.com/bayarea/article/pg-e-public-safety-shutoffs-what-you-need-to-know/17700000)

The City lies in the San Francisco Bay watershed. San Francisco Bay is the most prominent surface water body that receives surface water runoff from the City and groundwater discharge from the East Bay Plain. The southern portion of the Bay Shoreline in the City includes a salt marsh.

Temescal Creek, a main drainage outfall within the City is a channelized creek draining Lake Temescal (located in Oakland). It flows through the City, passes under Interstate 80, and discharges into San Francisco Bay in the Emeryville Crescent. The creek runs underground through most of the City. The creek flows are regulated by the Lake Temescal Reservoir.

The latest Federal Emergency Management Agency (FEMA) map of Emeryville's flood risk potential is from December 2007 and went into effect on August 3, 2009. As shown in Figure 4.5 (a), the majority of Emeryville is designated as Zone X (i.e. areas outside the 500-year flood zone). Zone V, the Coastal High Hazard Area, only includes City coastal and tideland areas, which do lie within the 100-year flood zone; however, these areas do not contain urban uses or structures. Flooding in the City could also occur as a result of storm-induced flooding, inundations from a tsunami and dam failure as discussed below.

Due to the geographical location of the City of Emeryville, there are currently no identifiable residential, commercial, or institutional properties that have experienced repetitive losses related to flooding within any 10-year period since 1987. Estimated risk for flooding in the City is one percent chance of flooding in the 100-year floodplain (once every 100 years) and a 0.2 percent chance in the 500-year floodplain.⁸⁰

The 100-year flood zone does not intersect with areas of the city where the highest intensity of residential and commercial development is anticipated. The 500-year flood zone overlaps the area around the railroad, at the south boundary, and the marina. Along the railroad, this could include Halleck Street, surface parking, and existing commercial and residential uses. At the marina, flooding areas could affect Powell Street, surface parking, and the Marina facilities.

While not identified by FEMA, there may be a risk of flooding in the neighborhoods along Temescal Creek, aligning with the 100- and 500-year flood zones shown east of Adeline Street. This area is characterized by single units, duplexes, and low-density multifamily, and is not intended to change substantially.

The flood zones overlap with the most socially vulnerable portions of Emeryville, identified by the CDC in Figure 4.5 (a). Existing affordable and below-market units are not in the 100- or 500-year flood zones.

⁸⁰ Emeryville Climate Change Chapter. Berkeley: Four Twenty Seven Climate Solutions, 28 Dec. 2016.

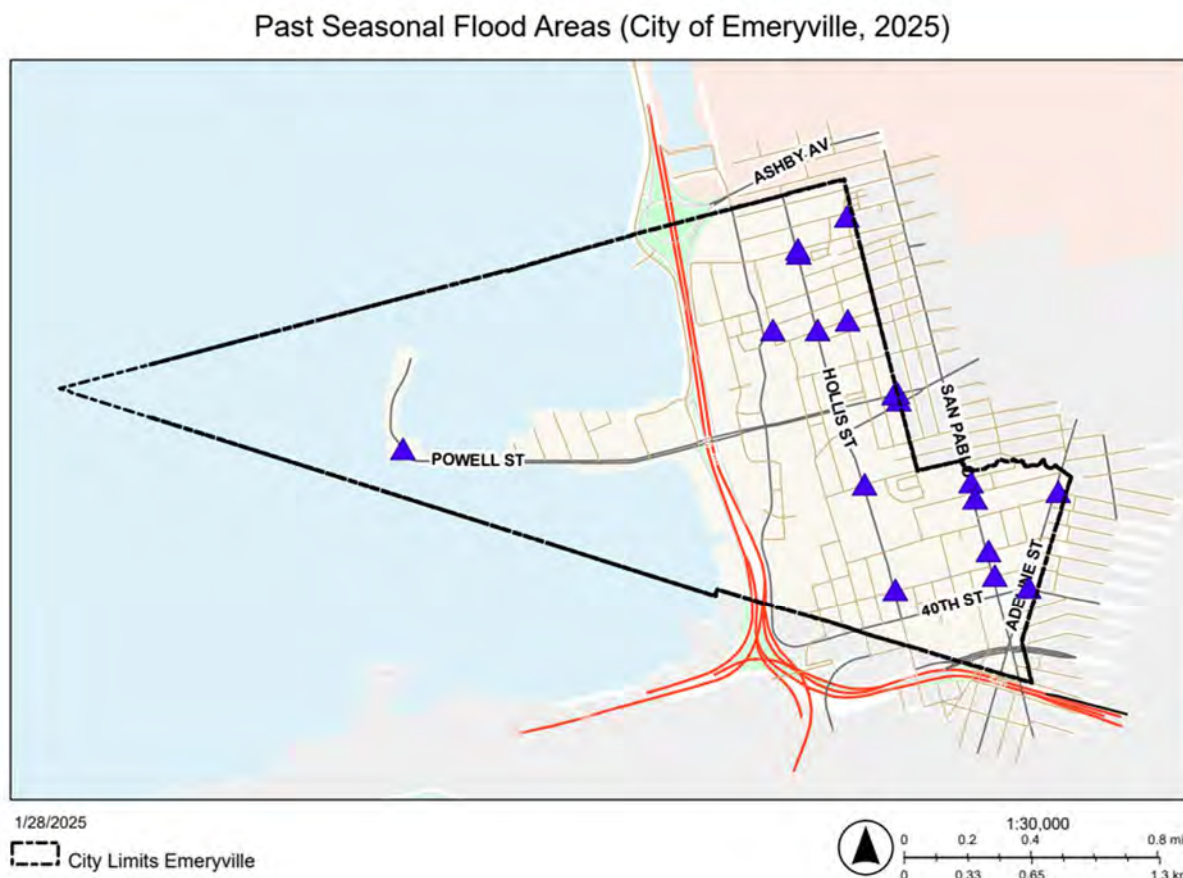


Figure 4.5.(a)

The City does participate in the National Flood Insurance Program but as highlighted by Figure 4.5 (b) FEMA Flood Hazard Map, the City of Emeryville is not zoned where it would be mandated that property owners are required to purchase flood insurance.

The City enforces FEMA and NFIP regulations through the Emeryville Municipal Code Title 8, Chapter §8-21 Floodplain Management. Only Zone V is considered a Special Flood Hazard Area and subject to the requirements of this chapter. Although Zone V is the coastal waters and tideland areas, the City's Floodplain Management Ordinance requires a development permit be obtained before any construction or other development can occur in this area and any construction or development in this area must be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

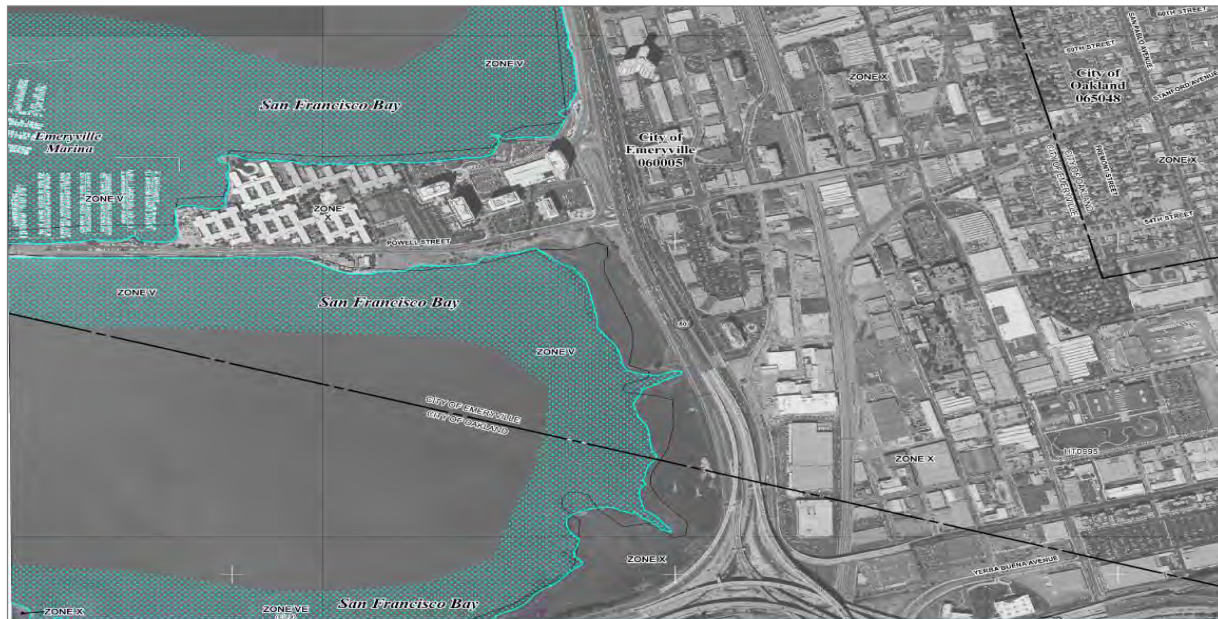


Figure 4.5 (b). FEMA Flood Hazard Map

SEASONAL FLOODING

A flood is defined as an overflowing of water onto an area of land that is normally dry. Flooding occurs when streams, rivers, lakes, reservoirs, or coastal water bodies are abnormally high and overflow into adjacent low-lying areas, areas at risk of recurring floods are known as floodplains. Floods generally occur from natural causes, usually weather-related, often in conjunction with a wet or rainy winter or with sudden and very heavy rainfalls. Homes, businesses as well as roads and other infrastructure can all sustain damage as the result of seasonal flooding.

Coastal flooding is generally associated with Pacific Ocean storms from November through February when high tides coincide with strong winds both on the outer coast and within the Bay. Floods can, however, result from human causes such as a dam failure, or a catastrophic failure of a large diameter water main.

Emeryville's flooding issues are more a function of the storm drain system being overwhelmed at certain inlets than proximity to the waterfront, Temescal Creek or other bodies of waters. The City has several sites that have been susceptible to floods, such as the areas east of the Southern Pacific railroad tracks, including the Hollis Street business areas and the Federal Post Office property.

Low lying areas affected by tidal and high winds have been and are susceptible to damage and flooding in the west peninsula shoreline area. Prior to 1963, periodic flooding and erosion occurred along Temescal Creek resulting in extensive property damage. The floodplain of the creek was then incorporated into Alameda County Flood Zone 12, most of the length of the creek was put into an underground culvert, and a deeper and wider concrete channel was constructed to contain the 100-year flood level.

On February 25, 2004, the City experienced a winter storm which caused flooding at a magnitude that had not been seen in recent memory. The storm generated a rain event with an intensity of at least a 25-year design storm, combined with high tide. Emeryville's Drainage Basin 27 had streets that were flooded to depths of greater than two feet. The streets impacted were LaCoste Street, 62nd Street, Overland Drive and 64th Street which included the Emeryville Post Office on 62nd Street. Cars that were parked along these streets were damaged by the flood waters, but no businesses suffered water intrusion. Access to businesses located on these streets was affected for several days until the waters receded.

On January 20, 2010, the City again experienced flooding conditions on the above referenced streets, although not as severe conditions as in 2004. As in the 2004 flooding, no businesses suffered water intrusion, but access to these businesses was severely limited due to the flooded streets.



2010 flooding along 62nd Street, Emeryville, looking west



Previous flooding on 61st Street, Emeryville

To mitigate any future flooding in this area, the Alameda County Flood Control District, working with the City, designed a new flood control bypass system to alleviate the flooding on the above-mentioned streets. This new underground system called for new connections to the existing drainage system to pipe storm water off the streets and into San Francisco Bay. Construction for this project cost \$8.5 million and was completed in November 2010.⁸¹ This area has not suffered any flooding since the completion of this project.

Impacts from seasonal flooding could include water intrusion into homes and businesses and streets becoming impassable, and damaged due to flooding. This damage could have an economic impact on residents, businesses and the City.

⁸¹ Alameda County Flood Control & Water Conservation District, Report to the Community Fiscal Years 2011 & 2012, Page 5

TSUNAMIS

A tsunami is a wave, or a series of waves, caused by an underwater earthquake, landslide or volcanic eruption. When a large, submarine earthquake (magnitude 8.0 or higher) occurs it creates a significant upward movement of the sea floor resulting in a rise or mounding of water at the ocean surface. This mound of water moves away from its center in all directions as a tsunami. Tsunamis are dangerous because they can strike with tremendous force and little warning, and they can also devastate coastal communities. They are a significant threat to human health, built and natural environments, and local, regional, and national economies.⁸²

Tsunamis affecting the Bay Area can result from offshore earthquakes within the Bay Area, or from very distant events. While it is most common for tsunamis impacting the Bay Area to be generated by faults in Washington and Alaska, local tsunamis can be generated from local faults running underwater (such as the small tsunami that was triggered by the 1906 earthquake). The San Andreas Fault runs along the coast off the Peninsula and the Hayward Fault runs partially through San Pablo Bay.

Tsunamis generally impact the Pacific Coast of California, and reports of tsunamis entering the San Francisco Bay are rare. However, on March 11, 2011, as a result of an earthquake off the coast of Japan, a half meter-tall surge was observed entering the waters off Emeryville at 9:38 am (See figure 4.5.2 (a)). As there are no structures or docks located on that side of the peninsula, there was no reportable damage in Emeryville, although there was minor damage at the Berkeley Marina.

⁸² NTHMP Tsunami Information Guide March 2019, Presented by the National Tsunami Hazard Mitigation Program, Page 7



Figure 4.5.2 (a). Picture taken by Steve Winter March 11, 2011

The Great 1868 Earthquake on the Hayward Fault is reported to have created a seiche within the Bay (a seiche is a tsunami that occurs within an enclosed body of water). It is unknown whether the seiche impacted the area that is now the City of Emeryville.

The Emeryville General Plan – Chapter 6: Conservation, Safety and Noise describes the tsunami hazard in Emeryville as follows: “Tsunamis are caused by submarine seismic or volcanic disturbances. The U. S. Geological Survey estimates that a 20-foot wave at the Golden Gate Bridge (an event estimated to possibly occur once in 200 years) could potentially cause a run-up of a 10-foot wave in the Emeryville Peninsula and the shoreline area.”

The probability of a tsunami affecting the City of Emeryville is low, given the rarity and unpredictability of the hazard. Table 4.5.2 (b) provides information on historical tsunami events that have occurred in the San Francisco Bay Area. Most tsunami events affected locations in San Francisco, Oakland, Berkeley, and Alameda which are all within a 10-mile radius of Emeryville.

Notable Historical Tsunamis in the San Francisco Bay Area

Run-up amplitude, in feet,
above normal tide
conditions

OBS = observed tsunami
activity
NR = No damage or severe
conditions reported

- Distant Source -
Tsunamis without felt
earthquakes

- Local Source -
Earthquake and tsunami
together

| Date | Magnitude-Source area | Tsunami location | Run-Up/Amp | Remarks |
|------------|---|------------------|------------|---|
| 2/15/1856 | M5.5 - SF Bay (possible submarine landslide) | San Francisco | 3 ft | "...water in the bay is exceedingly thick...by throwing up of mud and sand at bottom of bay..." |
| 8/13/1868 | M8.5 - Chile | SF-Fort Point | 1 ft | NR |
| 10/21/1868 | M6.8 - Hayward Fault (possible submarine/subaerial landslide) | SF-Cliff House | OBS | "...decided commotion in the ocean...wave sent inland..." |
| 3/31/1898 | M6.2 - Hayward-Rodgers Creek Fault crossing Suisun Bay | Oakland | 1 ft | "churned" water may be from storm activity, not tsunami |
| 4/1/1946 | M8.8 - Aleutian Islands | SF-Presidio | 1 ft | NR |
| 11/4/1952 | M9.0 - Kamchatka | San Francisco | 2 ft | NR |
| 3/9/1957 | M8.6 - Aleutian Islands | Alameda | 1 ft | NR |
| 5/22/1960 | M9.5 - Chile | San Francisco | 1 ft | NR |
| 3/28/1964 | M9.2 - Alaska | San Francisco | 2 ft | San Francisco ferry service disrupted by a current "running like the Mississippi River" |
| | | Alameda | 1 ft | NR |
| | | San Francisco | 4 ft | NR |
| | | Alameda | 2 ft | NR |
| | | Oakland | 4 ft | NR |
| | | San Rafael | 4 ft | Multiple docks damaged; boats sunk and damaged |
| | | Sausalito | 6 ft | Docks/boats damaged; minor inundation on dry land |
| 2/27/2010 | M8.8 - Chile | San Francisco | 1 ft | NR |
| 3/11/2011 | M9.0 - Japan | San Francisco | 2 ft | Two piles broken; boats heeled over |
| | | Alameda | 2 ft | 4-6 knot currents but no damage reported |
| | | Berkeley | 2 ft | \$80K in damages to docks and piles |
| | | Richmond | 1 ft | 5-6 knot currents with buoys displaced |
| | | Sausalito | 4 ft | Minor damage to house boats and marinas |
| 1/15/2022 | Tonga-Region Volcanic Eruption | San Francisco | 1 ft | NR |
| | | Alameda | 1 ft | NR |
| | | Berkeley | 1 ft | Strong currents observed at harbor entrance |
| | | Richmond | 1 ft | NR |
| | | Mill Valley | 1-2ft | Minor flooding and damage to docks |



Table 4.5.2 (b). Notable Historical Tsunamis in the San Francisco Bay Area⁸³

As indicated by the table, the most damaging tsunamis in Alameda County history have been a result of tsunamis generated from high scaled earthquakes in the Alaska-Aleutian Islands region. The combination of an earthquake and tsunami together, such as the magnitude 6.8 Hayward Fault and magnitude 6.8 Hayward-Rodgers Creek Fault, contained the highest potential of generating tsunami damage.

On December 5, 2024, at 10:51 am, the National Weather Service issued a tsunami warning for the California coast from Davenport to the Oregon border, which included Emeryville and surrounding jurisdictions after a large earthquake struck 45 miles off the northern California coast at 10:44 am. The warning was lifted at 11:55 am when it was determined that there was no tsunami threat.

The following infographics show the different phases of tsunamis and the impact each phase would have on the City and its at risk populations.

⁸³ Infographic provided by Jacqueline Bott, PG, CEG, Engineering Geologist and Nicholas Graehl, Engineering Geologist, California Department of Conservation. California Geological Survey, Tsunami Unit.



Table 4.5.2 (c) above (d) below Infographics from ESRI June 2022 Phase 1 and Phase 2 Tsunami Inundation Areas and At Risk Population Profiles for Emeryville



In Phases 1 and 2, no structures or members of the community are at risk from a tsunami. However, that does change in Phase 3 and the Max Phase as indicated in the infographics below:



Table 4.5.2 (e) Infographics from ESRI June 2022 Phase 3 Tsunami Inundation Areas and At Risk Population Profiles for Emeryville



Table 4.5.2 (f) Infographics from ESRI June 2022 Max Phase Tsunami Inundation Areas and At Risk Population Profiles for Emeryville

These maps estimate areas of Emeryville that could experience inundation following a tsunami and that includes the peninsula and Highway 80 all the way up to and a little past the railroad tracks in one area.

All five hotels in the City as well as two large retail shopping areas are located in the inundation zone. City facilities in the inundation zone include the City's only Police Station, the current Corporation Yard and one (of two) fire stations. Figure 4.5.2 (f) represents the maximum considered tsunami inundation from a number of extreme and realistic tsunami sources.⁸⁴ Property and residents located within the red shaded area are at risk for tsunami impact; facilities and people located uphill or inland from these areas are more likely to experience no impact from a tsunami event.

Most tsunami damage and destruction is caused by flooding, wave impacts, erosion, strong currents, and floating debris (e.g., trees, structures, vehicles, and other things that can act like a battering ram). In addition to loss of life and mass injuries, other impacts of a tsunami may include damage to and destruction to the homes and businesses located in the inundation zone, the marina and harbor, and the Emeryville shoreline. Basic services such as power, sewer and water may not be available after a tsunami and communications, transportation (ground, air, rail and marine) and health and public safety services may also be disrupted.⁸⁵

The National Tsunami Warning Center (NTWC) provides tsunami emergency information and bulletins to state and local jurisdictions during tsunami alerts. There are four levels of the NTWC's alert bulletins:

- **Tsunami Information Statement.** The information statement informs and updates emergency managers and the public that an earthquake has occurred, or that a tsunami Watch, Advisory, or Warning has been issued elsewhere in the ocean.
- **Tsunami Watch.** A Tsunami Watch alerts emergency managers and the public of a tsunami event which may later impact the Watch area coastline. Based on updated information and analysis of the situation, a tsunami watch can be upgraded to an Advisory or Warning or even canceled.
- **Tsunami Advisory.** A tsunami advisory is issued when there is a threat of a tsunami - typically with an amplitude of between one and three feet above existing tidal conditions is expected producing strong currents or dangerous waves to those in or near the water.
- **Tsunami Warning.** A warning is issued when a tsunami with significant widespread inundation is imminent or expected. Warnings are typically issued for tsunamis forecasted with an amplitude equal or greater than three feet. Coastal communities should evacuate residents and people from low-lying areas.

⁸⁴ USA. California Department of Conservation. California Geological Survey. Maritime Tsunami Response Playbook and Mitigation Guidance, Berkeley/Emeryville – Alameda County. By Wilson Rick, Patrick Lynett, Kevin Miller, Amanda Admire, Aykut Ayca, Edward Curtis, Lori Dengler, Michael Hornick, Troy Nicolini, and Drew Peterson. Sacramento: California Department of Conservation, 2016. Print. Page 21.

⁸⁵ NTHMP Tsunami Information Guide March 2019, Presented by the National Tsunami Hazard Mitigation Program, Page 7

To better inform and provide guidance for communities within close proximity to bodies of water susceptible to tsunami events, California Office of Emergency Services created the California Maritime Tsunami Response Playbook and Mitigation Guidance, and tailored scenario responses to selected individual cities based on 5 high magnitude earthquakes – tsunami events.

To reduce and mitigate tsunami damage to the Emeryville Marina community, residents and harbor management can incorporate soft and hard mitigation strategies aimed to better prepare for an emergency tsunami event. “Soft” mitigation strategies, or real time response measures, can include moving boats and ships out of harbors, restricting boat movement, removing hazardous materials away from the water, or identifying and assigning rescue, survey, and salvage personnel. “Hard” strategies, or permanent mitigation measures, refer to long-term improvements related to the marina itself, such as increasing the flexibility of interconnected docks, increasing the height of piles to prevent overtopping, moving docks and assets away from high hazard zones, or constructing flood gates.

DAM FAILURE

According to the Safety Element in the General Plan, the closest dam near the City is the dam at Lake Temescal, which is located 3.5 miles east of the City limits. Lake Temescal Dam is owned and managed by the East Bay Regional Park District and is overseen by the California Department of Water Resources, Division of Safety of Dams (DSOD). The DSOD supervises dam maintenance and inspections which includes seismic analysis of existing dams to assure their integrity and conducting regular inspections.

Lake Temescal Dam was built in 1869 and was last inspected by the state’s Division of Safety Dams in December 2023. At that time, the dam presented no issues necessitating corrective action and “the dam, reservoir, and all appurtenances [were] judged safe for continued use.”⁸⁶ The likelihood of a flood hazard is dependent upon the occurrence of a major earthquake and the ability of the dam to withstand seismic activity.

If the dam were to fail, it is estimated to cause overflowing of Temescal Creek and inundation of nearly 1,000 feet of land area on either side of the creek within 15 minutes. The water could reach the rest of the City, west toward the Bay, and north approximately to Powell Street within 25 minutes as shown in Figure 4.5.3 (a).

⁸⁶ Alma Balmes, Risk Manager, Human Resources, East Bay Regional Park District 18 June 2024

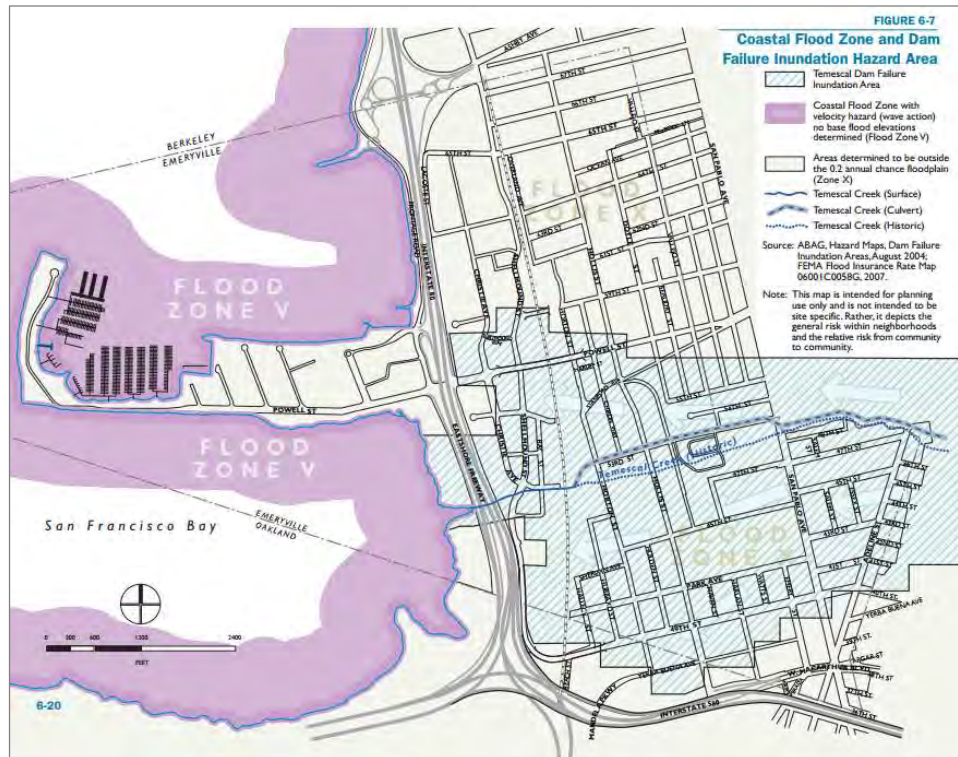


Figure 4.5.3 (a). Emeryville's Coastal Flood Zone and Dam Failure Inundation Hazard Area Map

FIRES

PROBABILITY – LOW

SEVERITY – MEDIUM

The City of Emeryville does not have the terrain or vegetation conditions for large or devastating wildfires. However, urban fires, i.e. a residential or commercial structure fire or an industrial fire, are a constant threat. While fires are not entirely preventable, upgrades in building codes and safety standards for road and building construction help ensure the safety of the community.

WILDFIRES

PROBABILITY – LOW

SEVERITY – MEDIUM

A wildfire is an uncontrolled fire spreading through vegetative fuels, posing danger and destruction to property and lives. Wildfires can occur in undeveloped areas and spread to urban areas where structures and other human development are more concentrated. While some wildfires start by natural causes (lightning), humans cause four out of every five wildfires. Wildfires started by humans are usually the result of debris burns, arson,

or carelessness. The number and size of wildfires in the State have increased due to climate change. The 10 of the largest wildfires in California history have all occurred since 2018.

In January 2025, several wildfires broke out in the Greater Los Angeles area. The Palisades, the Eaton, and the Hughes Fires burned more than 40,000 acres, destroyed more than 12,300 structures and prompted evacuation orders and warnings for as many as 200,000 residents. The Eaton and Palisades fires are now the most destructive wildfires in California History⁸⁷ and may be one of the costliest natural disasters in recent U.S. History.⁸⁸

Prior to those fires, the North Bay Fires in October 2017, the Camp Fire in 2018, and the Oakland-Berkeley Fire of 1991, were the most destructive wildfires in State history. The Camp Fire resulted in 85 deaths, displaced more than 50,000 people and destroyed more than 18,000 structures. The Oakland-Berkeley Hills Fire, resulted in 25 lives lost, 150 injuries, destruction of 3,354 single family homes and 456 apartments, and \$9 billion in losses (in 2015 dollars).

Emeryville does not have the conditions for such a large wildfire. However, there is a section of the Shoreline Park on the peninsula that does have brush and vegetation. This section is located near the I-80/580 corridor and the MacArthur Maze, a major artery in the area's transportation system. An average of 270,000 vehicles a day transit this portion of freeways. Any ignition of this area could reduce visibility for drivers along portions of this very dense transportation corridor and cause a serious smoke threat to the cars and trucks on the road.

However, the City's air quality can be severely impacted by wildfires occurring in the State, in the Western part of the country or even in Canada. Smoke from wildfires contain chemicals, gases and fine particles that can harm health. Wildfire smoke is unhealthy to breathe and can be especially dangerous for children, the elderly, pregnant women, and people with heart or respiratory conditions. In September 2020, smoke from a wildfire burning in the Sierras turned the Bay Area daylight skies into an apocalyptic orange for several days.

URBAN FIRES

PROBABILITY – LOW

SEVERITY – MEDIUM/HIGH

⁸⁷ Missions, L. (2025, Jan 15). *Greater Los Angeles Wildfires*. USGS, [Greater Los Angeles Wildfires - January 2025 | U.S. Geological Survey](#)

⁸⁸ Lee, Don (2025, Jan 9), *Economic Loss from L.A. Wildfires Could Top \$50 Billion, making it one of the costliest US Disaster*, Los Angeles Times, <https://www.latimes.com/business/story/2025-01-09/loss-from-wildfires-could-surpass-50-billion>

Urban conflagration, or a large disastrous fire in an urban area, is a major hazard that can occur due to a number of causes – wildfires, earthquakes, gas leaks, chemical explosions or arson. The urban fire conflagration that followed the 1906 San Francisco earthquake did more damage than the earthquake itself. Although it is unlikely that City of Emeryville would experience an urban conflagration due to the improvements in community design, construction materials, and fire protection systems, the possibility of an urban conflagration remains a threat to the Emeryville community. One reason is the current trend towards increased urban density and infill.

The City averages 2 fires a month with less than \$5,000 worth of damage, 1 fire a month with over \$5,000 worth of damage and 1 vehicle fire a month. However, on Wednesday, July 6, 2016, at approximately 2:45 am, a 6-alarm fire ripped through a five story 105-unit vacant apartment building under construction in Emeryville. The fire extended to an auto repair shop next door, destroying the shop and multiple vehicles parked on the street. It also caused moderate to significant damage to five townhouses located across street with an additional 10 townhouses declared uninhabitable. The fire caused approximately \$23,000,000 in damages (there was a 5-alarm fire at this exact same site on May 13, 2017, which caused similar damage). Both fires were the result of arson. There have been no major fires since 2017.

BIOLOGICAL THREATS

PROBABILITY – LOW

SEVERITY – HIGH

Biological threats can range from widespread pandemic and regional outbreaks to purposefully targeted bioterrorism. Viruses, bacteria, and toxins all pose as threats to our health safety; the number of outbreaks per year has more than tripled, with the number of new diseases per decade nearly quadrupling over the past 60 years.⁸⁹

Globalization, more efficient modes of traveling, and climate change are all factors contributing to a growing number of disease vectors carrying pathogens around the world. Having more extensive traveling methods means that disease vectors are easily transported from one part of the world to another, and climate change produces more amiable conditions for insects, bacteria, and viruses to grow. The World Health Organization (WHO) estimates that rising global temperatures, as well as altered precipitation and humidity linked to climate change, could significantly alter vector borne diseases and their effect on human populations more difficult to predict and control.⁹⁰

⁸⁹ Walsh, Bryan. "The World is Not Ready for the Next Pandemic." Time Health. Time, 03 May 2017. Web. 11 May 2017. <http://time.com/4766624/next-global-security>.

⁹⁰ "Climate Change and Vector-Borne Diseases." Climate Nexus. 23 Aug. 2016. Web. 11 May 2017. <http://climatenexus.org/learn/public-health-impacts/climate-change-and-vector-borne-diseases>.

PANDEMIC⁹¹

Pandemics occur when humans have little or no immunity against new strains or subtypes of known viruses, such as influenza, or against entirely new viruses. Over the last 300 years, there have been ten influenza pandemics including the historic pandemic of 1918 and 1919, which was responsible for 20 to 40 million deaths worldwide, which followed an earlier pandemic episode from 1830 to 1832. COVID-19 is another such pandemic. Experts predict there will be future events similar to COVID-19 and its variants.⁹²

A pandemic can be a social and an economic crisis just as much as a health one – its repercussions, severe and far-reaching, can be felt across the world. Many biological pathogens can cause widespread disease. Pathogens can evolve over time. A virus that was previously unable to spread between animals and people might mutate so that it can.

In addition, the risk of another pandemic continues to be pushed forward as the anti-vaccine movement encourages parents to refuse vaccination of their children, resulting in higher risks of infection and dispersal of diseases

Key naturally occurring biological hazards that Emeryville is concerned about are described below.

COVID-19

The COVID-19 pandemic, which began in March 2020, has made a pandemic a clearly recognized hazard in all parts of the world. On March 17, 2020, the City of Emeryville issued an Emergency Proclamation of Existence of a Local Emergency for COVID-19. The President then declared a major disaster for the State of California (DR-4482-CA) as a result of the COVID-19 pandemic on March 22, 2020.

The Wellcome Global Monitor 2020: COVID-19 report, the largest study of its kind, found that the COVID-19 pandemic has had a disproportionate impact on low-income countries and people with low incomes across all countries. Almost half (45%) of workers in low and lower-middle-income countries lost a job or business due to the pandemic, compared to just 10% of people in high-income countries.⁹³

COVID-19 is still impacting Emeryville, the State of California and the world at large. As of August 31, 2023 (the last date for which reporting was required), there were almost 467,711 positive cases reported in Alameda County. As of October 19, 2024, there were 2,476 COVID-19 related deaths in Alameda County.

⁹¹ California State Hazard Mitigation Plan, Volume 1, Part 3 – Profiles of other Hazards of Interest, Updated November 10 2023, Pages 30-1 to 30-20, [2023 California State Hazard Mitigation Plan](#)

⁹² M.T. Osterholm, Preparing for the next pandemic, N Engl J Med, 352 (18) (2005), pp. 1839-1842

⁹³ Wellcome Global Monitor 2020: Covid-19, 28 November 2021, [Wellcome-Global-Monitor-Covid.pdf](#)

The summer of 2024 also saw an upsurge in COVID-19 cases across the Country and in Emeryville due to the FLiRT variants. Hospitalizations and emergency department visits also ticked up during this time. Unlike the flu and other respiratory viruses, which tend to peak in colder months, COVID is prevalent even in the summer season.

Ebola

Ebola is caused by infection with one of the Ebola virus species.⁹⁴ Ebola can be transmitted through direct contact with infected individuals by exposure to bodily fluids including but not limited to saliva, sweat, feces, vomit, breast milk, and semen; objects that have been contaminated with body fluids from a person sick with Ebola; infected fruit bats or primates, and possibly from sexual contact.

Symptoms of fever, severe headache, muscle pain, weakness, fatigue, diarrhea, vomiting, abdominal pain, and hemorrhaging can appear between two to twenty-one days after exposure. Although there have been numerous Ebola outbreaks since 1976, the March 2014 Ebola outbreak remains the largest one in history and the first Ebola epidemic in West Africa affecting multiple countries in the region. About 30,000 people were infected and over 11,000 died.

On September 30, 2014, the first laboratory-confirmed case of Ebola was diagnosed in the United States from a man who traveled to Dallas, Texas from Liberia. Shortly after, two healthcare workers who provided care for the index patient tested positive for Ebola.

There have been no reported cases in the United States since 2014.

Zika Virus

The Zika virus is spread mostly by the bite of an infected *Aedes* species mosquito; symptoms of infection, such as fever, rash, headache, joint pain, red eyes, and muscle pain are usually mild lasting up to a week. However, Zika virus infection in pregnant women can cause a serious birth defect in which newborns are born with microcephaly and other severe brain defects. Microcephaly is a birth defect where a baby's head is smaller than expected. The virus can be spread from mother to newborn during pregnancy or around time of birth; sexual contact with infected individuals can also aid in the transmission of the virus.

Between January 1, 2015, and April 5, 2017, a total of 5,197 cases of Zika were reported in the US, with the highest concentration in New York, Florida, California, and Texas. The first two babies born in California with Zika-related microcephaly occurred in August 2016; both infants' mothers tested positive for the Zika virus and contracted the pathogen while traveling.

⁹⁴ There are 5 identified Ebola virus species, four of which are known to cause disease in humans. The fifth ebola virus, has caused disease in nonhuman primates, but not in humans.

Since 2018, there have been no reports of Zika virus transmission by mosquitoes in the continental United States. And since 2019, there have been no confirmed Zika virus disease cases reported from United States territories.

Bird Influenza (H5N1)⁹⁵

Avian influenza A (H5N1) virus is widespread in wild birds worldwide and is causing outbreaks in poultry, U.S. dairy cows and other animals in the United States. Since April 2024, 20 human cases of avian influenza A(H5) virus infection have been reported in the United States; 21 in total since 2022. As of October 11, 2024, California has had six confirmed cases of H5 bird flu. All six cases occurred in dairy workers on affected farms.

The Center for Disease Control (CDC) uses multiple surveillance systems year-round to monitor key flu indicators. These data are reviewed comprehensively each week. As of October 11, 2024, 299 dairy herds in 14 states had confirmed cases of H5 bird flu virus infections in dairy cows. California had 100 affected dairy herds. The number of affected herds continues to grow nationally.

The current public health risk to the general population is low, but the CDC is watching the situation carefully and working with states to monitor people with animal exposures.

Middle East Respiratory Syndrome (MERS)

Middle East Respiratory Syndrome (MERS) is a viral respiratory illness caused by the Coronavirus. Patients infected by MERS develop severe acute respiratory illness with symptoms of fever, cough, and shortness of breath.

The disease was first reported in Saudi Arabia in September 2012, with first known cases appearing in Jordan in April 2012.

Since the disease was first identified in Saudi Arabia in April 2012, over 2,600 cases of Middle East respiratory syndrome coronavirus (MERS-CoV) have been detected in 27 countries. In Europe, eight countries have reported confirmed cases, all with direct or indirect connections to the Middle East.

The majority of MERS-CoV cases continue to be reported from the Middle East. The source of the virus remains unknown, but the pattern of transmission and virological studies point to dromedary camels in the Middle East as a reservoir from which humans sporadically become infected through zoonotic transmission. Secondary human-to-human transmission has occurred, particularly within households and in healthcare settings.

⁹⁵ *CDC Avian Influenza (Bird Flu)*. (2024, October 11). Centers for Disease Control. Retrieved October 31, 2024, from <https://www.cdc.gov/bird-flu/spotlights/h5n1-response-10112024.html>

Since the beginning of 2024, and as of April 29, 2024, one MERS fatality has been reported in Saudi Arabia. Between April 2012 and April 2024, a total of 2,622 cases of MERS, including 950 deaths, have been reported by health authorities worldwide.

In May 2014, there were two confirmed cases of MERS in the US, one in Indiana and the other in Florida. Both cases were among healthcare providers who had traveled from Saudi Arabia.

There have been no reported cases of MERS in the US since 2014.

Enterovirus D68 (EV-D68)

Enterovirus D68 or EV-D68 is one of the 100 or more non-polio enteroviruses which causes mild to severe respiratory illnesses including runny nose, sneezing, cough, body and muscle aches, wheezing, and difficulty breathing. EV-D68 infection is more likely to occur during summer and fall; the virus can be spread from person to person when an infected individual coughs, sneezes, or leaves behind respiratory secretions with which others may come into contact with.

In 2014, the US experienced a nationwide outbreak of EV-D68, where the majority of confirmed cases were among children.

West Nile Virus (WNV)

West Nile Virus, or WNV, is an arthropod-borne virus commonly spread through bites from infected mosquitoes. However, there have been small number of cases where transmission of the virus occurred from blood transfusions, organ transplants, breastfeeding, and during pregnancy.

WNV symptom outbreak rate varies; about 1 in 150 people infected will develop severe illness with symptoms including high fever, headache, body stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis. Up to 20% of infected individuals experience lesser symptoms lasting as short as a few days to as long as several weeks, while the remaining 80% of people will not exhibit any signs of infection.⁹⁶

Most cases of WNV occur during the summer months between June and September and outbreaks have been reported throughout 48 states in the US. In 2023, 36 counties in California (Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Long Beach, Los Angeles, Madera, Merced, Monterey, Nevada, Orange, Placer, Riverside, Sacramento, San Bernardino, San Joaquin, San Luis

⁹⁶ National Center for Emerging and Zoonotic Infectious Diseases. West Nile Virus Factsheet. Center for Disease Control. https://www.cdc.gov/westnile/resources/pdfs/wnvfactsheet_508.pdf.

Obispo, San Mateo, Santa Clara, Shasta, Solano, Sonoma, Stanislaus, Sutter, Tulare, Ventura, Yolo, and Yuba) reported a total of 472 WNV cases, of which 19 were fatal.⁹⁷

Through August 2024, California has reported 19 cases of West Nile Virus with 3 deaths. Two of the three deaths were in the Bay Area, one in Contra Costa County and the other in Santa Clara County.⁹⁸

Mpox

Mpox Clade II is a rare disease that is caused by infection with the Mpox virus. Mpox can cause fever, headache, body aches, swollen lymph nodes, and a rash. The rash typically begins as flat spots that turn into bumps that fill with fluid. Some people develop spots that look like pimples or blisters before having any other symptoms. The bumps eventually crust and fall off as they heal.

The Mpox virus is not new, but beginning in May 2022, there was a significant increase in reported cases where Mpox is not commonly seen, including in the United States, California, and Alameda County. As of August 1, 2024, there were 33,400 reported cases in the United States of which 6,350 were reported in California.⁹⁹

On August 14, 2024, the World Health Organization (WHO) declared Mpox Clade I (a deadlier version of Mpox that is endemic to West Africa) to be a global health emergency of international concern due to an outbreak in Africa that is slowly spreading globally. There are no treatments approved by the Food and Drug Administration (FDA) specifically for Mpox. Antiviral drugs approved for treatment of smallpox may help to treat mpox because the viruses that cause mpox and smallpox are similar.

SIGNIFICANT OUTBREAKS (OTHER THAN COVID-19) SINCE 2006

Cholera Outbreak (October 2010)

Cholera is an acute, diarrheal illness caused by the infection of the intestine with the bacterium *Vibrio cholerae*. Infection is most likely to occur and spread in less developed countries where there is inadequate water treatment and poor sanitary conditions. The 2010 Cholera outbreak in Haiti occurred shortly after the country experienced a 7.0 magnitude earthquake which further impeded the nation's already struggling water, sanitation, and hygiene infrastructure.

⁹⁷ The California Mosquito-Borne Virus Surveillance and Response Program, West Nile.ca.gov Reported Incidence of West Nile virus - California, 2023, https://westnile.ca.gov/download?download_id=4984

⁹⁸ Ho, C (2024, August 26), West Nile Virus landed Fauci in the hospital. Here's where it has appeared in California, *San Francisco Chronicle*, <https://www.sfchronicle.com/health/article/west-nile-virus-california-anthony-fauci-19723659.php>

⁹⁹ Web, California Department of Public Health, Mpox Case Data as of August 2, 2024, accessed 14 Aug 2024, [California Mpox Data](#)

About one in 10 infected individuals will experience severe disease characterized by profuse watery diarrhea, vomiting, and leg cramps. The rapid loss of body fluids leads to dehydration and shock and without treatment, death can occur within hours.

Swine Flu (H1N1) (April 2009)

Swine Flu, or also known as H1N1 in accordance with the specific strain of the influenza virus, is a pig respiratory disease caused by type A influenza viruses that regularly cause influenza outbreaks in swine herds. Although the virus rarely infects humans, exposure to infected pigs can lead to transmission of variant viruses. People infected with such variant viruses experience symptoms similar to seasonal human influenza such as fever, lethargy, lack of appetite and coughing. The pandemic H1N1 virus was spread from person to person, being easily transmitted by coughing or sneezing.

The emergence of this new virus had a significant health impact on the human population due to the fact that most people had no or little immunity, since a vaccine had not been created for it. According to the CDC, the 2009 H1N1 pandemic resulted in a total of 60.8 million cases, 274,304 hospitalizations, and 12,469 deaths in the US.¹⁰⁰ Within those deaths, 657 were Californians. Currently, the Swine flu circulates as a seasonal flu, which can be combated by a vaccine.

Measles

Measles is a highly contagious virus that lives in the nose and throat mucus of an infected individual. Because of its ability to survive for up to two hours in an airspace after an infected individual sneezes or coughs, measles is highly contagious. Symptoms associated with measles includes fever, runny nose, coughing, red eyes, and a sore throat, followed by a rash that spreads all over the body.

While the virus had been declared eliminated from the US in 2000, there has been sporadic importations of measles into the county from travelers. Measles outbreaks can also occur in communities with high number of unvaccinated individuals. During January to July 2008, a total of 131 measles cases were reported to CDC, with 14 cases from California.¹⁰¹

In 2014, the United States experienced a record number of measles cases, with 667 cases from 27 states reported to CDC's National Center for Immunization and Respiratory Diseases (NCIRD); this was the greatest number of cases since measles elimination was documented in the U.S. in 2000.

¹⁰⁰ "CDC Estimates of 2009 H1N1 Influenza Cases, Hospitalizations and Deaths in the United States." Centers for Disease Control and Prevention. Centers for Disease Control and Prevention. Web. 01 June 2017. https://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm.

¹⁰¹ "Update: Measles --- United States, January--July 2008." Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, 22 Aug. 2008. Web. 02 June 2017. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5733a1.htm>.

In 2015, 188 people from 24 states and the District of Columbia were reported to have measles. The outbreak likely started from a traveler who became infected overseas with measles, then visited an amusement park in California while infectious; however, no source was ever identified.¹⁰²

From January 1, 2024, to August 8, 2024, a total of 211 measles cases were reported by 27 jurisdictions in the United States. There have been 13 outbreaks (defined as 3 or more related cases) reported in 2024, and 68% of cases (143 of 211) are outbreak-associated. For comparison, 4 outbreaks were reported during 2023 and 49% of cases (29 of 59) were outbreak-associated.¹⁰³

BIOTECH COMPANIES

Emeryville, as a commercial hub in the East Bay, is home to a number of biotechnology companies. Biotechnology is the use of living organisms, in particular microorganisms, or other biological systems for the improvement of quality of human life. However, purposeful alterations of nature, biodiversity, and the ecosystem may indirectly impact the human population in the future. While there are some beneficial results of bioengineered organisms in the fields of agriculture, animal husbandry, the pharmaceutical industry, and the medical field, genetically modified organisms (GMOs) can also carry unintended biological risks for the environment. Long term consequences can upset the balance of the natural ecosystem, creating reactions across the food chain.

CIVIL DISTURBANCE

PROBABILITY – LOW

SEVERITY – LOW

Civil disturbance is a broad term that is typically used by law enforcement to describe one or more forms of disturbance caused by a group of people. Civil disturbance is typically a symptom of, and a form of protest, against major socio-political problems. The severity of action is dependent on the public's outrage. Civil disturbances can also arise out of a union protest, institutional population uprising or from a large celebration that becomes disorderly.

Civil disturbances can take the form of small gatherings or large groups blocking or impeding access to a building, to a street or even to a highway or bridge. Consequences of a civil disturbance can include mobs burning or otherwise destroying property and terrorizing individuals.

¹⁰² "Measles – Cases and Outbreaks" Centers for Disease Control and Prevention. Centers for Disease Control and Prevention Web. 17 July 2107. <https://www.cdc.gov/measles/cases-outbreaks.html>.

¹⁰³ "Measles Cases and Outbreaks" Centers for Disease Control and Prevention, Measles (Rubeola), Web. 9 Aug 2024, accessed 14 Aug 2024, <https://www.cdc.gov/measles/data-research/index.html>

Emeryville has been subject to several civil disturbances where property and retail businesses were damaged. On December 1, 2014, a group of protesters from downtown Oakland, made their way through North Oakland into Emeryville breaking windows at several local businesses before being dispersed. A week later, on December 8, 2014, approximately 1,500 protestors marched from downtown Berkeley through University Avenue to Highway 80, shutting down both lanes of traffic on the highway before being redirected into Emeryville by the California Highway Patrol.

While the probability of future civil disturbance incidents is difficult to predict, given past occurrences and the location of Emeryville between Berkeley and Oakland, civil disturbance incidents are possible. Current societal trends and emerging social and political issues should be watched closely as these issues have led to civil disturbance incidents in the past.

TERRORISM

PROBABILITY – MEDIUM

SEVERITY – HIGH

Terrorism is the use of fear for intimidation, usually for political goals. Terrorism is a crime where the threat of violence is often as effective as the commission of the violent act itself. Terrorism affects us through fear, physical injuries, economic losses, psychological trauma, and erosion of faith in governments. It can manifest itself through bombings, hijackings, kidnappings, arson, assassinations, threats only, disruption of “lifeline systems” and other critical infrastructure, as well as the use of chemical, biological, radiological, nuclear and explosive weapons.

The federal government plays a significant role in terrorism response on a national level, but local governments along with counties and the state, have primary responsibility for protecting the health and safety of their citizens. The nature of terrorism, and all the forms it can take makes mitigation, response and recovery issues difficult.

The City of Emeryville has had its own experience with terrorism. On August 28, 2003, an improvised explosive device (IED), or pipe bomb, was detonated near the front door of the then Chiron Life Science Center in Emeryville causing damage to the building. A second device was detonated in another Chiron building shortly after the first responders arrived at the scene, also damaging the building and the surrounding area.

Although the likelihood of Emeryville experiencing another direct attack is low, the City still needs to be prepared given our location between Oakland (which is designated as a Tier I urban area – meaning it faces a higher level of risk than other urban areas for terrorism) and Berkeley and our proximity to other major landmarks in the Bay Area.

CYBERTERRORISM

The FBI defines cyberterrorism as a premeditated, politically motivated attack against information, computer systems, computer programs, and data that results in violence against noncombatant targets by subnational groups or clandestine agents. The U.S. National Infrastructure Protection Center defines cyberterrorism as a criminal act perpetrated through the use of computers and telecommunication capabilities, which results in violence, destruction, or disruption of services, to create fear by causing confusion and uncertainty within a given population, with the goal of influencing a government or populations to conform to a political, social, or ideological agenda.

Cyberterrorism can impact the community, the state or the nation as a whole, as well as individuals and business interests. Cyber based attacks gain access to or intrude on critical infrastructure systems, such as financial services, communications, energy, or transportation systems, with the potential to alter their reliable functioning. Disruption to such systems could pose a critical threat to national and local economic security.

The February 2023 Worldwide Threat Assessment of the US Intelligence Community describes an increasing risk of high-impact ransomware attacks, extorts used to extort funds, disrupt critical services, and expose sensitive data.¹⁰⁴ An increasing number of ransomware attacks have been targeting governments worldwide and the Bay Area was no exception.

The following Cities in the Bay Area have been hit with a ransomware attack: Union City (2021), Hayward (2023), Oakland (2023), Oakley (2024) and Pleasant Hill (2024). For the City of Oakland it took months to restore its IT capabilities.

To date, Emeryville has not experienced a full-scale cyber-attack. Given the proliferation of devices that are designed and used in almost every aspect of society (from smart phones and tablets, to automobiles [autonomous and not], household appliances, home security systems), with minimal security requirements and testing, it is conceivable that these attacks will continue and could lead to widespread vulnerabilities in civilian infrastructure and US government systems.

The City's IT infrastructure is protected by on-premise next generation firewalls, supplemented by cloud services that screen for malware, phishing attempts, and intrusion detection. Multi-factor Authorization (MFA) is implemented throughout the City's network and hosted applications.

Additionally, the City contracts with a third-party security firm that provides 24/7/365 real-time protection for the City's networks and cybersecurity training and simulations for staff.

¹⁰⁴ Office of the Director of National Intelligence (2023, February 6). *Annual Threat Assessment of the U.S. Intelligence Community*. <https://www.dni.gov/files/ODNI/documents/assessments/ATA-2023-Unclassified-Report.pdf>

BIOTERRORISM

Bioterrorism is not as apparent as an act of violent terrorism. An attack can go undetected for hours, days, or potentially weeks until affected people start to display symptoms of disease. According to the U.S. Department of Homeland Security, a biological attack is the intentional release of a pathogen (disease causing agent) or biotoxin (poisonous substance produced by a living organism) against humans, plants, or animals.¹⁰⁵ Depending on the specific biological agent used and the targeted audience of a biological attack, pathogens and toxins can be disseminated through aerosol, food or water, human carriers, infected animals, or physically distributed.

Two agents most commonly used as bioterrorism weapons in biological warfare are anthrax and smallpox as they have the highest potential for mass casualties and civil disruption. Both agents are highly lethal, with anthrax, if left untreated, approaching an 80% death rate and 30% death rate from smallpox if not vaccinated against the variola virus.

Anthrax

Anthrax is caused by the bacteria *Bacillus Anthracis* and can be spread through multiple ways. Most people can be affected by breathing in spores, eating contaminated food or drinking water, or getting spores in exposed skin. For example, when spores containing the bacteria are inhaled, the bacteria will activate and multiply while producing and spreading toxins throughout the body.

Anthrax has been used as a weapon around the world for almost a century. It has historical usage dating back to World War I in which German agents successfully infected Allied livestock with anthrax and glanders. In the 1990s, the cult leader of Aum Shinrikyo, a Japanese Doomsday Cult, failed in his attempt to release anthrax and botulinum toxin in Tokyo. In 2011, anthrax attacks were reported in the U.S. with 11 people impacted by inhaling the toxin in contaminated mail. An additional 11 people were infected with cutaneous anthrax.

Smallpox

Smallpox is a serious infectious disease caused by the variola virus. Symptoms included a fever and a distinctive progressive skin rash. It is estimated that about three out of ten people with the disease died while survivors were left with permanent scars or blindness.

The last naturally spread case of smallpox in the world was in 1977. The World Health Assembly declared smallpox to be eradicated in the 1980. As a result, most people born in the US after 1972 have not been vaccinated against the disease. Only a small amount of people are vaccinated due to military or Smallpox Response Team formations after 9/11 as an effort to prepare for bioterrorist attacks.

¹⁰⁵ National Academies, and U.S. Department of Homeland Security. News and Terrorism: Communicating in a Crisis. 2004. https://www.dhs.gov/xlibrary/assets/prep_biological_fact_sheet.pdf.

Emeryville has not experienced bioterrorism or any form of a biological attack. However, the probability of a future biological hazardous event cannot be ruled out. As part of the 44 mitigation goals, Emeryville is preparing for future biological hazards by collaborating with local health organizations and medical centers to establish emergency response procedures including medical resources, a reserve of health professionals, and establishment of distribution centers for medical services.

MITIGATION STRATEGY



Emeryville Marina

MITIGATION GOALS AND OBJECTIVES

The goal of this Local Hazard Mitigation Plan update is to create a more resilient City by reducing or eliminating long-term risks to the people and property of the City from natural and man-made hazards. This plan has four main objectives:

1. Reduce the potential for loss of life, injury and economic damage to Emeryville residents, businesses and city government from earthquakes, climate change, hazardous materials release, utility infrastructure failures, floods, fires, biological threats, civil disturbances and terrorism.
2. Increase the City's resilience and ability to serve the community during and after a hazard event by mitigating risk to key city functions such as response, recovery and rebuilding.
3. Protect the City's unique character and values from being compromised by a hazard event.
4. Encourage mitigation activities to increase the disaster resilience of the City, private companies and lifeline systems that are essential to Emeryville's ability to function.

LINKS TO OTHER CITY PLANS

This Local Hazard Mitigation Plan is just another contribution to the City's desire to be a resilient community. Many of the mitigation goals of the Local Hazard Mitigation Plan are consistent with the goals found in the City's General Plan, Climate Action Plan, Strategic Energy Plan and the Capital Improvement Program. Once approved and adopted, the goals and strategies of the Local Hazard Mitigation Plan will be considered in the City's long-range planning and programs.

Public Works staff will consider any new hazard mitigation strategies in Table 3.3(a), as appropriate, for possible inclusion in the City's next Capital Improvement Program. Any new plans created or any major revisions to the Emeryville General Plan, or any of the other of the above-mentioned plans or programs between 2025 - 2030, will integrate the analysis and adopted mitigation measures in this LHMP.

MITIGATION ACTIONS COMPLETED FROM THE 2019 – 2024 PLAN

City staff reviewed the mitigation measures, policies and actions included in the 2019-2024 Local Hazard Mitigation Plan. The COVID-19 Pandemic impacted the City's mitigation plans due to severe budget restraints; however, some measures have been completed, or in the process of being completed, and some have been continued in the 2024 – 2029 Local Hazard Mitigation Plan Update as shown in Table 3.3 (a) on page 94.

The following are the completed mitigation objectives from the 2019-2024 Local Hazard Mitigation Plan:

High Priority Mitigation Measures

Mass Notification System: The City contracted with Alameda County for AC Alert, a mass notification system in 2015. All existing and new hire staff have been enrolled and will continue to be enrolled in AC Alert. All Police Communication Dispatchers have been trained on this software and its usage.

In 2021, the City also contracted with the Alameda County for Zonehaven – a software platform that helps communities and first responders more effectively plan, communicate, and execute evacuations.

De-escalating Techniques: All officers receive POST approved training annually which includes de-escalation tactics. The Emeryville Police Department has a 4-hour POST approved Use of Force/De-escalation training course. In addition, de-escalation training is incorporated into all of the department's POST certified use of force training lesson plans for Firearms, Electronic Control Device (TASER), Defensive Tactics and Impact Weapons as well as the online POST Strategic Communications training.

Recovery Plan (Cyberterrorism): The City had a Cybersecurity Assessment done in 2021 and implemented many of the recommendations made from the assessment. These include a live 24/7 monitoring by a third-party network operations center, data backups that are stored at an offsite data center in an isolated repository, a partnership with the cyber security division of the Department of Homeland Security to provide periodic cyber hygiene checks and reports, multiple redundant next-gen firewalls at all endpoints and layered antimalware protection. The city also carries multiple insurance policies and warranties to provide funding if there is an event the requires recovery.

Revamping CERT Program: The City held a CERT Academy in 2019 with 20 participants. Approximately 12 of those participants became permanent members of the City's CERT Team. Trainings were held in person in 2019 and then virtually after 2020 - 2022. However, due to the transient nature of Emeryville's community members and the staff turnover the team dissolved in early 2023. Re-invigorating the City's CERT program is included once again in the 2025-2030 mitigation actions.

Revamping City Website – The City is in the process of completely updating their website which includes a Disaster Preparedness web page. This project is expected to be completed by early 2025.

Staff Trainings for Emergency Situations – The City contracts with Alameda County Fire Department (ACFD) for Emergency Preparedness. Between 2019-2024 ACFD held one (1) City Council training, twenty-five (25) EOC Section Trainings and six (6) tabletop exercises and trainings for City staff. As this is an ongoing need, this mitigation action item has been included in the 2025-2030 plan update.

Medium Priority Mitigation Measures

Storm Drain Cleaning – This is now done every October and then regularly to problem spots during the rainy season.

Increase Earthquake Awareness in the Community – The City contracts with Alameda County Fire Department (ACFD) for fire services which includes Disaster Preparedness Training for both City staff and the community. Since the last LHMP update, nine (9) Personal Emergency Preparedness (PEP) classes and two (2) CERT Hybrid Academies were held. City staff also met with several Homeowner Associations (HOA) in 2022 to discuss emergency preparedness in multi-unit buildings. As this is an ongoing need, this mitigation action item has been included in the 2025-2030 plan update.

Designate the Senior Center as a Cooling Center for Extreme Heat Days – this was completed in 2019.

Implement Water Efficient Landscaping Ordinance – this action was completed.

Create GIS Maps Reflecting Hazardous Pipelines in the City – this action item was determined not feasible or appropriate for the City.

Low Priority Mitigation Measures

Gas Shut Off Valves - Installation of approved automatic gas shut-off valves is required in existing buildings undergoing additions, alterations or repairs exceeding \$50,000 in construction valuation. Installation is required prior to Final Inspection. (Ord. No 19-012).

Establish Community Policing to Increase Police Knowledge of Neighborhoods - this action item has been completed.

Streamline Installation Process for Solar Panels on Building Developments and Remodels – this action item has been completed. The City is in compliance with AB2188 and the City will be in compliance with SB379 no later than September 30, 2024

Long Range Mitigation Measures

Alternative Transportation – The City has prioritized bicycle and pedestrian infrastructure city-wide, including 11 miles of bikeways in our 1.2-square mile city, with plans for up to 19 additional miles. A rails-to-trails greenway through the city saw over 700,000 users last year, and a new bike-ped bridge over the railroad tracks has provided many safer bike/ped options to get around and through the city. Emeryville also hosts several shared-mobility operators, including the regional BayWheels bike share program, which has seen more than 80,000 rides since its inception in 2017.

Restore and Build Up Wetlands Along Areas at Risk of Inundation Due to Sea Level Rise – The recently completed Point Emery Revetment Project improves the park and

surrounding areas' resilience by protecting the shoreline from the effects of sea level rise and wave action. Additionally, these shoreline protection features enable ongoing maintenance measures to address potential future flooding and sea level rise including repairs to public access areas and improvements along with prevention and rectification of future subsidence or uneven settlement, flooding, and inundation.

MITIGATION ACTIONS NOT COMPLETED IN 2019 – 2024

High Priority Mitigation Measures

Construct a Bioswale and Other Vegetative Storm Water Treatment Features for Storm Water Filtration and Flood Prevention – the City is awaiting feedback from the East Bay Regional Park District (EBRPD) in order to move forward with securing outside funding (Grant money) for the project. This project is in the pre-planning phase, and construction is not imminent. As such, this mitigation action has been carried over in the 2024 – 2029 LHMP

Install early Earthquake Warning System in both Fire Stations – this mitigation action to have the bay doors of the City's two fire stations open when warned of an imminent earthquake has been carried over to the 2025-2030 LHMP

Collaborate with EBMUD to update infrastructure and to identify adaptive strategies to protect water supply from drought – this action item has been carried over to the 2025-2030 LHMP.

Police Substation - the building of a police substation on the east side of the highway has been carried over to the 2025-2030 LHMP.

Caltrans Agreement – this mitigation action would have called for an agreement with Caltrans for permission to build a low-lying ramp where I-80 is parallel to the street in case the I-80 overpass collapse or is in danger of collapse. This agreement has been deemed unnecessary as it was determined that there are other means for residents to be able to exit the peninsula without having to go under the overpass or horizontally over the freeway.

Public Address System for the Peninsula – this mitigation item to install a public address system on the peninsula to warn marina residents of potential tsunami or severe weather-related events has been carried over to the 2025-2030 LHMP.

Draft Recovery Plan for the City – this mitigation action item has been carried over to the 2025-2030 LHMP.

Place Evacuation Route Signs on City Streets – this mitigation item to place evacuation route signs throughout the City has been carried over to the 2025-2030 LHMP.

Movement of Critical Services to More Secure Locations – this mitigation action has been carried over to the 2025-2030 LHMP.

Provide Fee Waivers for Earthquake Retrofit Projects on Single Family Homes – this mitigation action to encourage residents and business owners to upgrade homes and buildings to mitigate earthquake impacts has been carried over to the 2025-2030 LHMP.

Identify All Labs Located in the City – this action item has been updated and carried over to the 2025-2030 LHMP Update.

Medium Priority Mitigation Measures

Increase Earthquake Awareness - as this action item is an ongoing need, it has been included in the 2025-2030 LHMP Update.

Provide Emergency Tsunami Event Education and Outreach Materials for Retail, Hoel and Restaurant Establishments – this action item has been carried over to the 2025-2030 LHMP.

Coordinate with City of Berkeley and Oakland's Offices of Emergency Services for LHMP Best Practices – this action item has been carried over to the 2025-2030 LHMP.

Become a Point of Distribution (POD) for both commodities and medical services – this was determined to not be feasible for a city the size of Emeryville.

Establish an Emeryville Medical Reserve Corps – this was also determined to not be feasible for a city the size of Emeryville.

Low Priority Mitigation Measures

Work with Red Cross to install smoke detectors in single family homes - this action item has been carried over to the 2025-2030 LHMP.

Provide location for Public Disposal of Batteries and Oil – this has been amended in the 2025-2030 LHMP Update to promote already existing locations in the County.

Provide Slow Water Releasing Bags to Residents for Newly Planted Trees - this action item was deemed no longer necessary.

Implement a Transfer Tax for Homebuyer – this action item was deemed not feasible for the City at this time.

Put Window Film and/or Storm Windows on City Hall for energy efficiency and earthquake shatter prevention – Putting storm windows on City Hall was deemed cost prohibitive; however, putting film on City Hall windows to prevent shattering in the event of an earthquake has been carried over to the 2025-2030 plan update.

Encourage Renewables for Businesses By Giving Tax Breaks or Rebates – this mitigation action has been amended in the 2025-2030 update to provide information on grants (if available) to encourage renewable energy for businesses as opposed to giving tax breaks or rebates.

Build living levee or other protective measures in the Emeryville Crescent Marsh – this mitigation action item has been carried over to the 2025-2030 plan update.

Offer Geographic Information System (GIS) Resource Online – this action item has been modified and carried over to the 2025-2030 plan update.

Convert all 4 Railroad Tracks to Main Lines - this was determined to not be feasible at this time.

Establish Preparation and Response Protocols with Carleton College and Stanford Health to aid in the City as a POD During Disasters - Carleton College is no longer in operation and as determined above becoming a POD is not feasible for a city this size.

Shift to Smart Grid for Electricity Provision and Energy Needs - this is no longer an available option for the City.

Encourage Windmills in City via Public Outreach – this action item was determined not to be necessary or feasible.

Update Flood Plain Map for City – this action item has been carried over to the 2025-2030 LHMP.

MITIGATION ACTIONS TO COMPLETE 2024 – 2029

There were 44 mitigation actions included in the 2019-2024 Local Hazard Mitigation Plan. The Local Hazard Mitigation Planning Team reviewed these actions and identified any actions the City had taken since then.

The team then revised those actions where appropriate, established new actions, and evaluated these new actions for their feasibility, social benefits, economic benefits, environmental improvements and community objectives. Each action was assigned to a High, Medium, Low or Long Range/Already Being Done priority.

After reviewing the mitigation actions which have been completed since 2019, and in consideration of all the new residential and commercial development built or under construction in the City since the previous plan, the City commits to explore funding for the following forty (40) mitigation ideas between the years 2025 - 2030. Funding may come from the General Fund, the Capital Improvement Plan (CIP), or from grants. For grant-funded mitigation strategies, the project will be undertaken if, and when funding is secured.

The mitigation measures listed below in Table 3.3 (a) describe the actions the City may take, subject to funding availability and/or other agencies approvals, during the years 2025 - 2030. Table 3.3 (a) summarizes these actions, identifies the hazard(s) and mitigation objective(s) each action addresses, and indicates their assigned priority level of action. Funded actions will be included in the City's Capital Improvement Plan (CIP).

Table 3.3 (a). Priority Actions in Mitigation Strategy

| No. | Mitigation Action | Hazard(s) Addressed | Benefits | Agency Responsible | Priority | Funding Source | Timeframe |
|-----|--|---------------------|--|--|----------|---|----------------------|
| 1 | Construct bio swales and other vegetative storm water treatment features for storm water filtration and flood prevention | Flood | Manage high storm water flows, prevent flooding due to sea level rise | Public Works, East Bay Regional Park District | High | General Capital Fund, Coastal Conservancy Grant | Ongoing, 1 – 5 Years |
| 2 | Install early Earthquake Warning System in both fire stations | Earthquake | Provide egress for Fire Trucks in the event of structural damage to the Fire Station | Fire Department Public Works | High | Grants, General Capital Fund | 1 – 5 Years |
| 3 | Promote Mass Notification Systems (AC Alert, Zonehaven and MyShake) | All Hazards | Provide resources to the community and aid in disseminating information during an emergency or disaster. | Police Department, City Manager's Office | High | Disaster Preparedness Fund, General Fund | Ongoing |
| 4 | Emergency Operations Center/Disaster Training for all City Staff and City Council | All Hazards | Provide Emergency and City personnel with the ability to aid and respond to a disaster in the Community | Alameda County Fire Department, Police Department, City Manager's Office | High | General Fund | Ongoing, 1 – 5 Years |
| 5 | Police Substation | All Hazards | Ensure redundancy and resilience for the City's Police Force and their ability to respond | Police Department, Public Works | High | General Capital Fund | Ongoing, 1 – 5 Years |

| No. | Mitigation Action | Hazard(s) Addressed | Benefits | Agency Responsible | Priority | Funding Source | Timeframe |
|-----|--|--|---|---|----------|---|----------------------|
| 6 | Continue Increase earthquake preparedness awareness to residents in single family homes and multi-unit buildings | Earthquake | Increases community emergency preparedness and resilience | Police Department | High | General Fund | Ongoing, 1 – 5 Years |
| 7 | Public address system for Peninsula | Earthquake Flood Tsunami | Allow for immediate notification of marina residents of potential tsunami or weather-related events | Public Works | High | General Capital Fund, Emergency Preparedness Fund, Grants | 1 – 5 Years |
| 8 | Draft Recovery plan for City | All Hazards | Specific recovery procedures for after emergency events | All Departments | High | | 1 – 5 Years |
| 9 | Place evacuation route signs on streets | All Hazards | Inform community evacuation actions | Public Works | High | General Capital Fund or Emergency Preparedness Fund | 1 – 5 Years |
| 10 | Improve Community Emergency Response Team (CERT) training program to educate and train community members in times of emergency | All Hazards | Community relation building, increase community emergency preparedness | Police Department, Alameda County Fire Department | High | General Fund | 1 – 5 Years |
| 11 | Create a Written Pandemic Business Continuity Plan | Biological Threats | Specific operating procedures for the continuation of government during a pandemic | All Departments | High | | 1 – 5 Years |
| 12 | Work with EBMUD to update infrastructure and identify strategies to protect water supplies during droughts and disasters | Earthquake Hazardous Materials Release, Utility/Infrastructure Failure, Climate Change | Increase regional adaptability to drought and other hazards; improve resources and stakeholder response | EBMUD, Public Works, Police Department | High | EBMUD | 1 – 5 Years |

| No. | Mitigation Action | Hazard(s) Addressed | Benefits | Agency Responsible | Priority | Funding Source | Timeframe |
|-----|---|---------------------|--|---|----------|------------------------------------|-------------|
| 13 | Movement of critical services to more secure locations | All Hazards | Ensure accessibility and preservation of important utilities and services | Information Technology, Police Department | High | General Fund, General Capital Fund | Long Range |
| 14 | Provide fee waivers for Earthquake Retrofit projects on single family homes | Earthquake | Encourage people to upgrade homes and buildings to mitigate earthquake impacts | Community Development Department | High | No funding required | 1 – 5 Years |
| 15 | Update City web page to reflect information and resources around emergency events and natural disasters | All Hazards | Provide easy access to emergency preparedness information | Public Works, Police Department, IT | High | No funding required | 1 – 5 Years |
| 16 | Work with Alameda County Fire Department to identify all labs located in City and develop list of potential impacts during an emergency event | All Hazards | Transparency of where potential hazardous materials release may occur during emergency event | Alameda County Fire Department, Police Department | High | No funding required | 1 – 5 Years |
| 17 | Public Safety Microgrid | All Hazards | Provide battery backup for all critical infrastructure in the City | Public Works | High | Grants, General Capital Fund | Long Range |
| 18 | Structural Update and maintenance of 2 pedestrian bridges | Earthquake | Maintain the integrity of the bridges to withstand an earthquake | Public Works | High | Grants, General Capital Fund | Long Range |
| 19 | Seismic Update to 4060 Hollis Street | Earthquake | Increase the building's resilience to an earthquake | Public Works | High | Grants, General Capital Fund | Long Range |
| 20 | Seismic update to the Public Works Corp Yard and the Police Administration Building | Earthquake | Increase the buildings' resilience to an earthquake | Public Woks | High | Grants, General Capital Fund | Long Range |

| No. | Mitigation Action | Hazard(s) Addressed | Benefits | Agency Responsible | Priority | Funding Source | Timeframe |
|-----|---|---------------------------------|--|--|----------|--|------------|
| 21 | Build living levee or other protective measures in the Emeryville Crescent Marsh | Climate Change | Reduce negative impacts from sea level rise | EBRPD, Public Works, Community Development Department, Regional Stakeholders | High | | Long Range |
| 22 | Restoration/Build up of wetlands and the shoreline against sea level rise | Climate Change | Reduce negative impacts from sea level rise | PW Environmental Program, Community Development Department | High | | Long Range |
| 23 | Conduct Citywide storm drain cleaning | Floods | Reduce flooding of storm water system and backflow. | Public Works | Medium | Operating Budget | Ongoing |
| 24 | Provide emergency tsunami event education and outreach material for retail shops, hotels, and restaurants | Earthquake Floods Tsunami | Emergency preparedness | Police Department | Medium | Disaster Preparedness Fund, Grants | Ongoing |
| 25 | Relocate all utilities underground to reduce further City damage | Earthquake Floods | Prevent additional utility damages during emergency events. | Public Works | Medium | Partial funding from General Capital Fund and PG&E | Long Range |
| 26 | Reach out annually to Cal OES, the California Geological Survey, and/or FEMA for any new data on best practices for tsunami mitigation measures for the Emeryville Marina and Watergate Community | Tsunamis | Resource sharing and coordination to increase the City and community's resilience to disasters | Police Department, Public works, Community Development Department | Medium | No funding required | Ongoing |

| No. | Mitigation Action | Hazard(s) Addressed | Benefits | Agency Responsible | Priority | Funding Source | Timeframe |
|-----|---|--|--|---|----------|----------------------|-------------|
| 27 | Reduce Emeryville's vulnerability to severe storms and associated hazards through proactive research and planning | Climate Change, Floods, Extreme Weather | Emergency Preparedness, Reduce recovery costs | Public Works, Community Development Department | Medium | Grants, General Fund | 1 – 5 Years |
| 28 | Coordinate with Alameda County Office of Emergency Services regarding their plans for Points of Distribution (medical or commodity) during a disaster | Earthquake Tsunami Floods Biological Threats | Provide critical services and resources to impacted communities and aid in the City's ability to quickly respond to an emergency or disaster | Police Department, Alameda County OES, Alameda County Fire Department | Medium | No funding required | Ongoing |
| 29 | Explore reducing vulnerabilities to non-city buildings by developing a retrofit program for all non-compliant unreinforced masonry in Emeryville | Earthquake | Increase building safety | Community Development Department | Medium | Grants | 1 – 5 Years |
| 30 | Alternate Transportation | Climate Change | Reduce GHG emissions | Bikeshare, PW Environmental Programs | Medium | Traffic Impact Fee | Ongoing |
| 31 | Provide information on grants (if available) to encourage renewable energy for businesses | Climate Change | Incentivize positive small business actions around sustainability | Community Development Department, PW Environmental Services | Medium | No funding required | 1 – 5 Years |
| 32 | Leverage relationship with Berkeley and Oakland Offices of Emergency Services | All Hazards | Resource sharing and coordination of neighboring cities to increase emergency response and preparedness for the city and for residents | Police Department | Medium | No funding required | Ongoing |

| No. | Mitigation Action | Hazard(s) Addressed | Benefits | Agency Responsible | Priority | Funding Source | Timeframe |
|-----|---|--|--|--|----------|--|--------------|
| 33 | Promote awareness of Oakland and Berkeley's Public Address Systems until the City can obtain one of their own | All Hazards | Increase dissemination of emergency information to residents | Police Department, City Manager's Office | Medium | No funding required | Ongoing |
| 34 | Public Address System for the City (emergency sirens) | All Hazards | Increase the City's ability to notify residents of an emergency or potential impending disaster in a timely manner | Public Works, City Manager's Office, Police Department | Medium | Grants, Capital Fund | Long Range |
| 35 | Installation of back up battery power for traffic lights | Earthquake Flood Fire Utility/Infras tructure Failure | Provides for the continued operation of traffic lights in the event of a power disruption. | Public Works | Medium | General Capital Fund, Grants | 3 – 10 Years |
| 36 | Work with Red Cross to install smoke detectors in single family homes | Fires Hazardous Materials Release | Early detection of fire and potential chemical release prevention | Community Services | Low | No funding required | 1 – 5 Years |
| 37 | Promote locations of public disposal of hazardous materials (batteries, oil, e-waste) | Hazardous Materials Release Climate Change | Waste reduction/diversion | PW Environmental Programs, ACHHW | Low | No funding required | Ongoing |
| 38 | Put window film on City Hall windows for earthquake shatter prevention | Earthquake | Minimize earthquake damage | Public Works | Low | Major Maintenance Fund, Disaster Preparedness Fund, Grants | 1 – 5 Years |

| No. | Mitigation Action | Hazard(s) Addressed | Benefits | Agency Responsible | Priority | Funding Source | Timeframe |
|-----|---|--------------------------|---|--------------------|----------|---------------------|------------|
| 39 | Provide links on the City's webpage to publicly available GIS resources to identify risk and increase knowledge of earthquake and flood prone regions in the City | Earthquake Floods | Resource available for residents to identify areas at risk and increase knowledge of earthquake and flood prone regions in the City | Public Works, IT | Low | No funding required | Long Range |
| 40 | Update Flood Plain Map for City | Floods Climate Change | Increase awareness about areas in the City prone to flooding | FEMA | Low | No funding required | Ongoing |

LIST OF CITY OF EMERYVILLE'S ASSETS AT RISK FOR ALL APPLICABLE HAZARDS

Existing buildings, facilities, and critical assets indicated below are government-owned structures. Potential financial losses are based on December 2023 property value. Identified hazards listed as most likely to impact relative asset is based on the geographical location of each structure, historical exposure to said hazards, and the vulnerability of each asset.

Table 3.3 (b). Assets at Risk

| Structure | Facility Type | Address | Occupancy (SQ. FT) | Property Value | Hazard(s) most likely to impact |
|----------------------------------|----------------|--------------------|--------------------|----------------|--|
| Child Development Center | Community | 1220 53rd Street | 11,500 | \$4,696,863 | Earthquake, Terrorism, Biological Threats |
| Civic Center Addition | Government | 1333 Park Avenue | 16,532 | \$8,330,952 | Earthquake, Civil Disturbance, Terrorism |
| Civic Center (Old Town Hall) | Government | 1333 Park Avenue | 7,808 | \$3,868,167 | Earthquake, Civil Disturbance, Terrorism |
| Veteran's Memorial/Senior Center | Community | 4321 Salem Street | 14,183 | \$5,760,341 | Earthquake, Terrorism, Biological Threats |
| Emeryville Amtrak Station | Transportation | 5885 Horton Street | 9,483 | \$3,215,184 | Earthquake, Floods, Utility Infrastructure Failure, Terrorism |
| Public Works Corporate Yard | Government | 5679 Horton Street | 48,000 | \$6,709,651 | Hazardous Material Release, Floods, Utility Infrastructure Failure |

| Structure | Facility Type | Address | Occupancy (SQ. FT) | Property Value | Hazard(s) most likely to impact |
|---|---------------|--------------------|--------------------|----------------|---|
| Marina Restrooms | Community | 3300 Powell Street | 600 | \$252,259 | Earthquake |
| Marina Pier | Community | 3300 Powell Street | 6,500 | \$884,744 | Climate Change |
| Fire Station #2 | Emergency | 6303 Hollis Street | 10,576 | \$3,783,549 | Earthquake, Climate Change, Floods, Utility Infrastructure Failure, Terrorism |
| Fire Station #2 - Bio Storage Building | Emergency | 6303 Hollis Street | 2,600 | \$447,621 | Earthquake, Climate Changes, Floods, Biological Threats |
| Peninsula Fire Station | Emergency | 2333 Powell Street | 7,336 | \$3,258,966 | Earthquake, Climate Change, Floods, Utility Infrastructure Failure, Terrorism |
| Police Station Building - Police Department | Emergency | 2449 Powell Street | 12,746 | \$5,974,709 | Earthquake, Climate Change, Terrorism, Civil Disturbance |
| Public Art Installations | Community | Various locations | n/a | \$1,528,653 | Earthquake, Fires, Floods |
| Aggregate Bi/Rents | Government | Various locations | n/a | \$14,358,054 | Earthquake, Fires, Floods, Civil Disturbance, Utility Infrastructure Failure |
| Contractors Equipment | Government | Various locations | n/a | \$288,000 | Earthquake, Hazardous Material Release, Fires, Floods, Utility Infrastructure Failure |
| Fleet Vehicles | Government | Various locations | n/a | \$5,058,142 | Earthquake, Fires, Floods, Civil Disturbance, Terrorism |
| Marina Public Docks | Community | 3310 Powell Street | 3,588 | \$203,271 | Climate Change, Floods, Utility Infrastructure Failure, Terrorism |

| Structure | Facility Type | Address | Occupancy (SQ. FT) | Property Value | Hazard(s) most likely to impact |
|--|---------------|---------------------|--------------------|----------------|---|
| Harbor Master Office | Community | 3310 Powell Street | 2,890 | \$658,340 | Climate Change, Floods, Civil Disturbance |
| Marina Pump Station | Community | 3310 Powell Street | 156 | \$138,008 | Earthquake, Utility Infrastructure Failure |
| Hong Kong East Ocean Restaurant | Community | 3199 Powell Street | 11,823 | \$4,238,428 | Earthquake, Climate Change, Fires, Floods |
| Doyle/Hollis Park - Restrooms Building | Community | 133 62nd Street | 406 | \$169,637 | Earthquake |
| Community Center - Modular | Community | 4300 San Pablo Ave | 8,500 | \$1,536,901 | Earthquake, Terrorism, Biological Threats |
| Warehouse | Government | 5890 Christie Ave | 16,304 | \$3,671,841 | Earthquake, Fires, Floods, Terrorism |
| Office Building | Business | 5900 Christie Ave | 14,416 | \$4,764,926 | Earthquake, Fires, Civil Disturbance, Utility Infrastructure Failure, Terrorism |
| Huchiu Park Restroom | Community | 4311 Hubbard Street | 75 | \$250,000 | Earthquake, Hazardous Materials Release, Tsunami |

In addition to the number of City owned facilities and assets listed in Table 3.3 (b), the City also provides community amenities that, in a local hazardous event, would be subjected to critical damage or loss. Specifically, these amenities pertain to the following.

PARKS AND OPEN SPACES

The City of Emeryville has a total of 28.73 acres of parks and open spaces. Parks and open spaces play a vital part in providing green spaces and recreational areas for the community.

| | |
|-----------------------------------|------------|
| 61 st Street Mini-Park | 0.14 acres |
| Doyle Hollis Park | 1.25 acres |
| Christie Avenue Park | 1.29 acres |
| Community Gardens (3) | 0.69 acres |
| Davenport Mini-Park 14 | 0.44 acres |
| Marina Park | 7.56 acres |
| Hollis Green | 0.69 acres |

| | |
|---|------------|
| Point Emery | 1.37 acres |
| Shorebird Park | 1.97 acres |
| Stanford Avenue Park | 1.74 acres |
| Temescal Creek Park | 0.70 acres |
| Emeryville Greenway | 1.50 acres |
| Horton Landing Park | 1.40 acres |
| Joseph Emery Skate Park | 0.65 acres |
| San Francisco Bay Trail | 3.31 acres |
| Parc on Powell | 0.50 acres |
| Huchuin Park (public park + open space) | 3.53 acres |

ROADS

Roads and pathways are important assets as they provide connection points to different communities and areas of the City. Road value loss is estimated at \$500,000 per road.¹⁰⁶

| | | | | | |
|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 36 th Street | 37 th Street | 39 th Street | 40 th Street | 41 st Street | 42 nd Street |
| 43 rd Street | 44 th Street | 45 th Street | 47 th Street | 48 th Street | 53 rd Street |
| 54 th Street | 55 th Street | 59 th Street | 61 st Street | 62 nd Street | 63 rd Street |
| 64 th Street | 65 th Street | 66 th Street | 67 th Street | | |

| | | | |
|------------------|-----------------|--------------------|--------------------------|
| San Pablo Avenue | Adeline Street | Bay Street | Beaudry Street |
| Brunswick Lane | Christie Avenue | Doyle Street | Emery Street |
| Essex Street | Frontage Road | Halleck Street | Harlan Street |
| Haruff Street | Haven Street | Holden Street | Hollis Street |
| Horton Street | Hubbard Street | Lacoste Street | Ocean Avenue |
| Overland Avenue | Park Avenue | Peabody Lane | Peladeau Street |
| Powell Street | Salem Street | Shellmound Street | Shellmound Way |
| Sherwin Avenue | Stanford Avenue | Steve Dain Drive | Vallejo Street |
| Watts Street | Peralta Street | Yerba Buena Avenue | West MacArthur Boulevard |

¹⁰⁶ There is no accurate prediction of each road's likelihood to be impacted by a particular hazard event. Each road may experience multiple damages from different hazardous events or multiple roads can be impacted by one single event. Road damages are estimated based on estimated road length of 2 to 300 feet.

BICYCLE / PEDESTRIAN PATHWAYS

| | |
|-------------------------------------|---|
| Doyle Street / Emeryville Greenway | Christie Avenue Bicycle/Pedestrian Path |
| Bay Bridge Bicycle/Pedestrian Path | Joseph Emery Bicycle/Pedestrian Path |
| Pedestrian Bridge at Amtrak Station | South Bayfront Pedestrian Bridge |

FEDERAL, STATE AND LOCAL ORDINANCES AND REGULATIONS

The City has enacted local ordinances and regulations to promote disaster mitigation, preparedness, response or recovery. Many City ordinances and programs are based on State requirements. These local ordinances and State regulations are listed below.

Seismic Hazard Mitigation Ordinance 95-001. Emeryville's Seismic hazard mitigation ordinance was passed in 1995 to amend and clarify an earlier ordinance passed in 1990. This ordinance applies only to unreinforced masonry buildings identified as potential seismic hazards. The mitigation measures contained in this ordinance are minimum measures only and cannot be applied to any building that is undergoing a change of occupancy. For unreinforced and under-reinforced buildings requiring building permits and/or undergoing a change of occupancy, the City has adopted Appendix A1 of the International Existing Building Code (IEBC).

Municipal Code, Title 4, Public Safety, Chapter 2: Emergency Plans. The declared purposes of this chapter are to provide for the preparation and carrying out of plans for the protection of person and property within the City in the event of a disaster and to provide for the coordination of the civil defense and disaster functions of the City with all other public agencies and affected private persons, corporations and organizations. Any expenditure made in connection with such civil defense and disaster activities, including mutual aid activities, shall be deemed conclusively to be for the direct protection and benefit if the inhabitants and property of the City.

Municipal Code, Title 9, Planning Regulations, Chapter 6, Article 7. The purpose of these regulations is to establish the criteria for the conversion of existing rental units to condominiums while ensuring that converted dwellings meet safety standards related to seismic retrofits and fire codes.

Municipal Code, Title 9, Planning Regulations, Chapter 5, Article 7: Hazardous Waste Facilities. Hazardous Waste Facility Projects may not be located within 200 feet of any active or recently active seismic fault; in an area with 25% or greater slope; or areas subject to liquefaction or subsidence unless the facility incorporates adequate engineered design features which assure structural stability; in an area of highly permeable soils or sediment; in a 100-year flood plain or an area subject to flooding by dam failure or tsunamis. Hazardous waste facilities require a Major Conditional Use Permit from the Planning Commission.

Public Resources Code Section 4291. PRC 4291 is the law requiring annual defensible space to be provided around all structures in, upon, or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material.

Public Resources Code, Title 14. These regulations provide additional fire prevention and suppression standards.

Public Resources Code Section 2694. PRC 2694 states that a person who is acting as an agent for a transferor or real property that is located within a seismic hazard zone, shall disclose to any prospective transferee the fact that the property is located within a seismic hazard zone.

Public Resources Code Section 2695 (a). Development in a liquefaction hazard zone requires adherence to the guidelines for evaluating and mitigating seismic hazards.

Municipal Code, Title 4, Public Safety, Chapter 5: Fire Code. Effective January 1, 2017, the City adopted The 2015 International Fire Code (IFC), as amended by the State and known as the 2016 California Fire Code (CFC), including Sections 102, 103, 104.9, 108, 113.2 and 503 (California Code of Regulations, Title 24, Part 9) as published by the International Code Council (ICC) and the California Building Standards Commission. This code provides minimum standards for many aspects of fire prevention and suppression activities. These codes include provisions for access, water, supply, fire protections systems, industrial and commercial practices, and the use of fire-resistant building materials. The Fire Marshal is authorized to inspect, or cause to be inspected, all building occupancies within the jurisdiction, except for the private spaces of residential dwellings, for the purpose of ensuring compliance with the Uniform Fire Code.

Municipal Code, Title 8: Building Regulations. The Chief Building Official is authorized to issue a permit for construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. Minimum requirements that must be fulfilled before a partial permit may be issued include: all land use, site development foundation and special inspection issues shall have been resolved and a preliminary review has been completed; if applicable to the project, the Public Works Department shall have approved all site drainage and public works improvements including all applicable fees, encroachment permits, bonds, etc.; the Fire Marshal shall have approved all site development features such as access, fire hydrants, etc.; applicable soils reports, special inspection program form, calculations, hazardous materials, management plan and other information deemed by the Chief Building Official to be pertinent and necessary for the inspection of the work.

California Code of Regulations, Title 19. These regulations pertain to fire prevention and engineering measures for new construction.

California Code of Regulations, Title 14, Article 10: Seismic Hazards Mapping.

These regulations shall govern the exercise of the city, county and state agency responsibilities to identify and map seismic hazard zones and to mitigation seismic hazards to protect public health and safety in accordance with the provisions of Public Resources Code, Section 2690 et seq.

Earthquake Safety and Public Buildings Rehabilitation Bond Act (Proposition 122).

In 1990, the State of California passed the Earthquake Safety and Public Rehabilitation Bond Act (Proposition 122). Up to \$50 million was allocated for the seismic retrofit of essential services facilities. Many local governments and special districts have retrofitted their essential services buildings with local funds.

Assembly Bill 337 (Bates bill). This bill was passed in 1992 in response to the Oakland Hills, California urban wildfire of 1991. It requires brush clearance and fire-resistant roof material (Class A or B) to be used on all new construction that is located in areas designated as being in a “Very High Fire Severity Zone”.

California Civil Code 1103. This article mandates three natural hazard disclosures and consolidates these previously required disclosures onto a statutory form called the Natural Hazard Disclosure Statement (NHDS). This form is now a legally required part of most residential property transactions.

Alquist-Priolo Earthquake Fault Zoning Act. The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to identify earthquake fault zones along traces of both recently and potentially active major faults. The Alquist-Priolo Zones are usually one-quarter mile or less in width and proposed development plans within these fault zones must be accompanied by a geotechnical report prepared by a geologist describing the likelihood of surface rupture and other seismically induced hazards. The City of Emeryville is not located in an Alquist-Priolo Earthquake Zone.

California Environmental Quality Act (CEQA) and Guidelines. The CEQA was adopted by the State Legislature to provide public disclosure of the substantial adverse environmental effects of proposed development within the State. The CEQA Statutes and Guidelines (California Code of Regulations Title 14, Chapter 3, Section 15000, et seq.) includes the disclosure of and mitigation for safety hazards as environmental impacts.

Cobey-Alquist Floodplain Management Act. This act encourages local governments to plan, adopt and enforce land use regulations for floodplain management in order to protect people and property from flooding hazards. This act also identifies requirements which jurisdictions must meet in order to receive state and financial assistance for flood control.

CAPABILITIES ASSESSMENT

This capabilities assessment is designed to identify existing local agencies, personnel, planning tools, public policy and programs, technology, and funds that have the capability to support hazard mitigation activities and strategies outlined in this plan.

The City of Emeryville has several key departments with resources to support the implementation of mitigation actions. These departments, along with County, State, Federal and private resources, offer a variety of planning, technical, policy, and staffing resources as summarized in Table 3.3 (c).

| Type of Resource | Resource Name | Ability to Support Mitigation | Lead Personnel | Web Address |
|------------------|-----------------------------------|--|--|---|
| Plan Resource | Emeryville General Plan | Principal policy document that guides conservation, development and change in the City. Identifies City programs and policies as they pertain to land use, public services, housing, natural resources, and safety. The General Plan supports the implementation of mitigation actions, and this Local Hazard Mitigation Plan Update will be adopted as an amendment to the Safety Element of the City's General Plan. | Community Development Department - Planning Department | http://www.emeryville.org/385/General-Plan-and-Supporting-Documents |
| Plan Resource | Climate Action Plan | The City of Emeryville's Climate Action Plan adopted in 2008, and Climate Action 2.0 Adopted in November 2015 is a comprehensive roadmap that outlines specific activities that the City will undertake to reduce greenhouse gas emissions. Hazards identified in 2009 LHMP (and this LHMP) as well as some mitigation strategies were incorporated into the Climate Action 2.0 update. | Public Works Department - Environmental Programs | http://emeryville.org/338/Climate-Action-Plan |
| Plan Resource | Capital Improvement Program (CIP) | This plan identifies the essential upgrades to infrastructure and allocates funding to see these improvements through. Mitigation ideas from the 2019 (and this) LHMP have been incorporated into the current CIP. | Public Works Department | http://www.emeryville.org/DocumentCenter/View/8286/Capital-Improvement-Program?bidId= |
| Plan Resource | Local Hazard Mitigation Plan | The Local Hazard Mitigation Plan identifies the risks from natural hazards present in the City and includes strategies to reduce those risks. The City can coordinate hazard mitigation activities with neighboring cities as well as the county for a more consistent and unified approach to hazard mitigation. | All Departments | http://emeryville.org/1106/Local-Hazard-Mitigation-Plan |
| Policy Resource | Building Code | The Building Code specifies how new structures can be built. It includes the California Building Code, in addition to any amendments made by the City of Emeryville. Mitigation actions may involve amending the Building Code to improve a building's safety or structural stability. | Community Development Department - Building Division | http://www.ci.emeryville.ca.us/1017/Community-Development |
| Policy Resource | Zoning Ordinance | The City's Zoning Ordinance translates plan policies into specific use regulations, development standards and performance criteria that govern development on individual properties. The General Plan establishes the policy framework while the Zoning Ordinance prescribes standards, rules and procedures for development. | Community Development Department - Planning and Building Divisions | http://www.ci.emeryville.ca.us/1017/Community-Development |

| Type of Resource | Resource Name | Ability to Support Mitigation | Lead Personnel | Web Address |
|--|---|---|---|---|
| Personnel Resource | Community Development Department | The Community Development Department has the primary responsibility for administering the laws, regulations, and requirements that pertain to the physical development of the city, and for overseeing the implementation of the City's economic development, housing, and public arts programs. Mitigation activities related to planning and building can be implemented by any and all of the three Divisions. | Planning Division Building Division Economic Development and Housing Division | http://www.ci.emeryville.ca.us/1017/Community-Development |
| Personnel Resource | Finance Department | The Finance Department manages all financial aspects of City operations - accounting, annual audit requirements, tracking and accounting for all purchase orders, accounts payable, accounts receivable and business licenses. The department may be responsible for implementing mitigation actions related to the department's scope before, during and after a disaster. | Finance Department - Finance Director | http://emeryville.org/119/Finance |
| Personnel Resource | Human Resources Department | The Human Resources Department is responsible for staff recruitment and selection, classification and compensation, employee and labor relations, payroll, employee benefits, health and wellness and some aspects of risk management. | Human Resources Department - HR Director and Emergency Preparedness Coordinator | http://www.emeryville.org/121/Human-Resources |
| Personnel Resource | Police Department | The Police Department protects life and property, maintains law and order, seeks solutions to neighborhood problems that adversely affect the quality of life, fosters a community spirit of cooperation and adherence to laws of our society. The Police Department is also the lead department for the City's Emergency Preparedness Program and in conjunction with the Alameda County Fire Department provides training on emergency preparedness to City staff and the community. Mitigation activities may be implemented by the Police Department. | Police Department - Chief of Police | http://www.emeryville.org/123/Police |
| Financial Resource | Disaster Reserve Fund | The purpose of the Disaster Reserve Fund is to provide funding in response to a disaster or other imminent or emergency event for which a declaration of a state of emergency has or could be declared. | Finance Department - Finance Director | http://www.emeryville.org/376/Budget |
| Technical Resources | Emergency Preparedness Page on City Website | The City has a Disaster Preparedness Page on its website for residents. The Earthquake Information Page includes information on Disaster Supply Kits, Emergency Alert Notifications, Creating a Disaster Plan, Emergency Response Training, Local Hazard Mitigation Plan, Climate Action Plan and Earthquake Information. | Police Department | http://www.emeryville.org/86/Disaster-Preparedness |
| Community and Mitigation Outreach | Building Department | The City promotes the Earthquake Brace + Bolt program for homeowners on the Building Division Website. The Earthquake Brace and Bolt Program also has promotional information for residents which will be made available at the Front Counter in City Hall and on the City's website. | Building Department | www.earthquakebracbolt.com |
| Personnel and Technical Resource Community and Mitigation Outreach | Alameda County Fire Department | The City contracts with the Alameda Fire Department for comprehensive fire services to protect and safeguard life, environment, and property including "all risk" services that mitigate the effects of fire, injury, illness, urban search and rescue, water rescue, hazardous materials, storm, human-caused calamity and natural disasters. The department works closely with the City and provides technical assistance and training on disaster preparedness for City staff and the community. | Alameda County Fire Department - Fire Chief | http://www.emeryville.org/120/Fire |

| Type of Resource | Resource Name | Ability to Support Mitigation | Lead Personnel | Web Address |
|--|--|---|-------------------------------------|---|
| Technical Resource | Alameda County Sheriff's Office of Emergency Services (ACSO OES) | The Alameda County Sheriff's Office of Emergency Services provides guidance on disaster preparedness activities to jurisdictions in the County. | Alameda County Sheriff's Office | https://www.alamedacountysheriff.org/cws_oes.php |
| Plan Resource | Alameda County Hazard Mitigation Plan | The purpose of this plan is to identify the natural hazards in the County, determine how they will impact the community, and develop strategies to lessen the effect of those hazards and create a more disaster resilient Alameda County. | Alameda County | https://lhmp.acgov.org |
| Plan Resource | Alameda County General Plan | The County's General Plan is a long-range policy document approved by the Board of Supervisors to guide physical, economic, and environmental growth in the County. The plan includes policies intended to reduce hazards and disasters in Alameda County. | Alameda County | https://www.acgov.org/cda/planning/generalplans/index.htm |
| STATE AND FEDERAL AGENCIES | | | | |
| Technical Resource | California Department of Transportation (Caltrans) | Caltrans has jurisdiction over state-designated highways, including Highway 80, which bisects the City in two. The City can work with Caltrans on making the highway more resilient and developing an evacuation for the Peninsula residents and businesses if the highway overpass should be compromised. | Caltrans | http://www.dot.ca.gov/ |
| Technical and Financial Resource | California Office of Emergency Services | This state agency provides guidance on hazard mitigation planning activities in California, as well as information on reducing risk for residents, businesses, and governments. It also provides notification of funding opportunities for hazard mitigation activities. | CalOES Mitigation Planning Division | http://www.caloes.ca.gov/Cal-OES-Divisions/Hazard-Mitigation |
| Technical and Financial Resource | Federal Emergency Management Agency (FEMA) | This federal agency provides guidance for hazard mitigation activities and distributes federal funding for hazard mitigation grants and recovery efforts after a declared disaster. | FEMA | http://www.fema.gov/multi-hazard-mitigation-planing |
| Technical and Financial Resource | Bay Area Urban Areas Security Initiative (BAUASI) | The Bay Area Urban Areas Security Initiative sustains and improves regional capacity to prevent, protect against, mitigate, respond to, and recover from terrorist attacks and catastrophic disasters. BAUASI also administers the Homeland Security Grant Program. | BAUASI | http://www.bayarea uasi.org/ |
| SPECIAL DISTRICTS AND PRIVATE RESOURCES | | | | |
| Technical Resource | East Bay Regional Park District (EBRPD) | East Bay Regional Park District owns and manages the Lake Temescal Dam. | EBRPD | https://www.ebparks.org |
| Technical Resource | Pacific Gas & Electric | The Pacific Gas and Electric Company (PG&E) owns the electricity and natural gas transmission and distribution systems in the City of Emeryville. It also provides natural gas service and some electrical service to the community. PG&E Can work with the City to reduce the vulnerability of energy infrastructure to natural hazards. | PG&E | https://www.pge.com/ |
| Technical Resource | East Bay Municipal Utility District (EBMUD) | EBMUD owns and operates the water distribution system or the City of Emeryville. EBMUD can work with the City to reduce the vulnerability of the water infrastructure to natural hazards. | EBMUD | https://www.ebmud.com/water/ |

MITIGATION PROJECTS AND PROGRAMS

Local Hazard Mitigation Plan (Update 2025). The intent of the Local Hazard Mitigation plan is to reduce or prevent injury, death and damage from hazards in the City. It identifies past and present mitigation activities, current policies and programs, and mitigation strategies for the future. This plan also guides hazard mitigation activities by establishing hazard mitigation goals and objectives.

General Plan. The City of Emeryville General Plan, adopted in 2009, includes a chapter on “Conservation, Safety and Noise” which serves as the Safety Element of the plan. The plan also includes a chapter on “Sustainability” which outlines sustainable design measures and policies the City can undertake to reduce its contribution to global climate change, minimize its reliance on foreign oil and other fossil-fuel sources, and decrease consumption of natural resources. The Local Hazard Mitigation Plan has been adopted as an amendment to the Safety Element of the General Plan.

Climate Action Plan. The City of Emeryville’s Climate Action Plan adopted in 2008, and Climate Action Plan 2.0 Adopted in November 2016 is a comprehensive roadmap that outlines specific activities that the City will undertake to reduce greenhouse gas emissions. Hazards identified in the 2009 Local Hazard Mitigation Plan and the 2019 Local Hazard Mitigation Plan update were taken into consideration when developing Climate Action Plan 2.0.

Capital Improvement Program Fiscal Years 2023 – 2028. The current Capital Improvement Program (CIP) was adopted by council in June 2023. Several projects in the CIP were derived from mitigation strategies identified in the 2019 Local Hazard Mitigation Plan.

Program for Seismic Retrofit for Wood-Framed Dwellings. The City of Emeryville has established a program to encourage owners of one and two-family, wood-framed residential structures to seismically upgrade their properties. Emeryville property owners may purchase, from the Emeryville Building Division, a pamphlet and a drawing that will help them to install simple seismic retrofit measure to their buildings. This drawing may be used by a licensed contractor or by a skilled homeowner who wishes to take out an owner/builder permit. The permit applicant needs to provide a basic foundation plan of the structure to be retrofitted.

Earthquake Brace + Bolt. In 2016, the City was approved by the California Residential Mitigation Program Board members to be included in the 2016 expansion of the Earthquake Brace + Bolt Program (EBB). Beginning January 1, 2016, this program provides up to \$3,000 to homeowners who brace and bolt their homes in accordance with the program rules. This program is for a limited duration.

Fire Prevention Education Program. The City contracts with Alameda County Fire Department (ACFD) to provide fire services to the City. ACFD offers a public information and education program that promotes public awareness of the significance of Fire/Safety

prevention measures. This program enables the public to be better prepared when an emergency fire situation occurs.

Emergency Preparedness Education Program. Alameda County Fire Department also offers a variety of training in Emergency Preparedness. These trainings are topic based and are geared towards increasing the awareness, preparedness, and capability of all community members within the City of Emeryville. The goals of these training programs are to increase the City's and the community's capability to mitigate against, prepare for, response to, and recover from disasters. Program offerings include Personal Emergency Preparedness (PEP) and Community Emergency Response Team (CERT) trainings.

LAND USE AND DEVELOPMENT TRENDS

Emeryville's land use transformation over the past 15 years since the last General Plan was adopted has been extensive. Formerly dominated by manufacturing and distribution, the City is now marked by the recent development of research and development spaces, multi-story residential developments, as well as mixed-use developments. Emeryville is a built-out city, necessitating new development from the reuse of existing underutilized sites and buildings.

Emeryville's Planning Regulations contain 16 base zoning districts, including three residential districts and one mixed-use residential district. Unlike in most traditional zoning ordinances, the City maintains a map-based system of building intensity (floor area ratio (FAR)), residential density, and building height regulations, which are part of the General Plan.

This system - where building heights, residential densities, and FARs are not linked to underlying land uses - is an excellent approach for a city of Emeryville's size, allowing molding of urban form based on geographic and location considerations. Thus, the City's zoning regulations - which regulate what gets built on the ground - reflect an intense, mixed, and in some instances a tall city as suggested by the General Plan. Consequently, the Emeryville emerging from the zoning ordinance reflects the broad vision for the community presented in the General Plan.

Almost all of the Bayfront and freeway edge area west of the railroad tracks has been redeveloped over the past 50 years. Much of this space is devoted to retail uses in large-scale developments, such as Bay Street, IKEA, the Public Market, and the Powell Street Plaza all of which serve a regional clientele.

As the date of this plan, almost no industrial uses remain in this area. Residential developments to the west of the tracks (Watergate Condominiums, Pacific Park Plaza, Avenue 64, Artistry, Bay Street, Emme, Marketplace Parcel D and recently added Bay Center Apartments) are large in size and high in density, comprising about 3,348 housing units – more than half of the housing in the City.

Because Emeryville is largely flat, topography does not play a factor in the City's land use pattern. Transportation corridors, however, do split the City into several sub-districts. The main divisions are I-80 and the railroad, and to a smaller extent Powell Street. Interstate-580 separates Emeryville from Oakland along the Southern City limits, although a portion of the area north of I-580 is in Oakland.

The General Plan identifies the evacuation routes for the City as I-580, Hollis Street and San Pablo Avenue. Impacts of future development and population changes on these routes will be addressed in the next General Plan Update which is anticipated to be completed in 2030.

In addition, while the population in Emeryville has increased, the City has not seen an increase in traffic. There are different travel patterns since the pandemic due to remote work and hybrid work environments as well as shift to more online shopping versus in person shopping at the City's big box stores and retail centers.

CITYWIDE LAND USE GOALS AND POLICIES¹⁰⁷

GOALS

(a) Land Use

LU-G-1: An overall balance of uses. Employment, residential, cultural, destination and local retail-as well as a full range of amenities and services necessary to support a vibrant community.

LU-G-2: A mixed-use city. Mixed-use development in various parts of the city, with the range of permitted and required uses varying to meet the needs of specific districts and neighborhoods.

LU-G-3: Community activity centers. Centers that combine residential, retail, office, and public uses to create areas of identity and activity for residents and visitors.

LU-G-4: A mix of housing types. A diversity of housing types to accommodate a variety of household sizes and incomes.

LU-G-5: Preservation of residential neighborhoods. Residential use, structures, low-rise scale, and character of the Triangle, Doyle Street, and Watergate neighborhoods preserved, and the scale of other areas of stability maintained.

¹⁰⁷ City of Emeryville. Emeryville General Plan. City of Emeryville Planning Division. October 2009. Pages 2-20 - 2-23. Web. 17 Mar. 2017. <http://emeryville.org/DocumentCenter/Home/View/1016>.

LU-G-6: Vibrant new mixed-use center. Intensification of existing underutilized commercial centers with surface parking (such as Powell Street Plaza and East Bay Bridge Center) as vibrant, multi-story, walkable mixed-use destinations with structured parking and open space.

(b) Height and Intensity

LU-G-7: A varied skyline. With the highest intensities/heights grouped in the Powell Street/Christie Avenue area, with heights stepping down from this urban core.

LU-G-8: Uninterrupted sunlight in key areas. During designated periods on all major parks. Adequate sunlight on sidewalks, streets, especially in Neighborhood Centers with other key public gathering areas.

LU-G-9: Appropriately scaled buildings. Heights and massing that do not appear monolithic.

LU-G-10: Maximum sky exposure. For streets and public spaces, and minimal view disruptions.

(c) Economic Development

LU-G-11: A wide range of economic activity. An economy that capitalizes on Emeryville's central location, strengthens the City's tax base, and ensures that Emeryville has adequate fiscal resources to fund high quality public services for its residents and businesses.

LU-G-12: Successful businesses. Retain and foster the growth of Emeryville businesses.

LU-G-13: Local employment opportunities. Encourage establishment of businesses that will employ and serve Emeryville residents.

POLICIES

(a) Land Use

LU-P-1. Land uses will be consistent with the Land Use Classifications in Section 2.4 and the Land Use Diagram, Figure 2-2 of the General Plan.

LU-P-2. The Powell / Christie / Shellmound / I-80 core area will be developed into a compact but high-intensity regional transit hub. This hub will include a retail core, with stores, restaurants, and hotels; a financial and commercial center, creating a daytime work population; and a residential neighborhood providing vitality during non-work hours.

LU-P-3. The northern (north of Powell) and southern halves of the Powell/Christie core area shall be integrated and connected, and the district shall be walkable, with small blocks, pedestrian orientated streets and connections to surroundings.

LU-P-4. Park Avenue (west of Hollis Street), Hollis Street (between 61st and midblock between 65th and 66th streets), Powell Street/Captain Drive, and San Pablo Avenue (between 36th and 47th streets) will be developed as walkable, mixed use neighborhood centers, with an array of amenities and services-including stores, restaurants and cafes, galleries and office uses – to serve neighborhood needs, with community serving uses and active building frontages that engage pedestrians at the ground level.

LU-P-5. Retail uses shall be concentrated in areas with Neighborhood or Regional Retail overlays, near neighborhood centers, and in the Emeryville Marketplace.

LU-P-6. The current deficiency of park and open space will be addressed by making parkland acquisition a high priority by the City, and by working with private landowners to secure these areas through development incentives, land swaps other mechanisms.

LU-P-7. Existing uses on sites designated for large community parks along Hollis Street shall remain as conforming uses, until such time as these sites are acquired by or dedicated to the City.

LU-P-8. Live/Work uses will be permitted in all land use designations except Public Parks/Open Space, and Marina. In the Industrial district west of Hollis Street, only “heavy live/work-involving”, for example manufacturing, welding or assembly will be permitted.

LU-P-9. Zoning measures will ensure health and safety compatibility for industrial uses bordering residential uses.

(b) Height and Intensity

LU-P-10. Maximum building height will be defined by the Maximum Building Heights diagram in Figure 4.2 of the General Plan.

LU-P-11. Maximum floor area ratios (FARS) and residential densities for sub-areas of the City, will be defined by Figure 2-3 and 2-6 respectively in the General Plan.

LU-P-12. Bulk standards will be defined in the Zoning Ordinance, with particular emphasis on zones where taller buildings are permitted.

LU-P-13. Building heights will step down to the east and west from Powell/Christie core; buildings taller than 55 feet are permitted east of Hollis Street. The height and scale of existing development (30 feet maximum) in the Doyle Street and Triangle neighborhoods will be maintained.

LU-P-14. Heights greater than 100 feet are only permitted for buildings that meet specific criteria, such as minimal impacts on public views, sky exposure, wind, and shadows, adequate separation from other tall buildings, and exemplary design, and/or provide public amenities, through a discretionary review and approval process.

LU-P-15. Buildings in all districts shall be required to step down to meet permitted heights in adjacent lower-rise districts.

LU-P-16. A point-based system will be established for intensity, height and density bonus, as well as review and approval process.

(c) Policies for Specific Areas

LU-P-17. The area round the Amtrak station shall be developed with pedestrian and bicycle amenities, and transit-supportive uses, through measures such as reduced parking requirement, incorporation of public parking in developments, and accounting for transit proximity when considering height and FAR bonuses.

LU-P-18. The reuse of the Sherwin Williams site shall include a mix of residential and nonresidential uses with ample open space, centered on an extension of the Emeryville Greenway connecting the Horton Landing Park and the Park Avenue District.

LU-P-19. The relocation of the AC Transit facility will be pursued. Alternative community uses if/when the facility relocates will be studied.

LU-P-20. Along San Pablo Avenue, neighborhood-oriented retail establishments that may serve a regional clientele as well with housing above will be promoted. Development adjacent to residential uses in the Triangle neighborhood shall be in keeping with the scale and character of the residential uses.

LU-P-21. The East Bay Bridge, Powell Street Plaza, and Marketplace shopping centers shall be intensified by consolidating parking into structures and converting surface parking lots into residential and mixed-use development-including retail, hotels, and offices; expanding the City street grid through the sites; and developing new parks and public open space. Future redevelopment of these shopping centers should include at least as much retail space as existed when this General Plan was adopted.

LU-P-22. In the short term, landscaping and facades in the East Bay Bridge Shopping Center should be upgraded.

LU-P-23. The Powell Street Plaza site shall be encouraged to redevelop as a high intensity, high-rise, mixed-use development that complements the Powell Street entrance to the city from the freeway.

LU-P-24. The Marketplace and adjacent parcels shall be encouraged to redevelop with a mix of uses, and iconic mid to high-rise development.

LU-P-25. If new residential buildings are proposed adjacent to freeways and railroad tracks impacts of these corridors, including noise, vibration, air pollution, should be considered during site planning. Noise, vibration, and air pollution shall be mitigated to the extent possible.

(d) Economic Development

LU-P-26. A mix of retail that draws local customers as well as patrons from the general Bay Area shall be encouraged.

LU-P-27. A diversity of commercial uses to insulate the City's fiscal base from downturns in particular markets shall be maintained.

LU-P-28. The City will pursue retail uses that will serve the need of Emeryville resident, and encourage these uses to locate in the Neighborhood centers.

LU-P-29. The City will encourage the development and retention of small business, start-up firms, partnership incentives, and buildings that accommodate these businesses.

LU-P-30. The City will encourage development of dynamic, leading edge industries, based in high technology, medical/bio engineering, bio technology, and media that provide good quality jobs with the potential for career advancement.

LU-P-31. The City will encourage development of existing Emeryville businesses with the object of retaining and expanding employment opportunities and strengthening the tax base. Provide assistance to existing businesses that may be displaced by new development to relocate in Emeryville.

LU-P-32. The City will work existing Emeryville businesses, Chamber of Commerce, and others to address the City's economic needs and stimulate growth.

On the following page are Emeryville's General Plan land use maps indicating where the General Plan allows various future uses, and a diagram that designates the areas of change and stability throughout the City. Areas of change are those parts of the City that have a heightened potential for redevelopment over the next 20 years because of current land uses and intensity of development, while areas of stability are those parts of the City that are not anticipated to change significantly in character, land use or development intensity over the next 20 years.

This map also indicates master plan areas, which are likely to change over the next 20 years, but that have already been approved by the City Council either through the entitlement of Planned Unit Developments (PUD), or the adoption of an area plan that includes a vision for the future character of the area.

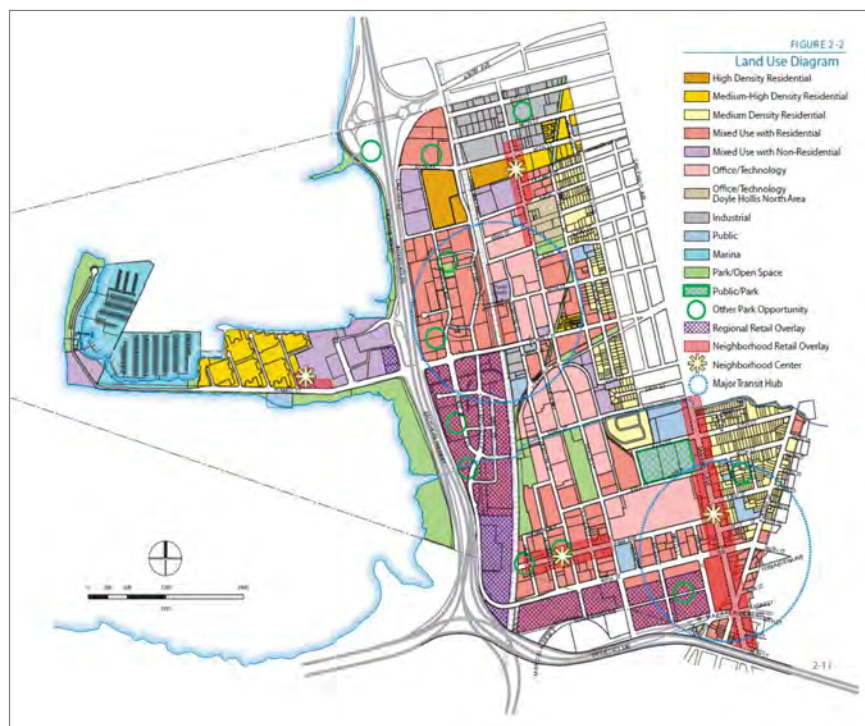


Figure 3.7 (a). City of Emeryville General Plan Land Use Diagram¹⁰⁸

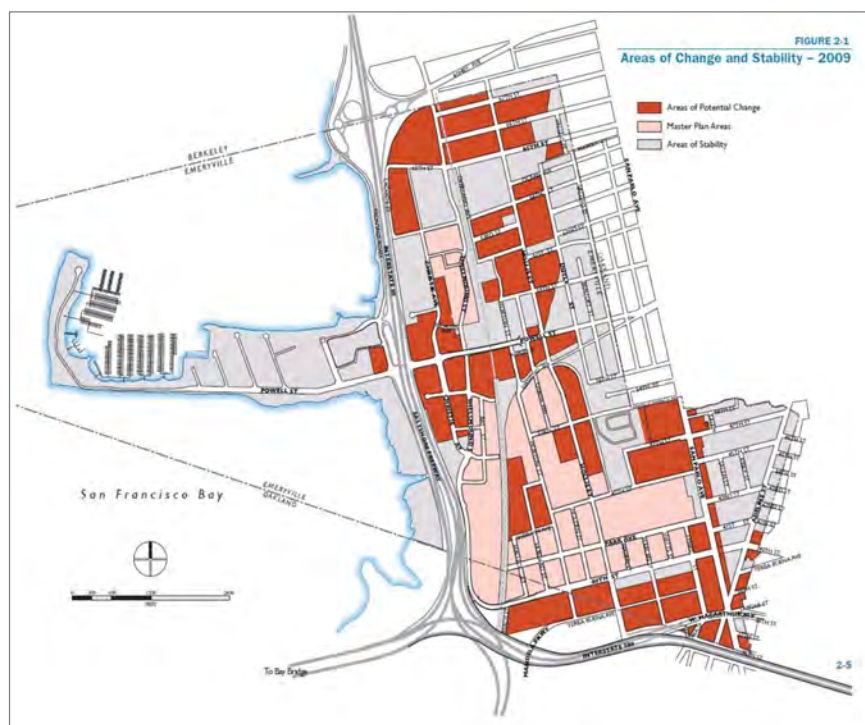


Figure 3.7 (b). City of Emeryville Areas of Change and Stability - 2009¹⁰⁹

¹⁰⁸ City of Emeryville. Emeryville General Plan. City of Emeryville Planning Division. October 2009. Web. 13 Apr. 2017. <http://emeryville.org/DocumentCenter/Home/View/1016>.

¹⁰⁹ City of Emeryville. Emeryville General Plan. City of Emeryville Planning Division. October 2009. Web. 13 Apr. 2017. <http://emeryville.org/DocumentCenter/Home/View/1016>.

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PLAN MAINTENANCE



Emeryville Amtrak Station

PLAN REVIEW, EVALUATION AND IMPLEMENTATION

The City of Emeryville 2025 - 2030 Local Hazard Mitigation Plan will be reviewed by CalOES and FEMA for consideration. After receiving an “Approval Pending Adoption” determination from FEMA, the Plan will be presented to the Planning Commission and the Emeryville City Council in public hearings for final adoption.

In April 2021 and May 2022, the Emergency Preparedness Coordinator convened a meeting to review any new land development, mitigation activities or hazards identified in the City since the approval of the plan in 2019 using a City of Emeryville Local Hazard Mitigation Plan Review – Crosswalk. Participants in these meetings included the City Manager, the Community Development Director and the Public Works Director.

To ensure that the mitigation strategies in the 2025-2030 LHMP are implemented as envisioned, and to review any new hazards data as it becomes available, going forward the Community Development Director or their designee will monitor the mitigation measures, and annually review the plan in partnership with the City Manager’s Office and the Public Works Department.

The Local Hazard Mitigation Plan is a living document. It will be reviewed by the above-mentioned staff after every major disaster, who will propose amendments, when deemed necessary. If amendments are needed, staff will commence the public planning process as well as public hearings. The amended plan would then be submitted to CalOES and FEMA for final approval.

To track the implementation of the plan over time, the Community Development Director or their designee will engage with stakeholders on a timely basis to ensure plan implementation is ongoing and is achieving its stated purpose and goals. In order to continue discussion and participation from the public, periodic social media updates on the City’s website, and social media accounts will serve to inform the community of any updates and mitigation action progress.

The 2024 – 2029 Plan will be placed on the City’s website and the public will be able to comment or make inquiries throughout the plan period. In addition, the City will continue with education opportunities during this period to keep citizens informed of the natural and man-made hazards Emeryville faces and what the City is doing to reduce the risks from those hazards. The City will also publish a community survey on an annual basis.

The City will integrate the Local Hazard Mitigation Plan into existing plans and programs where appropriate and is included in the Safety Element of the City’s General Plan.

The Emeryville Local Hazard Mitigation Plan will be reviewed and revised once every five (5) years. The Community Development Director will be the Project Manager for the update. The next version of the Plan will be adopted by the City in 2029.

APPENDIX A



Emeryville Center of Community Life

CITY OF EMERYVILLE PLANNING PROCESS 2019 - 2024 UPDATE

| Date | Event Type | Participants | Purpose |
|----------|---|--|---|
| 4/5/21 | LHMP Annual Crosswalk | City Manager, Public Works Director, Community Development Director and Emergency Preparedness Coordinator | To review the LHMP and update any changes that have occurred and will need to be included in the 2025-2030 update. |
| 5/16/22 | LHMP Annual Crosswalk | City Manager, Public Works Director, Community Development Director and Emergency Preparedness Coordinator | To review the LHMP and update any changes that have occurred and will need to be included in the 2025-2030 update |
| 10/04/23 | Strategy meeting for LHMP Update | City Manager, Assistant City Manager, HR Director, HR Management Analyst - Annuitant | To discuss the LHMP update |
| 10/11/23 | Email to Community Development Department | Valerie Bernardo and Charles Harris, Economic Community Development Coordinators | For recommendations on leaders from underserved communities and socially vulnerable populations to serve on our planning team |
| 10/12/23 | Project Managers for LHMP Update meeting | Assistant City Manager and Human Resources Management Analyst – Annuitant | To discuss the LHMP update and next steps needed |
| 10/12/23 | Email to Community Services Staff for referrals | Community Services Director and Recreation Supervisor for Youth Programs | Seeking a referral to individuals or organizations that work with underserved communities to join our planning team |
| 10/26/23 | Local Hazard Mitigation Plan Public Opinion Survey posted to City website; Emails to City listservs were sent with a link to the website and survey | Community Members and City Employees | Request for community and City staff input on hazards in the City |
| 11/7/23 | Survey Closes | Community Members | Obtain community's input on hazards facing the City |
| 11/28/23 | Local Hazard Mitigation Plan Update Kick-Off Meeting | City of Emeryville staff and representative from Alameda County Fire | To discuss the LHMP update, why we are doing it, and what we need to update the plan |
| 11/29/23 | Project Managers for the LHMP Update | Assistant City Manager and Human Resources Management Analyst – Annuitant | To discuss the LHMP update and next steps needed |

| Date | Event Type | Participants | Purpose |
|---------|---|--|--|
| 1/8/24 | 2 nd Local Hazard Mitigation Plan Update Planning Team Meeting | City of Emeryville staff, representative from Alameda County Fire, and three members of the community | To review previously identified hazards and any new hazards we may wish to include in our plan |
| 1/10/24 | Email from Planning Team Community Member | Email from Louise Engel | Providing information to contribute to the LHMP committee knowledge base toward ranking categories |
| 1/23/24 | Email from Planning Team Community Member | Email from Louise Engel | Providing information regarding Emeryville Cove Yacht Harbor Renovations |
| 1/29/24 | LHMP Update Project Coordinators Check-in | Assistant City Manager and HR Management Analyst - Annuitant | To discuss the next steps in the planning process |
| 2/5/24 | Email to Environmental Programs Supervisor in Public Works | Emailed Nancy Humphrey, PW Environmental Programs Supervisor in Public Works | To request she attend the next planning team meeting to help identify mitigation ideas for Climate Change |
| 2/13/24 | 3 rd Local Hazard Mitigation Plan Update Planning Team Meeting | City of Emeryville Staff and two community members | Continue to review the identified hazards and rank them by priority |
| 3/6/24 | 4 th Local Hazard Mitigation Plan Update Planning Team Meeting | City of Emeryville Staff and two community members | To review the status of previous mitigation ideas, identify new mitigation ideas and to categorize them by priority and funding source |
| 3/6/24 | Email to PW Environmental Programs Supervisor | Emailed Nancy Humphrey, Public Works Environmental Programs Supervisor | To request a list of programs or processes the City has implemented to mitigate or deal with Climate Change since 2019 |
| 3/7/24 | LHMP Check-in with Project Coordinators | Assistant City Manager and HR Management Analyst | To review the results of the March 6 th Planning Team meeting and discuss next steps |
| 3/8/24 | Email to California Department of Conservation Regarding updates to Tsunami Playbook for Emeryville | Email to Jacqueline Bott, PG, CEG, Engineering Geologist, with the California Geological Survey Tsunami Unit | To see if there were any updates to the Tsunami Playbook for the City of Emeryville |
| 3/8/24 | Emailed City of Berkeley | Sent email to the mitigation group at the City of Berkeley | Emailed City of Berkeley with our identified hazards and request a list of their outside agency contacts |

| Date | Event Type | Participants | Purpose |
|---------|---|--|--|
| 3/8/24 | Emailed Operation Dignity | Sent email to Tomika Perkins at Operation Dignity with our prioritization of mitigation ideas and priority rankings of hazards | To obtain input about our mitigation ideas and how they could impact the underserved community |
| 3/13/24 | Sent email to City Emergency Preparedness Coordinator | Sent email to Lt. Fred Dauer, City of Emeryville Emergency Preparedness Coordinator | Forwarded the 2020 Maritime Playbook for Berkeley and Emeryville and the new California Tsunami Evacuation Playbook for Emeryville (updated May 2023) |
| 3/14/24 | Surveys posted on City Website | Sent out a NewsFlash with a link to two surveys on our website | Notice to the community of two surveys posted on the City's website one for the proposed hazards identified in the LHMP and the mitigation ideas proposed to address those hazards |
| 3/17/24 | Email to EBMUD | Email to Steven Frew and Lilian Leung at EBMUD | To obtain information on other public agencies' local hazards response and mitigation strategies and to review our section on EBMUD. |
| 3/17/24 | Email to City of Berkeley Mitigation Group | Email to Sara Lana at City of Berkeley | To inquire if they have a new contact at Kinder Morgan |
| 3/21/24 | Email to PW Environmental Programs Supervisor | Nancy Humphrey, Environmental Programs Supervisor for City of Emeryville | To review our section on Climate Change and obtain her input |
| 3/23/24 | Manned an Information Table at the Healthy Families Festival and Egg Hunt | Lori Elefant and Shareena Perena from Human Resources | To provide education on and obtain input from the community on the city's LHMP hazards and identified mitigation ideas for the update |
| 4/10/24 | Email to Chief Building Official | Email to Vic Gonzales, Chief Building Official for City of Emeryville | To obtain his input for our sections in on Soft Story structures and URM's. |

| Date | Event Type | Participants | Purpose |
|---------|---|--|---|
| 4/10/24 | Follow up email to EBMUD | Emailed Lilian Leung and David Cook at EBMUD | To follow up on our request to review and update our section on EBMUD in our LHMP. |
| 4/10/24 | Email to IT Director | Email to Michael Parenti, IT Director for City of Emeryville | To request input on the City's telecommunications and mitigation strategies we have implemented for Cybersecurity |
| 4/10/24 | Email to Alameda County Fire Department | Email to Randall West, Deputy Fire Chief at Alameda County Fire Department | To request his review and input on our section on Urban Fires in our LHMP |
| 4/12/24 | Email to PG&E | Email to Les Putnam, Senior Public Safety Specialist at PG&E | To request his review of our section on PG&E and their mitigation activities since 2019 |
| 4/12/24 | Email to Comcast | Emailed Sena Fitzmaurice, Senior Vice President of Government Communications | To request a review of our section on Comcast and any mitigation activities since 2019 |
| 4/17/24 | LHMP Check-in with Project Coordinators | Assistant City Manager and HR Management Analyst – Annuitant | To discuss next steps in our planning process |
| 4/17/24 | Email to Kinder Morgan | Email to John Rocha at Kinder Morgan | To request review and input on our sections on Earthquakes and Hazard Material Releases and the Kinder Morgan Jet Fuel Line |
| 4/17/24 | Email to Cal Trans | Email to Cal Trans District 4 | To request review and input on our section on key transportation partners in our Earthquake Hazards Analysis |
| 4/17/24 | Email to BART | Email to earthquakesafety@bart.gov | To request review and input on our section on key transportation partners in our Earthquake Hazards Analysis. |

| Date | Event Type | Participants | Purpose |
|---------|---|---|--|
| 4/17/24 | Email to Planning Department Staff | Email to Associate Planner in the Planning Division | To request updated information on the housing developments that are located within a block of the railroad tracks |
| 4/17/24 | Email to LHMP Update Planning Team | LHMP Planning Team | Emailed spreadsheets of our identified mitigation ideas to the planning team to evaluate and rate the ideas on their feasibility, social benefits, economic benefits, environmental improvement benefits and Community Objectives. |
| 4/24/24 | Email to PW Environmental Programs Supervisor | Email to Nancy Humphrey | To obtain review and input on our section on Sea Level Rise in the Local Hazard Mitigation Plan. |
| 4/24/24 | Email to PW Director | Email to Mohammed Alaoui | To request a review and update to our section in the plan on Sanitary Sewers and Storm Drains |
| 4/24/24 | Email to Assistant City Manager | Email to Pedro Jimenez | To clarify if coal was going by train through the City of Emeryville |
| 5/7/24 | Follow up email to Kinder Morgan | Second email to John Rocha at Kinder Morgan | To request review and input on our sections on Earthquakes and Hazard Material Releases and the Kinder Morgan Jet Fuel Line |
| 5/7/24 | Email from LHMP Planning Team Member | Email from Louise Engel | Email advising that at her HOA on 5/3 sent an email blast to all residents with the City survey links to comment on the LHMP Update |
| 5/8/24 | 5 th LHMP Update Team Meeting | City of Emeryville staff, representative from Alameda County Fire, and two members of the community | Reviewed the outcomes of our evaluations of the identified Mitigation ideas and finalized their priority ranking. |

| Date | Event Type | Participants | Purpose |
|---------|---|---|---|
| 5/8/24 | Email to PW Director | Emailed Mohamed Alaoui, Emeryville PW Director | To obtain update on status of building a bioswale |
| 5/8/24 | Emailed to Planning Division | Email to Planning Division staff member and Community Development Director | To obtain update on the parks, roads, bicycle paths and pedestrian walkways in the City |
| 5/9/24 | Email from Planning Team Community Member | Email from Louise Engel | Email with proposed text revisions/additions to the LHMP section on sea level rise |
| 5/10/24 | Email to PW Director | Email to Mohamed Alaoui | To ask about a mitigation idea for the shoreline proposed by community member |
| 6/12/24 | Email to Planning Division | Email to Planning Division Staff | To request a review of Land Use and Development Trends in the City for their comment and update |
| 6/12/24 | Email to Kinder Morgan | Follow Up Email to John Rocha at Kinder Morgan | To request review and input on our sections on Earthquakes and Hazard Material Releases and the Kinder Morgan Jet Fuel Line |
| 6/12/24 | Email to PG&E | Email to Les Putnam, Senior Public Safety Specialist | Email to request information on PG&E and Emeryville |
| 6/12/24 | Emailed BART | Email to earthquakesafety@bart.gov | Email to BART regarding the retrofit of the Transbay Tube and if it was completed |
| 6/12/24 | Email to Caltrans | Email to Caltrans-d4@dot.ca.gov | Email to Caltrans regarding the I-80 overpass |
| 6/12/24 | Email to IT Director | Email to Mike Parenti | To obtain update on City's phone provider and data services and what the City has done to combat cyberterrorism |

| Date | Event Type | Participants | Purpose |
|---------|--|--|---|
| 6/13/24 | Email to PW Director | Email to Mohamed Alaoui | To review and comment on our section on Sanitary Sewers and Storm Drains |
| 6/15/24 | Email to IT Director | Email to Mike Parenti | To follow up on what the City has done to address Cyberterrorism |
| 6/17/24 | Email to East Bay Regional Park District | Email to Alma Balmes, Risk Manager for EBRPD | To request review and comment on our section on Dam Failure and the Lake Temescal Dam |
| 6/24/24 | Email to Planning Division | Email to Planning Division Staff | Follow up email to our request for update on the City's parks and open spaces, roads, bicycle paths and pedestrian walkways in the City |
| 6/24/24 | Email to Planning Division | Follow Up Email to Planning Division Staff | To request information on the number of housing units that are around the railroad tracks |
| 6/25/24 | Email to PG&E | Email to Les Putnam, Senior Public Safety Specialist | Follow up email to request information on PG&E and Emeryville |
| 6/26/24 | Email to PW Environmental Programs Supervisor | Email to Nancy Humphrey | Obtain input on Sea Level Rise and Climate Change sections of the LHMP |
| 6/27/24 | Email from PW Environmental Programs Supervisor and Assistant City Manager | Emails to and From Nancy Humphrey and Pedro Jimenez | To obtain information on the City's electric fleet vehicles and other efforts to combat climate change |
| 7/3/24 | Email to Planning Division | Emails to Planning Division Staff | To review and comment on land use maps in the LHMP |
| 7/15/24 | Email to Planning Division | Email to Planning Division Staff | Follow up request review and input on the Earthquake Hazard section in the LHMP |

| Date | Event Type | Participants | Purpose |
|---------|---|---|---|
| 7/31/24 | Email to PW Director | Email to Mohamed Alaoui | To obtain update on Bioswale project to be included in the LHMP |
| 7/31/24 | Follow call and email to Kinder Morgan | Telephone call and follow up email to John Rocha | To review and update our section on the Kinder Morgan jet fuel line |
| 7/31/24 | Email from Associate Civil Engineer | Email from Nikolas Ignacio | Update on the building a Bioswale project |
| 7/31/24 | Email to IT Director | Email to Mike Parenti | To update our section on Cyberterrorism |
| 8/7/24 | Email to Police Lieutenant | Email to Fred Dauer | To request update on a Police Department Mitigation Actions |
| 8/21/24 | 6 th LHMP Update Team Meeting | City of Emeryville Staff, Two members of the Community | To have the team review the draft LHMP Update and make comments/edits |
| 9/4/24 | Email to Outside Stakeholders on Upcoming Public Presentations | Email to nearby jurisdictions and outside stakeholders | To advise on the upcoming public hearings and opportunity to provide comments on the plan |
| 9/9/24 | Presentation of draft LHMP update to the Public Works & Transportation Committees | Public Works & Transportation Committees members, City staff and general public | To hold public hearings and receive public comments. |
| 9/10/24 | Presentation of draft LHMP update to the Public Safety Committee | Public Safety Committee members, City staff and general public | To hold public hearings and receive public comments. |
| 9/17/24 | City Council Study Session of the draft LHMP Update | City Council members, City staff and general public | To hold public hearings and receive public comments. |
| 9/18/24 | Presentation to Department Heads | City of Emeryville Department Heads | To have Department Heads review the draft LHMP Update and make comments/edits |
| 9/26/24 | Presentation of draft LHMP update to the Planning Commission | Planning Commission members, City staff and general public | To hold public hearings and receive public comments. |

CITY OF EMERYVILLE LHMP CROSSWALK 2021

CITY OF EMERYVILLE
LOCAL HAZARD MITIGATION PLAN
APRIL 5, 2021 REVIEW – CROSSWALK

Participants in the review:

Christine Daniel, City Manager
Mary Grace Houlihan, Public Works Director
Charles Bryant, Community Development Director
Trish Raver, HR Director
Navarre Oaks, Associate Planner
Lori Elefant, Management Analyst/Emergency Prep Coordinator

| Pg # | 2019 Section/Subsection Revised | Comments |
|---------|--|--|
| 1-2 | Table of Content -Acknowledgements | Acknowledgements will need to be updated |
| 9 - 14 | <p>Section 1 – Background and Introductions</p> <p>N changes to the basic information Will need to update the existing plans, studies, reports and Technical information</p> <p>Need to update language on Page 12 to reflect that the City adopted the Local Hazard Mitigation Plan as an amendment to the Safety Element of the City's general Plan on September 3, 2019 and the the LHMP was given final approval by CalOES and FEMA on 10/4/19</p> | <p>Need to update plans, studies and/or reports:</p> <p>Berkeley's 2019 LHMP</p> <p>Oakland's 2021 LHMP (being updated now)</p> <p>New Tsunami playbook</p> <p>Population needs to be updated: As of 1/1/20, population was 12,298 (January 2021 information will be produced by DOF in May 2021)</p> <p>East Bay Regional Parks is updating or has updated their EOP for the Temescal Dam</p> <p>PG&E's Wildfire Mitigation Plan</p> <p>Elements of the General Plan been updated (they are working on it but they have not been updated as of yet)</p> |
| 15 - 75 | <p>Section 2 and 3 – Hazards in Emeryville and Hazards Analysis</p> <p>The rankings of our hazards may change in the next revision – for example Biological hazards may move up given the Pandemic. Also, the history of events in the</p> | <p>Large Earthquake in 2019 (Ridgecrest, CA (3 initial shocks of 6.4, 5.4 and 7.1 on July 4th and July 5th – Most powerful earthquake in the State in 20 years.</p> <p>New Tsunami Hazard maps</p> <p>Biological threats may be moved up in the rankings (Pandemic)</p> <p>Air Quality Issues from Wildfire Smoke can be added to the wildfires</p> |

| | | |
|-----------|--|---|
| | Area and the country will need to be updated with these new events.w | <p>section</p> <p>Climate Change – extreme weather events in USA and the rest of the world (wildfires in Australia)</p> <p>Texas Power Outages/Utility Failure</p> <p>Sea Level rise on groundwater levels</p> <p>PSPS can be added under the wildfires section</p> <p>Any new housing near the railroad tracks? – Sherman Williams will be adjacent to the tracks, but this project has not broken ground yet. Parcel C (66 units) & D (need # of units (of the Public Market) are across the street from the tracks but are in the vicinity where they would be impacted if something should occur on the tracks</p> <p>Navarre will send me the General Plan Annual Report from February 2021 which includes all of the approved Residential Developments and updates through December 2020, our land use summary program, conservation, safety and noise progress, as well as development decisions and pending projects in Emeryville in 2020.</p> <p>Train derailment in Emeryville in April 2020; large train derailment in Arizona in July 2020 which collapsed a bridge and caused a hazardous materials leak</p> <p>December 2020, Kinder Morgan spilled 42,000 gallons of gasoline under a waterway in Walnut Creek.</p> <p>100,000 Comcast customers in the Oakland Hills lost internet during a PSPS (even though these homes had not lost power)</p> <p>Pandemic and all the issues that have come with it</p> <p>Civil Unrest of 2020</p> <p>New Land Development Since 2019 (we listed Parc on Powell and Emme 64th and Christie</p> <p>Any update to URM buildings since the last report? Not that Charlie is aware of.</p> |
| 76 - 87 | Section 4 – Mitigation Strategy and Actions | |
| | Changes in Mitigation Projects | |
| 87 - 91 | Assets at Risk | <p>New Parks?</p> <p>Bicycle/Pedestrian pathways?</p> |
| Page 97 - | Mitigation Projects and Programs – any changes? | |

| | | |
|-----|---|--|
| 103 | Land Use and Development trends? New Maps? | |
| 109 | Plan Maintenance | |
| | | |
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| | | |
| | | |
| | | |

CITY OF EMERYVILLE
LOCAL HAZARD MITIGATION PLAN
2021 REVISION - CROSSWALK

[illegible]

CITY OF EMERYVILLE
LOCAL HAZARD MITIGATION PLAN
2021 REVISION - CROSSWALK

| Pg # | 2019 Section/Subsection Revised | Comments |
|------|---------------------------------|---|
| | | <ul style="list-style-type: none">• added |
| | | |
| | | |
| | | |

CITY OF EMERYVILLE LHMP CROSSWALK 2022

**CITY OF EMERYVILLE
2019-2024 LOCAL HAZARD
MITIGATION PLAN
REVISION – 2022 CROSSWALK (MAY)**

| Pg # | 2019 Section/Subsection Revised | Comments |
|------------|--|--|
| 1-2 | Table of Content | |
| 89 - 14 | Section 1 – Background and Introductions | <p>Need to update plans, studies and/or reports: Berkeley's 2019-2024 LHMP Oakland's 2021-2026 LHMP Update Alameda County 2021-2-26 LHMP Update New Tsunami playbook Population needs to be updated: As of 1/1/22 per the DOF, Emeryville's population has increased to 12,497 Will need to check any updated reports in City East Bay Regional Parks is updating their EOP for the Temescal Dam PG&E's Wildfire Mitigation Plan</p> |
| 15 - 75 | Section 2 and 3 – Hazards in Emeryville and Hazards Analysis | <p>Large earthquake in 2019 (Ridgecrest CA) 3 initial shocks, 6.4, 5.4 and 7.1 on July 4th and 5th – Most powerful earthquake in the State in 20 years. New Tsunami Hazard maps – increased area of inundation Biological threats may be moved up in the rankings (Pandemic) Air Quality Issues can be added to the wildfires section PSPS can be added under the wildfires section Texas Power Outages/Utility Failure Climate Change – extreme weather events in USA and rest of the world Sea Level Rise on groundwater levels Update for number of residential units = ?? Any new housing near the railroad tracks? – Sherwin Williams project will be adjacent. Parcels C&D are across the street Train derailment in Emeryville in 2020. Large train derailment in</p> |

| | | |
|----------|---|---|
| | | <p>Arizona in July 2020 which collapsed a bridge and caused a hazardous materials leak</p> <p>Amtrak train crashes into a car a truck in San Pablo 11/21/21</p> <p>Train derailed in West Oakland in October 18, 2021</p> <p>Train derailment in Montana kills 3 and injures dozens 9/15/21</p> <p>December 2020 Kinder Morgan spilled 42,000 gallons of gasoline under a water way in Walnut Creek</p> <p>100,000 customers in the Oakland Hills lost internet during a PSPS even though these homes had not lost power.</p> <p>Pandemic</p> <p>Civil unrest 2020</p> <p>The State is in another severe drought and now water restrictions are being imposed</p> <p>A large chemical plant exploded in Illinois</p> <p>1/15/22 – Volcano eruption in Tonga caused tsunami surges along the coastline</p> |
| 76 - 87 | <p>Mitigation Strategy and Actions</p> <p>Changes in Mitigation Projects</p> | <p>The pandemic threw a wrench into most of the City's mitigation plans (anything that required money). Severe budget restraints have limited what the City could accomplish in 2020/21, 2021/22 & and will probably impact 2022/23 as well</p> |
| 87 -91 | Assets at Risk | <p>New Pedestrian Bridge over the railroad tracks</p> <p>New Parks? Bicycle Pedestrian Pathways?</p> |
| 97 - 103 | <p>Mitigation Projects and Programs – Any changes?</p> <p>Land use and Development Trends?</p> <p>New Maps?</p> | <p>#10 – The City has identified designated Evacuation Routes for the City. Will need to explore the creation and placement of signs.</p> <p>#11 – The City's CERT Team is going strong. We have one CERT Cohort that was trained in 2019. We have a second cohort that will go through the online portion of the CERT training in April/May 2021 (hybrid – educational portion online, hands-on portion will be in 2022) and a third cohort will hopefully start in September 2021.</p> <p>#12 – we held EOC Section trainings and one function exercise on Zoom for staff in 2021</p> <p>#13 – Need to check with IT</p> <p>#20 – all new developments need to underground utilities, but nothing has been done for existing wiring.</p> <p>#22 – the Senior Center has been handing out food three days a week</p> |

| | | |
|-----|------------------|---|
| | | <p>to vulnerable members of their community during the pandemic. The school district has been doing the same for their families.</p> <p>#23 – this needs to be removed. Any physician interested in participating will be under the County's MRC, not an Emeryville one.</p> <p>#24 – completed</p> <p>#25 – Due to COVID-19, this has been placed on a back burner</p> <p>#26 – Waste Management now allows households to leave batteries out with their trash for pick up.</p> <p>#32 – HR will be working with IT to update the City's website</p> <p>#35 – Carrington College moved out of Emeryville or closed its doors altogether</p> <p>#36 – The City adopted an ordinance in on 2/16/21 regarding Dockless shared Mobility Systems and is working with different vendors regarding permits for these stations.</p> <p>#40 - the State Fire Marshall has all the information/records regarding hazardous pipelines in the City as well as ACFD</p> <p>#43 – this ongoing</p> <p>#44 – these will be done by the Planning Department. There are new Tsunami inundation maps that will need to be updated in the next General Plan update and the next LHMP.</p> |
| 109 | Plan Maintenance | The plan will be reviewed again in April 2022 |
| | | |
| | | |
| | | |
| | | |

CITY OF EMERYVILLE
LOCAL HAZARD MITIGATION PLAN
2021 REVISION - CROSSWALK

[illegible]

CITY OF EMERYVILLE
LOCAL HAZARD MITIGATION PLAN
2021 REVISION - CROSSWALK

[illegible]

CITY OF EMERYVILLE PLANNING PROCESS DOCUMENT BACKUP

Lori Elefant

Subject: 2024 Local Hazard Mitigation Plan Update Meeting
Location: Conference Room - 1st Floor Large

Start: Wed 10/4/2023 12:30 PM
End: Wed 10/4/2023 1:30 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: Lori Elefant
Required Attendees: Paul Buddenhagen; Pedro Jimenez; Navarre Oaks; Lilybell Nakamura; Frederick Dauer
Resources: Conference Room - 1st Floor Large

Hi All,

This will be an in-person meeting 😊

Thanks,

Lori

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 239 228 767 70

Passcode: 65vzvT

[Download Teams](#) | [Join on the web](#)

[Learn More](#) | [Meeting options](#)

Lori Elefant

From: Lori Elefant
Sent: Wednesday, October 11, 2023 7:59 PM
To: Valerie Bernardo; Charles Harris
Cc: Pedro Jimenez
Subject: Local Hazard Mitigation Plan

Hi Valerie and Charles,

I am back working in HR as an annuitant and will be assisting Pedro with the Local Hazard Mitigation Plan (LHMP) update. In this update we need to include leaders from underserved communities and socially vulnerable populations in our planning process. We were wondering if you had any suggestions for who we might approach from any of the organizations that you work with to be on our LHMP Update planning team.

Any recommendations would be much appreciated.

Thanks,

Lori Elefant, ARM
Management Analyst - Annuitant

Lori Elefant

From: Pedro Jimenez
Sent: Thursday, October 12, 2023 8:26 AM
To: Christen Gray; Rebecca Sermeno
Cc: Lori Elefant
Subject: Local Hazard Mitigation Plan update

Hi Christen and Rebecca,

Lori and I will be working on the Local Hazard Mitigation Plan (LHMP) update. In this update we need to include leaders from underserved communities and socially vulnerable populations in our planning process. We were wondering if you had any suggestions for who we might approach from any of the organizations that you might work with to be on our LHMP Update planning team. Any recommendations would be appreciated.

Thanks
Pedro

Lori Elefant

Subject: Local Hazard Mitigation Plan Update
Location: my office

Start: Thu 10/12/2023 3:30 PM
End: Thu 10/12/2023 4:30 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Pedro Jimenez
Required Attendees: Lori Elefant

Lori Elefant

Subject: Local Hazard Mitigation Planning Team Meeting
Location: Conference Room - 2nd Floor Large

Start: Tue 11/28/2023 3:30 PM
End: Tue 11/28/2023 5:00 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Pedro Jimenez
Required Attendees: Lori Elefant; Michael Parenti; John Kennedy; Alyssa Chung; April Richardson; Lawrence Chiu; Rebecca Sermenio; Frederick Dauer; Randall ACFD West; Mohamed Alaoui
Resources: Conference Room - 2nd Floor Large

AGENDA

LOCAL HAZARD MITIGATION PLAN UPDATE COMMITTEE
MEETING

SECOND FLOOR CONFERENCE ROOM
THURSDAY, November 28, 2023 AT 3:30 PM

- I. Introductions
- II. Ranking of Risk Identified
- III. Review of Risk Analysis
 - a. Identify previously identified risks
 - b. Have the risks changed?
 - c. New Mitigation Efforts since Previous Plan?
 - d. Any New Hazards since Last Plan?
- IV. Identify Possible New Mitigation Ideas
- V. Closing

THURSDAY, NOVEMBER 28, 2023 AT 3:30 PM

EMAIL ADDRESS

| | | | |
|---|---|--|--|
| April Richardson Lori Elefant Michael Purnell | Paul Davis Lori Elefant Michael Purnell | City Clerk Human Resources IT Director | april.richardson@emeryville.org lelefant@emeryville.org m.purnell@emeryville.org |
| John W. Kennel Mohamed Alao | John W. Kennel Mohamed Alao | City Attorney Public Works | John.Kennel@emeryville.org mohamed.alao@emeryville.org |

**Notes from the City of Emeryville Local Hazard Mitigation Planning Team
Meeting #1**

November 28, 2023

Facilitator: Pedro Jimenez, Assistant City Manager

In Attendance in Person: April Richarson, City Clerk
Lori Elefant, Management Analyst – Annuitant
Michael Parenti, IT Director
John Kennedy, City Attorney
Mohamed Alaoui, Public Works Director

In Attendance via Teams: Fred Dauer, Police Lieutenant
Randall West, Deputy Chief, ACFD
Lawrence Chiu, Finance Director
Rebecca Sermenio, Community Services Director

In this first meeting we reviewed why we needed to do the LHMP Update, the steps to updating the LHMP, the Guiding Principles of the update, and what our first steps should be, i.e. identifying the hazards we wanted to include in our LHMP Update.

CITY OF EMERYVILLE

Hazard Mitigation Plan Update Kick Off Meeting




November 28, 2023

1

CITY OF EMERYVILLE

Local Hazard Mitigation Plan Update

- A current Local Hazard Mitigation Plan is required to receive Hazard Mitigation funding through the Hazard Mitigation Grant Program (HMGP, Pre-Disaster Mitigation Grant Program (PDM) and the Flood Management Assistance Grant Program (FMA)
- Once a plan is approved by FEMA, it must be adopted by Council within 1 year of the FEMA "approved Pending Adoption" notification from FEMA and then updated every 5 years.



2

CITY OF EMERYVILLE

Why do an LHMP?

- Reduces potential for:
 - Loss of life
 - Injury
 - Property damage



3

What is Hazard Mitigation?

“Hazard Mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects.”



4

STEPS TO UPDATING A LHMP

- Convene the LHMP Update Planning Team
- Review the risks that were previously identified in our LHMP
- Review risks that were identified in the ABAG's Regional LHMP
- Review other risks that may have been identified in our Community Survey including the risk of drought and climate change.



5

STEPS TO UPDATING A LHMP

- Review development trends since plan
- Update disaster history
- Update mitigation actions from previous plan and develop new mitigation actions for any new identified risks including drought and climate change




6

CITY OF EMERYVILLE

LHMP Review Roles

Cal OES

- Reviews the plan
- Returns plan to the City
- City submits plan to FEMA




7

CITY OF EMERYVILLE

LHMP Review Roles

FEMA

- Reviews plan
- Approve/
Approve pending adoption/
Return for Revisions



8

CITY OF EMERYVILLE

Hazard Mitigation Planning Process

- LHMP Required Elements
 - ✓ Planning process
 - ✓ Hazard identification and analysis
 - ✓ Mitigation strategy
 - ✓ Plan review, evaluation & implementation
 - ✓ State requirements
 - ✓ Adoption




9

CITY OF EMERYVILLE

LHMP Guiding Principles

- **Guiding Principle #1:** Focus on mitigation strategy
- **Guiding Principle #2:** Review for intent & compliance
- **Guiding Principle #3:** The process is as important as the plan itself
- **Guiding Principle #4:** This is the community's plan
- **Guiding Principle #5:** Use the plan review to foster relationships





10

CITY OF EMERYVILLE

Guiding Principle #1

- Focus on the mitigation strategy
- Emphasize actions and implementation
- Purpose of the planning process is to develop a sound mitigation strategy that will be effective in reducing losses







11

CITY OF EMERYVILLE

Guiding Principle #2

- Review for intent as well as compliance
- Required revisions should lead to substantial improvements in the strategy







12

CITY OF EMERQUILLE

Guiding Principle #3

- The process of developing a local hazard mitigation plan is as important as the plan itself
- Process is not defined by FEMA or the State
- Process is defined locally







13

CA Governor's Office of Emergency Services

Guiding Principle #4

- This is the community's plan
- FEMA does not require that plans have a particular organization







14

CITY OF EMERQUILLE

Guiding Principle #5

- Use the plan review to foster relationships
- FEMA, State, and local community officials work together






15

CITY OF EMERYVILLE

FIRST STEPS

- Review previously identified risks
- Review any newly identified risks
- Review for relevancy
- Prioritize




16

CITY OF EMERYVILLE

PREVIOUSLY IDENTIFIED RISKS

- Earthquakes
- Hazardous Materials
- Climate Change
- Fires
- Floods
- Civil Unrest
- Utility Infrastructure Failure
- Terrorism
- Biological Threats



17

CITY OF EMERYVILLE

ABAG IDENTIFIED RISKS

- Earthquakes
- Tsunamis
- Flooding
- Landslides
- Wildfires
- Drought
- Climate Change
- Dam Failure
- Delta Levee Failure
- Extreme Heat
- Pandemic Flu
- Agricultural Pests
- Security related threats



18

CITY OF EMERYVILLE

COMMUNITY IDENTIFIED RISKS

- Hazardous Materials (12)
- Drought (22)
- Earthquake (45)
- Gas Explosion (3)
- Train Derailment (5)
- Other Hazards (32)
- Structural Fire (8)
- Energy Shortage (15)
- Epidemic (57)
- Severe Weather (22)
- Act of Terrorism (7)
- Flood (9)
- Wildfire (11)

* Number of responses is out of 89 responses




19

CITY OF EMERYVILLE

COMMUNITY IDENTIFIED RISKS

- Tsunami (3)
- Extreme Heat (15)
- Dam Failure (0)
- Freeze (4)

* Number of responses is out of 89 responses




20

CITY OF EMERYVILLE

NEXT STEPS

- Review all identified risks
 - Are they still relevant?
 - Do they need to be added to the plan?
 - If so, prioritize risks
 - Update recent disaster history




21

CITY OF EMERYVILLE

Contact Information

Pedro Jimenez, Assistant City Manager
City of Emeryville
(510) 596-3770
pjimenez@emeryville.org



Lori Elefant

From: Lori Elefant
Sent: Wednesday, November 29, 2023 11:35 AM
To: Pedro Jimenez
Subject: Accepted: LHMP Check In and review next steps

Lori Elefant

From: Lori Elefant
Sent: Wednesday, November 29, 2023 1:41 PM
To: Pedro Jimenez
Subject: For our Meeting Today
Attachments: Comparison of Emy_Oak_Berkeley LHMP Hazards.docx

Hi Pedro,

I thought I would put this together for our meeting today and Berkeley has some great mitigation ideas for each hazard [City of Berkeley 2019 Final Draft Local Hazard Mitigation Plan \(arcgis.com\)](#). If you click on each tab, you will see a list of the mitigation ideas for that hazard.

Thanks,

Lori

COMPARISON OF BERKELEY, OAKLAND, AND EMERYVILLE'S IDENTIFIED HAZARDS

| Berkeley LHMP |
|-------------------------------|
| Earthquake |
| Liquefaction |
| Landslide |
| Wildfire Urban Interface Fire |
| Tsunami |
| Flood |
| Climate Change |
| Extreme Heat |
| Hazardous Materials Release |

| Oakland LHMP |
|---------------------|
| Dam Failure |
| Drought |
| Earthquake |
| Flood |
| Landslide |
| Sea Level Rise |
| Severe Weather |
| Tsunami/Seiche |
| Wildfire |
| Climate Change |
| Hazards of Interest |

| |
|---|
| • Pandemic |
| • Hazardous Materials Release |
| • Economic Related Public Health Issues |
| • Cyberterrorism |
| • Civil Unrest |

| Emeryville LHMP |
|---|
| Earthquake (we include liquefaction under this category) |
| Hazardous Materials Release |
| Climate Change (we include drought, sea level rise and extreme weather under this category) |
| Fires |
| Floods (we include tsunamis and dam failure under this category) |
| Civil Unrest |
| Infrastructure/Utility Failure |
| Terrorism |
| Biological Threats (we included pandemic under this category) |
| |

Lori Elefant

From: Pedro Jimenez
Sent: Wednesday, December 13, 2023 5:17 PM
To: Lori Elefant; Michael Parenti; John Kennedy; Alyssa Chung; April Richardson; Lawrence Chiu; Rebecca Sermenio; Frederick Dauer; Randall West; Mohamed Alaoui; litai5986@mypacks.net
Subject: LHMP
Attachments: Comparison of Emy_Oak_Berkeley LHMP Hazards.docx; LHMP Survey Responses.pdf; LHMP- Prioritizing of Identified local hazard Mitigation Ideas.jpg; LHMP priority previous ranking.jpg

Hi all, Lori shared some information that will be helpful during this process. Berkeley has some great mitigation ideas for each hazard [City of Berkeley 2019 Final Draft Local Hazard Mitigation Plan \(arcgis.com\)](https://www.arcgis.com/home/webmap/viewer.html?appid=70000000000000000000000000000000&layers=0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99). If you click on each tab, you will see a list of the mitigation ideas for that hazard. Attached is a comparison of Oakland, Berkeley and Emeryville identified hazardous. Also attached is the survey results and pictures of the previous rankings and suggested mediations for your review prior to our next meeting scheduled 12/27 at 3pm.

Thanks,
Pedro

Happy Holidays!

Lori Elefant

From: Pedro Jimenez
Sent: Friday, December 29, 2023 8:53 AM
To: Lori Elefant; Michael Parenti; John Kennedy; Alyssa Chung; April Richardson; Lawrence Chiu; Rebecca Sermenio; Frederick Dauer; Randall West; Mohamed Alaoui; litai5986@mypacks.net
Subject: RE: LHMP
Attachments: Comparison of Emy_Oak_Berkeley LHMP Hazards.docx; LHMP Survey Responses.pdf; LHMP- Prioritizing of Identified local hazard Mitigation Ideas.jpg; LHMP priority previous ranking.jpg

Hi All,

Reminder our next meeting is 1/8/24 at 2:30pm. Attached is some information that will be helpful during this process. Berkeley has some great mitigation ideas for each hazard [City of Berkeley 2019 Final Draft Local Hazard Mitigation Plan \(arcgis.com\)](#). If you click on each tab, you will see a list of the mitigation ideas for that hazard. Attached is a comparison of Oakland, Berkeley and Emeryville identified hazardous. Also attached is the survey results and pictures of the previous rankings and suggested mediations for your review.

Wishing everyone a safe and happy New Year!

Thanks,
Pedro

AGENDA

LOCAL HAZARD MITIGATION PLAN UPDATE

TEAM MEETING

January 8, 2024 AT 2:30 PM

- I. Introductions
- II. Review of Planning Process to Date
- III. Ranking of Risk Identified
- IV. Review of Risk Analysis
 - a. Identify previously identified risks
 - b. Have the risks changed?
 - c. New Mitigation Efforts since Previous Plan?
 - d. Any New Hazards since Last Plan?
- V. Identify Possible New Mitigation Ideas
 - a. Earthquake
 - i. Previously identified mitigation ideas
 - ii. Brainstorming of new mitigation ideas
 - b. Hazardous Materials
 - i. Previously identified mitigation ideas
 - ii. Brainstorming of new mitigation ideas
 - c. Fires
 - i. Previously identified mitigation ideas
 - ii. Brainstorming of new mitigation ideas
 - d. Climate Change
 - i. Previously identified mitigation ideas
 - ii. Brainstorming of new mitigation ideas
 - e. Floods
 - i. Previously identified mitigation ideas
 - ii. Brainstorming of new mitigation ideas
 - f. Protests/Civil Unrest
 - i. Previously identified mitigation ideas
 - ii. Brainstorming of new mitigation ideas
 - g. Infrastructure/Utility Failure
 - i. Previously identified mitigation ideas
 - i. Brainstorming of new mitigation ideas
 - h. Terrorism
 - i. Previously identified mitigation ideas
 - ii. Brainstorming of new mitigation ideas
 - i. Biological Threats
 - i. Previously identified mitigation ideas
 - ii. Brainstorming of new mitigation ideas

[illegible]

January 8, 2024 AT 2:30 PM

NAME

SIGNATURE

AFFILIATION (City / Public / Other)

EMAIL ADDRESS

LOUISE ENGEL

SIGNATURE *Garrett Engel*

Public - Resident

EMAIL ADDRESS
litai.5986@murades.net

FRANZ DAUER

James

CITY POLICE

FD-402 (P) ENERGYVILLE.ORG

April Richardson

12/5/20

Cat & Clerk

april.richardson@emtnwille.org

1081 Elephant

1000

HP

Lebefaktor: Anzahl: 100

Nov 19/20/2020

[illegible]

62

56 11-11-11 11-11-11

Answer: 24/11

22

Assignment 2: Analysis

John. Kennedy (W) -

AWSSA
M.K. O

[Handwritten signature]

ISTAN
55

Mike +

2.7.

Lawrence

FINANCE

Randall

Fire

Notes from Local Hazard Mitigation Plan Update Planning Team
January 8, 2024
Facilitator: Pedro Jimenez

Attendees: Fred Dauer, Police Department
April Richardson, City Clerk
John Kennedy, City Attorney
Alyssa Chung, Assistant Planner
Lori Elefant, Management Analyst – Anuitant

On Teams: Michael Parenti, IT Director
Lawrence Chiu, Finance Director
Randall West, Deputy Fire Chief, ACFD

At this meeting we reviewed the hazards identified in Berkeley, Oakland's and Emeryville's LHMPs. We discussed each hazard and whether there were any new hazards we needed to include or any that we needed to remove from the update. The team decided to keep the same main hazards but add some additional subsets under each hazard. The hazards to be included are:

Earthquake
Hazardous Materials Release
Climate Change
Fires
Floods
Civil Unrest
Infrastructure/Utility Failure
Terrorism
Biological Threats

Lori Elefant

From: litai5986@mypacks.net
Sent: Wednesday, January 10, 2024 12:46 PM
To: Pedro Jimenez
Cc: Lori Elefant
Subject: LHMP, Climate Change category- flooding and sea level rise: background information
Attachments: Emeryville AB 691 Sea Level Rise Assessment 2019.pdf

Hi Pedro:

During the Monday LHMP meeting, one issue the committee reviewed was Sea Level Rise (Climate Change category). Since I'm on the WCA Board of Directors (plus have lived at WCA for over 25 years), I'm particularly concerned with the issues of: 1. Flooding, and, 2. Sea level rise. I provide the information below, to contribute to the LHMP committee knowledge base toward ranking categories.

1. Flooding

Alyssa Chung, Assistant City Planner, described a "flooding" concern raised by Public Works and Building. The "Flooding" issue may pertain, in part, to effects on the sanitary sewer pump station and manholes within the Marina Park lands. This issue is project to arise by year 2100, when projected Sea-level rise might be coupled with a 100-year storm event.

The attached City report describes two mitigation alternatives by the City. One alternative is "to seal the manholes and upgrade the pump station to seal it from surface flows, building a berm around the pump station."

Note regarding flooding events on Powell Street. For several years, the City has actively maintained pumping equipment on Powell Street, across from the entrance to The Towers office complex (2200 Powell St.).

Attachment - sea level rise- Emeryville: Copy of "City of Emeryville – AB 691 Sea-Level Rise Assessment on State Grant Lands", State Lands Commission. Refer to overview section "1. Assessment of impacts of sea-level rise" on pages 1-2. Also refer to section with mitigation - "4. 2100 Sea-level rise with 100-year storm- 66 inches", bottom of page 6." Study sources: SF-BCDC, State Lands Commission and EBRPD.

2. Sea Level Rise Effects: public and private shoreline

Prior City/regional studies describe the projected effects from "sea level rise", thru year 2100, for lands over which the City has responsibilities. These are "land areas" west of the State Lands Grant, i.e. the City Marina Park with associated public marina, along with the Asian restaurant land.

However, that report was "silent" regarding sea level rise impacts that might affect the balance of shoreline lands within the peninsula region of the City. This shoreline includes: the private marina, Trader Vic, the Watergate residential complex, the Office towers, and EBRPD's "McLaughlin East Shore State Park" with shoreline trail.

In 2019, City staff responded to my concerns regarding sea level rise impacts along those additional, extensive shoreline area. The City's response is that staff: "did not see projected flooding at Watergate Condos, even at end of century with a 100-yr storm."

Below is a copy of my 2019 communication with the former City staff person, Diana Keena, Associate Planner (now retired).

"RE: [External] Sea Level Rise - SLC, report request

From:Diana Keena <dkeena@emeryville.org>

To:"litai5986@mypacks.net"

Cc:"Charles S. Bryant" <cbryant@emeryville.org>

Subject:RE: [External] Sea Level Rise - SLC, report request

Date:Sep 3, 2019 9:50 AM

Attachments:Emeryville AB 691 Sea Level Rise Assessment.pdf

Hi Louise,

Here's the report. Our study focused on the lands west of the State Lands Grant, so it doesn't include Watergate Condos frontage. However, we did look at the whole coastline using Adapting to Rising Tides maps. Using the State-recommended 50% probability sea level rise of 12 inches by mid-century and 24 inches by end of century, we did not see projected flooding at Watergate Condos, even at end of century with a 100-yr storm. In the Marina area where flooding is projected, we see the need to seal manholes and a pump station by end of century. Our Public Works engineers said we have recently maintained main lines and will soon have newly maintained laterals, and we don't foresee a problem with pipes floating, so we should not need to work on the underground sewer lines.

Best regards,

Diana"

City of Emeryville – AB 691 Sea-Level Rise Assessment on State Grant Lands

A. AB691 and Summary of Emeryville's Response

AB 691 requires local trustees of legislatively granted public trust lands whose annual revenue averages over \$250,000 to assess how to address sea-level rise. Emeryville's public trust grant is located between Emeryville Marina and Emery Cove Yacht Harbor, as shown in Figure 1. Annual rents for the marina and restaurant in the granted lands averaged \$567,088 per year for 2014-2018, as shown in Table 1.

Table 1. City of Emeryville – Rental Income –
Emeryville Marina and Hong Kong East Ocean Restaurant

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|------------|---------|---------|---------|---------|---------|
| Marina | 301,878 | 316,639 | 340,862 | 350,816 | 338,202 |
| Restaurant | 208,325 | 231,299 | 256,761 | 242,901 | 247,757 |
| Total | 510,203 | 547,938 | 597,623 | 593,717 | 585,959 |

This report aims to address the four AB 691 assessment criteria:

1. Assessment of impacts of sea-level rise
2. Maps of 2050 and 2100 impacts (2030 impacts are not mapped)
3. Estimate of financial costs of sea-level rise
4. Description of how trustee proposes to protect and preserve resources and structures

1. Assessment of impacts of sea-level rise

a. Vulnerable natural and built "manmade" resources and facilities.

The natural resources are the Marina portion of the Emeryville peninsula and the Bay lands within the grant. The City does not expect significant effects on natural systems in the Bay in the granted lands.

b. Impacts and recommendations in Ocean Protection Council's Sea-Level Rise Guidance.

The 2018 Guidance document recommends using the 50% probability projected sea-level rise for all assets except for long-term critical regional assets. In this report, the City has used 50% probability projection. For San Francisco Bay, this is 12 inches by 2050 and 24 inches by 2100.

c. Impacts of storms and extreme events.

In this report, the City assessed the impacts of 2050 and 2100 sea-level rise with a 100-year storm. For 2050, this is 52 inches. For 2100 it is 66 inches.

d. Changing shorelines.

In this report, the City used the San Francisco Bay Conservation and Development Commission's Adapting to Rising Tides maps, which consider changing shorelines. There are no cliffs or beaches in the City's grant lands; therefore, the shoreline is not expected to change much, other than sea-level rise.

e. Trends in relative local sea level.

We do not expect noticeable changes in relative local sea level. Noticeable changes in land elevation are not expected here.

f. Impacts to public trust resources and values, including public access, commerce, recreation, coastal habitats, and navigability.

We assessed impacts on roads, paths, and docks (access) a restaurant (commerce), and a park (recreation). We do not expect significant impacts to coastal habitats or navigability during this century in the grant lands.

g. Prioritize vulnerabilities to be addressed.

In Table 2 on page 6, the City prioritizes vulnerabilities to be addressed by when and how often they are expected to occur.

2. Maps of 2040 and 2100 impacts

a. FEMA flood hazard maps

We did not choose this option.

b. Online mapping tool resources.

In this report, the City used the San Francisco Bay Conservation and Development Commission's Adapting to Rising Tides maps of sea-level rise alone and with 100-year storm for 2050 and 2100. Please see Figures 2-5 on pages 8-11.

3. Estimate of financial costs of sea-level rise

a. Replacement or repair costs of resources and facilities that could be impacted

Replacement or repair costs of facilities would be the same as the cost of adaptation measures, because both involve relocation or waterproofing. These costs are shown in Table 2.

b. Non-market values of public trust resources that could be impacted

Recreational value of Marina Park is described in Section B.4 on page 6 regarding Year 2100 sea-level rise with 100-year storm.

c. Costs of 2050 and 2100 sea-level rise projection with a 100-year storm

Costs of preparing for or responding to sea-level rise with a 100-year storm are shown in Table 2.

d. Anticipated costs of adaptation measures and benefits of such strategies and structures

The cost of preparing for sea-level rise and 100-year storms is shown in Table 2.

4. How trustee proposes to protect and preserve resources and structures

a. Proposed mitigation/adaptation measures, and how vulnerabilities will be addressed

Proposed mitigation and adaptation measures are described in Section B, starting on page 4.

b. Timeframe of implementation of such measures

Timeframes for implementation of adaptation measures are shown in Table 2 on page 5.

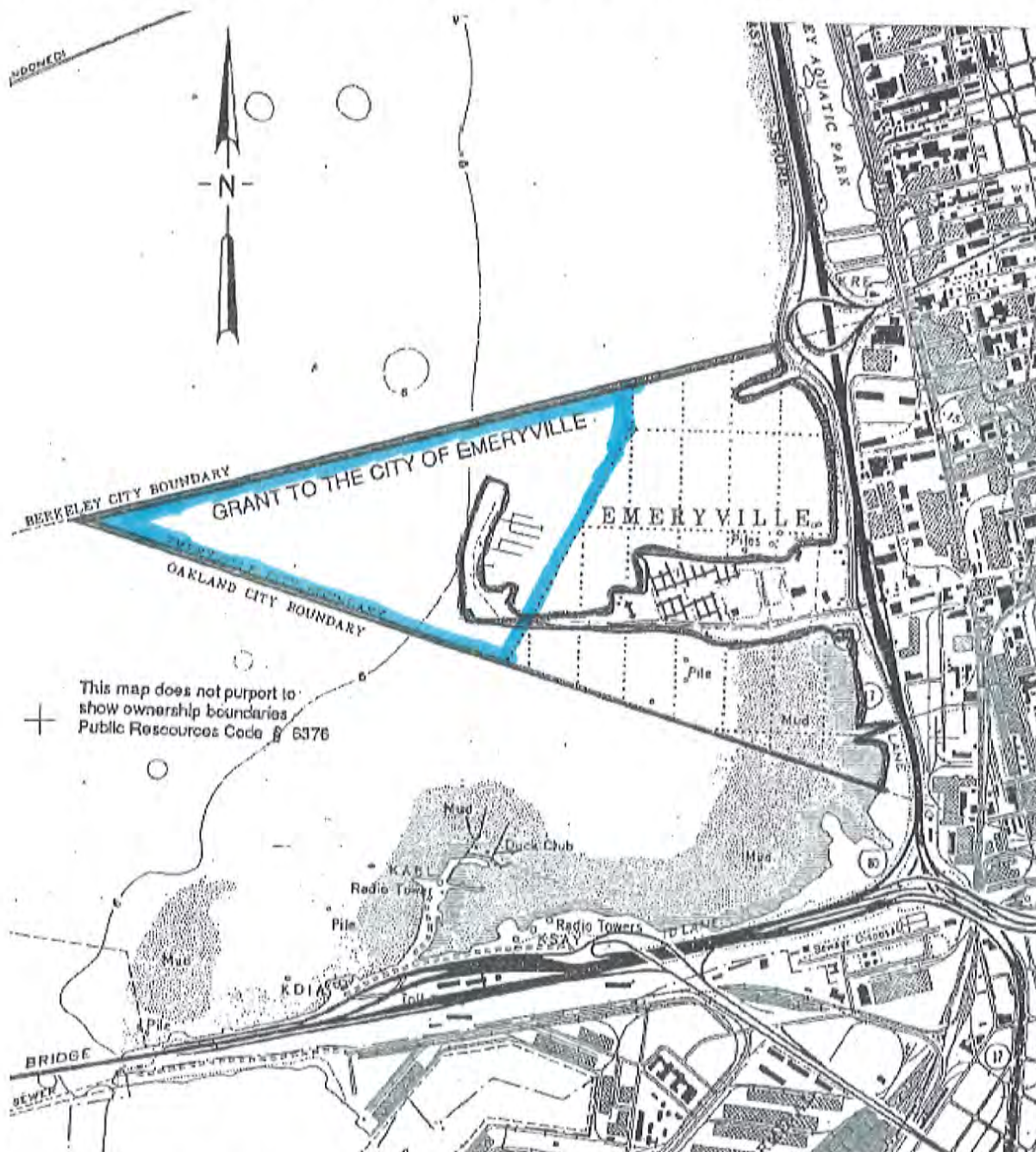
c. Plans to monitor impacts of sea-level rise and climate change and effectiveness of measures

Sea-level rise is addressed in Emeryville's Local Hazard Mitigation Plan (2017). The LHMP includes a section on plan review, evaluation and implementation. The LHMP will be monitored, evaluated, and updated every 5 years. The next General Plan (circa 2030-2050) is also anticipated to address sea-level rise in more detail than the current General Plan. General Plan implementation is monitored each year when the General Plan Annual Progress Report is prepared.

d. Regional partnerships the trustee is party to or intending to form

The City works with the San Francisco Bay Conservation and Development Commission's Adapting to Rising Tides program.

Figure 1. Map of Public Trust Grant to the City of Emeryville



Source: State Lands Commission, 2019

B. Potential Impacts, Adaptation Strategies, and Cost of Strategies

Figures 2-5 at the end of this section depict 50% probability projections of sea-level rise and flooding from a 100-year storm. The yellow line means no overtopping, the red line means 0-1-foot overtopping, and the light blue means 0-2-foot flooding.

1. 2050 Sea-level rise, 50% probability - 12 inches

We see slight overtopping on the east shore between the Marina rest room and the Marina office. However, there is no light blue flooding inland of the land, so the impact on lawns and trees would be negligible from sea-level rise alone in the first half of the century. Sea-level rise will bring the docks closer to land elevation, reducing the angle of the ramps to the slips.

About 200 feet of the trail could be flooded just south of the park restroom. It could be relocated a few feet up for about \$100,000.

2. 2100 Sea-level rise, 50% probability - 24 inches

By end of century, with sea-level rise alone, the Marina office could be inundated. It will likely need to be rebuilt by then anyway, and the City can rebuild it closer to Powell Street – there would be no additional cost due to sea-level rise. Water covering some of the parking would not be a problem, because a restaurant and an office building were approved on the parking and not built. One tree could be inundated near the Marina restroom; it would need to be removed. Sea-level rise will bring the docks up to land elevation making the ramps to the slips approximately level.

The path south of the Marina rest room, where it runs near the shore, is likely to be covered and could be moved closer to Powell Street along with the Marina office. That segment minus the segment described under 2050 would be about 1,000 feet. That could cost up to \$500,000.

3. 2050 Sea-level rise with 100-year storm - 52 inches

By mid-century, a big storm could cause temporary flooding of the north end of the restaurant, parking for the restaurant and the Marina, the lawn north of the restaurant, about 300 feet of Powell Street, the boat ramp, the trail from the Marina restroom south, and some trees, picnic tables, benches, trash bins and lights. The docks could rise to about 2 feet higher than the adjacent shore. The ramp angle to the slips would then be about the same as it is now, going up from shore rather than down.

Water on Powell Street could be pumped toward the boat ramp parking lot to restore access to the Marina. Park users would not be able to use the lawn north of the restaurant, the two picnic tables just south of the Marina office, or the trail on the east side until flood waters recede; however, most of the park would be useable.

Sandbags could protect the restaurant. The lawn and pavement probably would not be damaged. When furnishings are replaced, they should be waterproof; that will add about \$25,000 to their cost. For streetlights, the City will need to stabilize the bases and waterproof the junction boxes, which will cost about \$100,000.

Trees could be flooded with saline water in the restaurant parking lot, in the meadow north of it, and along the east shore. Rinsing with fresh water after the flood could help them recover. As trees are replaced, species that can tolerate saline water should be planted.

4. 2100 Sea-level rise with 100-year storm- 66 inches

By end of century, a 100-year storm could cause temporary flooding of the entire restaurant, half of the part of Powell Street in the area and fields and parking next to it, the boat ramp parking and the lights there, the east shore from the windsurf ramp south, more lawns and furnishings, and the west shore from the park parking south. Additional trees would be flooded along Powell Street south of the park restroom and in the boat ramp parking lot. Again, rinsing them with fresh water could help them recover, and as trees are replaced, salt tolerant species should be used. The Marina docks would rise to about 3.5 feet higher than the land. The ramps can be made to adjust to this change.

Recreational value of Marina Park is estimated at \$770,000 per year, based on City observations of park use and values based on research by Economic and Planning Systems for East Bay Regional Parks District in 2017¹. Storm flooding of park access and half of the park, as would occur with 2100 sea-level rise and 100-year storm, would cause a loss of recreational value of about \$2,000 a day.

Flooding could affect the sanitary sewer pump station and manholes. The City will need to seal the manholes and upgrade the pump station to seal it from surface flows, building a berm around the pump station; that could cost about \$500,000 dollars.

The City could conduct a feasibility analysis of replacing the restaurant at a higher level with waterproof construction, compared to projected future revenue of the facility. The

¹ Economic & Planning Systems, Inc. for East Bay Regional Parks District, *Quantifying Our Quality of Life: An Economic Analysis of the East Bay's Unique Environment*, 2017, page 37.

current estimate to replace the 10,000-square-foot restaurant with a waterproof facility at a higher elevation is approximately \$4,000,000. A feasibility analysis would need to consider whether a new facility would continue to be threatened by sea-level rise and storms in the next century at its new level.

Alternatively, the City could create a beach made of gravel and mixed sand to protect the riprap, restaurant, parking, park fields, trees, lights, and benches from overtopping. A beach consisting of a sand beach face, sand berm, and gravel storm berm could dissipate wave energy, reduce erosion, and protect the riprap and the infrastructure it protects. This could cost about \$4,000,000. The Adaptation Atlas by San Francisco Estuary Institute and SPUR maps the west and south shorelines of the Emeryville Marina area as suitable for beach creation.²

5. Summary of Estimated Costs

Table 2 lists estimated costs of adaptation.

Table 2. Estimated Adaptation Costs

| | |
|--|--------------------|
| Trail relocation (200 feet) - by 2050 for sea-level rise | \$100,000 |
| Trail relocation (1,000 feet) - by 2050 for storm, 2100 for sea-level rise | \$500,000 |
| Streetlight stabilizing and waterproofing - by 2050 for storm | \$100,000 |
| Waterproof furnishings - by 2050 for storm | \$25,000 |
| Sanitary sewer sealing (manholes, pump station) - by 2100 for storm | \$500,000 |
| Create beach OR Rebuild, raise and waterproof restaurant - by 2100 for storm | \$4,000,000 |
| Total | \$5,225,000 |

² San Francisco Estuary Institute and SPUR, *San Francisco Bay Shoreline Adaptation Atlas: Working with Nature to Plan for Sea-Level Rise Using Operational Landscape Units*, April 2019, pages 74 and 150.

Figure 2. 2050 Sea-Level Rise, 50% Probability - 12 Inches



Source: San Francisco Bay Conservation and Development Commission – Adapting to Rising Tides

Figure 3. 2100 Sea-Level Rise, 50% Probability - 24 Inches



Source: San Francisco Bay Conservation and Development Commission – Adapting to Rising Tides

Figure 4. 2050 Sea-Level Rise with 100-Year Storm - 52 Inches



Source: San Francisco Bay Conservation and Development Commission – Adapting to Rising Tides

Figure 3. 2100 Sea-Level Rise with 100-Year Storm- 66 Inches



Source: San Francisco Bay Conservation and Development Commission – Adapting to Rising Tides

Lori Elefant

From: litai5986@mypacks.net
Sent: Tuesday, January 23, 2024 10:12 PM
To: Pedro Jimenez
Cc: Lori Elefant
Subject: Emery Cove Yacht Harbor renovations: private sector mitigations. LHMP update background.
Attachments: 2024 0123 Emery Cove Yacht Harbor Renovations Mitigations.pdf

Hi Pedro:

The attachment provides a copy of an email – 01/23/24 - by the Harbor Master, Ms. Diane Isley, at Emery Cove.

The description summarizes the recent renovations which aim to mitigate potential future hazards which might affect their shoreline with the adjacent boat dock slips and facilities.

After the January LHMP meeting, I mentioned the extensive marina renovations to Lori Elefant. She suggested that the renovations are “mitigations” that would be suitable to include within the background information of the LHMP Plan update.

Emery Cove Yacht Harbor is a private 430 slip "dockominium marina" located on the Emeryville Peninsula.

<https://emerycove.com/about-emery-cove/>

The report's 2nd page, provides added information about Emery Cove Yacht Harbor adjacent to Powell Street on the City's peninsula.

Louise Engel, AICP

510-597-1553

litai5986@mypacks.net

Emery Cove Yacht Harbor Renovations – Mitigations to Potential Future Hazards

Below is a copy of an email – 01/23/24 - by the Harbor Master, Ms. Diane Isley, at Emery Cove. The description summarizes the recent renovations which aim to mitigate potential future hazards which might affect their shoreline with the adjacent boat dock slips and facilities.

Emery Cove Yacht Harbor is a private 430 slip dockominium marina located on the Emeryville Peninsula. "Emery Cove Yacht Harbor is the only marina in the Bay Area offering the possibility of owning your own boat slip in a 100% fee title ownership."

<https://emerycove.com/about-emery-cove/>

The balance of this report, to the LHMP team, provides added information about Emery Cove Yacht Harbor adjacent to Powell Street on the City's peninsula.

From: "Diane Isley" <diane@emerycove.com>

To: "Louise Engel" <ltengel@min.....>

Subject: RE: Watergate neighbor, re-introduction. Plus, request for information on recent yacht marina improvements.

Date: Jan 23, 2024 5:38 PM

Hello Louise,

I do not have any concerns regarding hazards related to climate change, flooding, hazmats etc from our property.

Dock Renovation

For our recent dock renovation and restroom ADA renovation we went through the permitting process with many agencies including The City of Emeryville Building Department, Planning Department, Public Art Department, PG&E, BCDC (Bay Area Conservation and Development Commission), Army Corp Engineers etc in which these concerns including sea level rise are required to be addressed through wind/wave studies, sediment sampling, pile height, structural strengths, recycling percentage of demo etc. The piles on the new wave attenuator were replaced with larger/stronger piles. Our dock renovation permit from City of Emeryville was issued in 2018 and we will be finalizing the last permit sign off this year after the required art sculpture is installed. The material we chose for the docks may be recycled at life's end- aluminum substructure and Ipe hard wood decking which has a class A fire rating and no treatment required- no chemicals. Part of our permit included a renovation of a large grass area on our property into a park like setting which included a grant from EBMUD to conserve water. This grass renovation requires the approval of plants/surface materials by BCDC and EBMUD.

The restroom ADA renovation permit was signed off last year 9/26/22.

We also replaced 130 tons of rip rap rocks along the shoreline that maintains the integrity of the land side slopes. Over the years people steal these rocks and throw them into the water so they need replaced and maintained.

Kind Regards, Diane Isley, Harbor Master

Emery Cove Yacht Harbor, Emery Cove Marina Condominium Association Inc., 3300 Powell St #203, Emeryville, CA 94608. Contact: 510-428-0505 phone 510-301-0320 cell www.emerycove.com

Emery Cove Yacht Harbor

This additional information originates from the Emery Cove website: <https://emerycove.com>

"There are 430 slips at Emery Cove totaling 17,801 lineal feet...."

"Emery Cove's common areas are repaired, maintained, insured and managed through a non-profit property owner's association (Emery Cove Marina Condominium Association, Inc. or the "Association")."

The Emery Cove boat slips: The "marina has been given approval by the BCDC for a total of 6% live-aboard slips. Permanent live-aboard status is at the discretion of the Harbor Master and is not specific to any particular boat slip. The harbor office can advise you as to the details. Weekend use and periodic overnight occupancy by you or a guest will always be OK at Emery Cove."

AMENITIES: "SHORESIDE FACILITIES

Restrooms, Showers and Laundry

Ice & Soda Vending Machine

Recycle Waste Oil / Oil Filters / Rag Disposal"

"DOCK FEATURES

Dockside Electricity: Separately Metered.

Berths under 50' 30 Amp 125 Volt.

Berths over 50' 30/50 Amp 125 Volt.

Average Depth: 8.5' MLLW.

Liveaboards: Slips Limited By Permit. Currently full with a waitlist.

Fuel Dock: Gas and Diesel within Harbor at Emeryville Marina. Hours: Open 24 Hrs. Credit Card Payment.

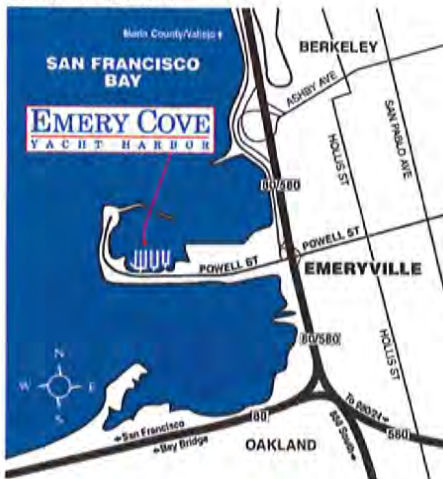
Fuel Dock Phone: 510-654-3716.

Ground Fault Monitoring.

Dock Box, water hookup and phone/internet service at every slip.

Wifi. Parking. Two Pumpout Stations. "

LOCATION MAP



Lori Elefant

Subject: LHMP Check In
Location: my office

Start: Mon 1/29/2024 2:00 PM
End: Mon 1/29/2024 3:00 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Pedro Jimenez
Required Attendees: Lori Elefant

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 219 773 881 576

Passcode: QeMno9

[Download Teams](#) | [Join on the web](#)

[Learn More](#) | [Meeting options](#)

Lori Elefant

Subject: Local Hazard Mitigation Planning Team Meeting
Location: Conference Room - 2nd Floor Large

Start: Tue 2/13/2024 3:00 PM
End: Tue 2/13/2024 4:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Pedro Jimenez
Required Attendees: Lori Elefant; Michael Parenti; John Kennedy; Alyssa Chung; April Richardson; Lawrence Chiu; Rebecca Sermeno; Frederick Dauer; Randall West; Mohamed Alaoui; litai5986@mypacks.net

Hi All,

This was the best time that I saw on everyone's calendars that could accommodate the majority for the next meeting.

Thanks
Pedro

AGENDA

LOCAL HAZARD MITIGATION PLAN UPDATE TEAM MEETING

February 13, 2024, 3:00 PM

- I. Introductions
- II. Review of Planning Process to Date
 - a. Timeline
 - i. Due 10/3/2024
 - ii. Complete before August 2024 and submit for feedback
 - iii. City Council Study Session 7/23
 - iv. Planning Commission Meeting 6/27
 - v. Committee meetings in April 2024
 - vi. Events/Community Workshop
 - 1. Healthy Family Festival/Egg Hunt 3/23?
 - 2. Earth Day 4/21/2024
 - 3. Community Workshop April 2024?
 - vii. Dept Heads April 2024
- III. Risk Identified
 - a. Have the risks changed?
 - b. Any New Hazards since Last Plan?
 - i. Earthquake
 - ii. Hazardous Materials
 - iii. Fires
 - iv. Climate Change
 - v. Floods
 - vi. Protests/Civil Unrest
 - vii. Infrastructure/Utility Failure
 - viii. Terrorism
 - ix. Biological Threats
- IV. Mitigations
 - a. New Mitigation efforts since previous plan and new ones to be added?
 - i. Earthquake
 - ii. Hazardous Materials
 - iii. Fires
 - iv. Climate Change
 - v. Floods
 - vi. Protests/Civil Unrest
 - vii. Infrastructure/Utility Failure
 - viii. Terrorism
 - ix. Biological Threats

LOCAL HAZARD MITIGATION PLAN UPDATE COMMITTEE MEETING SIGN IN SHEET

SECOND FLOOR CONFERENCE ROOM

February 8, 2024 AT 2:30 PM

13

NAME

SIGNATURE

AFFILIATION (City / Public / Other)

EMAIL ADDRESS

JOSEPH PRED

Michal Pury

ALYSSA CHUNG

April Richardson

George Martin

Louise Engel

Lawrence Chiu

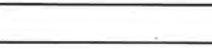
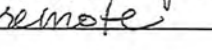
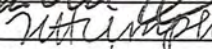
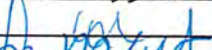
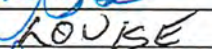
Lori Elefant

Rebecca Semeno

Mohamed Alawi

Nancy Humphrey

Fred Danner



MUTUAL AND RESPONSE SIG

Emerville

CITY OF EMERYVILLE PLANNING

City of Emeryville

Gov. M. Markie

Resident Public

Emerville

City of Emeryville

City of Emeryville

City of Emeryville

City

City

JOSEPH PRED MARS 911 INFO

g.martin@gemartin.com

louis.5486@mupac.ro.net

mohamed.alawi@emeryville.ca

Notes from Local Hazard Mitigation Plan Update Planning Team #3
February 13, 2024
Facilitator: Pedro Jimenez

Attendees: Joseph Pred, CEM, Community Member
Louise Engel, Community Member
George Martin, Community Member
Mohamed Alaoui, Public Works Director
Nancy Humphrey, PW Environmental Programs Supervisor
April Richardson, City Clerk
John Kennedy, City Attorney
Alyssa Chung, Assistant Planner
Michael Parenti, IT Director
Lawrence Chiu, Finance Director
Randall West, Deputy Fire Chief, ACFD
Rebecca Sermeno, Community Services Director
Lori Elefant, Management Analyst - Annuitant

Remote: Fred Dauer, Police Lieutenant

At this meeting we asked everyone to rank the hazards we identified by priority from 1 – 9. With 1 being highest priority and 9 being least priority. The team established the following priority order of hazards:

- 1) Earthquake
- 2) Climate Change
- 3) Hazardous Materials Release
- 4) Infrastructure/Utility Failure
- 5) Floods
- 6) Fires
- 7) Biological Threats
- 8) Civil Unrest/Protests
- 9) Terrorism

Lori Elefant

Subject: Local Hazard Mitigation Planning Team Meeting
Location: Conference Room - 2nd Floor Large

Start: Wed 3/6/2024 3:00 PM
End: Wed 3/6/2024 4:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Pedro Jimenez
Required Attendees: Lori Elefant; Michael Parenti; John Kennedy; Alyssa Chung; April Richardson; Lawrence Chiu; Rebecca Sermenio; Frederick Dauer; Randall West; Mohamed Alaoui; litai5986@mypacks.net; Joseph Pred; Nancy Humphrey

Hi All,

This was the best time that I saw on everyone's calendars that could accommodate the majority for the next meeting.

Thanks
Pedro

LOCAL HAZARD MITIGATION PLAN UPDATE COMMITTEE MEETING SIGN IN SHEET

SECOND FLOOR CONFERENCE ROOM

March 8, 2024 AT 3:00 PM

NAME _____

SIGNATURE

AFILLIATION (City / Public /Other)

EMAIL ADDRESS

JOSEPH PRIN

Rebecca Serrano

LOUISE ENGER

Michael Parent.

April Richardson

Mohamed Alwali

Nancy Humphrey

Randall We

JOHN KENNEDY

Lori Ekford

PUBLIC

Cat

Public

CO₂

City

Care

Cetip

Fire Department

CITY ATTORNEY

Human Resources

JOSEPH@MARS 911.INFO

rebecca.serrano@emeryville

litai 5986 @ MYPACKS.NET

mohamed.alawi@emugville.org

fandall.west@accgov.org

John. Kenneth Coleman, Ill.

1 elephant @ emerald pr.

Notes from Local Hazard Mitigation Plan Update Planning Team #4
March 6, 2024
Facilitator: Pedro Jimenez

Attendees: Joseph Pred, CEM, Community Member
Louise Engel, Community Member
Mohamed Alaoui, Public Works Director
Nancy Humphrey, PW Environmental Programs Supervisor
April Richardson, City Clerk
John Kennedy, City Attorney
Michael Parenti, IT Director
Randall West, Deputy Fire Chief, ACFD
Rebecca Sermeno, Community Services Director
Lori Elefant, Management Analyst, Annuitant

At this meeting we reviewed the mitigation ideas that we had identified in our previous LHMP to determine if we had accomplished them and if not, why. We then discussed if the mitigation idea should be carried over into our new update. We also discussed any new mitigation ideas that we wished to include. We identified 34 mitigation ideas to be included in our new update.

Public Involvement Campaign

small staff
disper them
but hard

Fred Quinn list
on website ->

PRIORITIZING OF IDENTIFIED LOCAL HAZARD MITIGATION IDEAS

| High Priority | Medium Priority | Low Priority | Long Range Ideas/Already Done |
|--|---|---|--|
| Building a Bioswale <i>In the process</i> | Storm Drain Cleaning | Gas shut off valves | Build Levees (Regional for Sea Level Rise) |
| Earthquake Warning System <i>ask Randall</i> | Increase Earthquake Awareness | Work with the Red Cross to install smoke detectors in single family homes | Senior Center as a cooling center (already exists) |
| Mass Notification System <i>Yes Central</i> | Providing Tsunami information to retail, hotels and restaurants | Public Disposal of batteries & oil | Drought landscaping ordinance (already exists) |
| Work with EBMUD <i>Drought planning</i> | underground utilities | Treegrators for residences | GIS Maps of Hazardous Pipelines in the City for use in the EOC (Already doing) |
| Police Substation <i>Keep Fred?</i> | Leverage relationship with Berkeley Office of Emergency Services | Transfer Tax (% rebated to homebuyer for earthquake retrofit) | Offer GIS Mapping Online (Long Range) |
| Caltrans Agreement <i>Permitting</i> | Becoming a POD (both commodity & medical) | Requiring automatic gas shut off valves with remodels | Streamlining process for solar panels (already doing) |
| Deescalating Techniques <i>remove touch</i> | Medical Reserve Corps <i>X</i> | Film on Windows at City Hall | Restoration/Build up of Wetlands against sea level rise (Long Range/Regional) |
| Recovery Plan (cyberterrorism) <i>Remove accounts</i> | Encourage renewables for businesses by giving tax breaks or rebates | Wind/Windmills (already doing) | |
| Public Address System for Tsunamis and maybe the City as a whole <i>(all)</i> | Publicize education or Spill & Burn | Community Policing (already doing) | |
| Evacuation Route Signs <i>down</i> | Update flood plain (being done by FEMA) | | |
| Revamping CERT Program <i>GOO hang</i> | Convert 4 track lines to main lines | | |
| Train staff <i>Train</i> | Work with Carrolton College (Long Range) | | |
| Moving Critical services to more secure location <i>cloud</i> | Alternative Transportation (Bike Share) Already doing | | |
| Fee waiver for Earthquake retrofit projects on single family homes (Braces & Bolts) <i>cloud</i> | Smart Grid (already doing) | | |
| Revamping City Web Page <i>more plan</i> | | | |
| List of Labs/issues | | | |

Free
5000
city
5200

Not
available
Current

Post
cards
to
city
5/10/00

Multi
unit
dual
vs
single
broadband

Ac1

Long
Camp
Plan

County
plan
Project

Future
Preliminary

Appl
County
Plan

H2/Kayne

already Building Resilient crossing over for emergency
sim for different edition
(if review 1 day + 200g with letter)

PRIORITIZING OF IDENTIFIED LOCAL HAZARD MITIGATION IDEAS

| High Priority | Medium Priority | Low Priority | Long Range Ideas |
|--|--|---|--|
| Building a Bioswale | Continue Storm Drain Cleaning | Work with the Red Cross to install smoke detectors in single family homes | Build a living levee or other protective measures in the Emeryville Crescent Marsh Levees (Regional for Sea Level) Rise |
| Earthquake Warning System for Fire Station Doors | Increase Earthquake Awareness in the community | Promote locations of Public Disposal of hazardous materials (batteries, oil, e-waste) | Emergency Services, the California Geological Survey and FEMA to document and explore additional tsunami hazard mitigation measures for the Emeryville |
| Promote Mass Notification Systems to the Public (AC Alert, Zonehaven and My Shake) | Providing Tsunami information to retail, hotels and restaurants | Erect Evacuation Route Signs in the City | Improve the City's resilience to disasters |
| Police Substation | Leverage relationship with Berkeley and Oakland Offices of Emergency Services | Transfer Tax (% rebated) to homebuyer for earthquake retrofit | Underground utilities |
| Reduce vulnerabilities to non-City buildings by continuing the retrofit program for all remaining non-compliant unreinforced masonry throughout Emeryville | Film on windows at City Hall to prevent shattering | Requiring automatic gas shut off valves with remodels | Restoration/Build up of Wetlands against sea level rise (Long Range/Regional) |
| EOC/Disaster Training for all City Staff and City Council | Promote Awareness of Oakland and Berkeley's Public Address Systems until City can obtain one of their own | Provide information on grants (if available) to encourage renewables for businesses. | Alternative Transportation (Bike Share) Already doing |
| Reduce Emeryville's vulnerability to severe storms and associated hazards through proactive research and planning | Collaborate with Alameda County Office of Emergency Services regarding their plans for Points of Distribution (medical or commodity) during a disaster | Provide links on the City's webpage to publicly available GIS resources to identify risk and increase knowledge of earthquake and flood prone regions in the City | Work with EBMUD to update infrastructure and identify strategies to protect water supplied during droughts and disasters |
| Reactivate the City's CERT Program | | Update Flood Plain Map for City | Public Address System for the City (emergency sirens) |
| Work with Alameda County Fire to Identify all labs located in the City and develop a list of potential impacts during an emergency event. | | | |
| Fee waiver for Earthquake retrofit projects on single family homes (Braces & Bolts) | | | |
| Disaster Preparedness Training for residents who live in multi-unit buildings | | | |
| | | | |

Lori Elefant

From: Lori Elefant
Sent: Wednesday, March 6, 2024 4:48 PM
To: Nancy Humphrey
Subject: RE: Shallow Groundwater Response to Sea Level Rise | San Francisco Estuary Institute

Thanks Nancy! Could you please put together for me a list of any programs or processes the City has implemented to mitigate or deal with Climate Change since 2019? Could you also review what we wrote in our 2019 plan (below) and let me know if you have any recommended changes. I am thinking that under Extreme Weather I should include "Extreme Winds" since we seem to be having more of those events lately, what do you think?

CLIMATE CHANGE

Like regions across the globe, the San Francisco Bay Area is experiencing and will continue to increasingly experience the impacts of the changing climate. By 2100, average temperatures in the San Francisco Bay Area will increase by 11°F. In 2100, Emeryville will experience six to ten additional heat waves each year, which will disproportionately impact the elderly, children under five and the low-income members of our community. If the average temperatures increase, this could shorten the snowfall season in the Sierra Nevada Mountains, increasing the amount of rain and the rate of snow melt, thereby threatening even coastal cities, such as Emeryville with increased flooding.

The Bay Area had been in the midst of a historic five-year drought. In 2014, the Governor declared a State of Emergency in California in response to the drought conditions which began in 2012. 2015 surpassed 1977 as the driest year on record in California. In June 2015, statewide reservoirs were at only 18 – 67% of average. Although the winter of 2016 eased drought conditions enough that the Governor ended the State of Emergency in April 2017, the 2017/2018 winter saw a less than average rainfall for Emeryville and the Bay Area; however, the 2018/2019 winter has proved to be an above normal year for rain. That said, climate change is likely to increase the number and severity of future droughts. The cumulative impact of climate change impacts will result in drier conditions for the entire City of Emeryville, and could alter the timing and efficiency of the Bay Area water supply.

Sea level rise is another concern for the City as a direct result of climate change. According to the City's General Plan, the local effects of sea level rise could be severe in Emeryville. Historic records show that sea level in the San Francisco Bay Area has risen by as much as seven inches in the past century. The San Francisco Bay Conservation and Development Commission (BCDC) projects a 16-inch sea level rise scenario at mid-century. This could, in turn, erode bay shores, marshes and wetlands and increase the salinity in our rivers.

Then under Hazard Analysis we have:

CLIMATE CHANGE^[1]

PROBABILITY – HIGH

SEVERITY – HIGH

Climate change is the greatest environmental challenge of the 21st century. It poses a serious and significant issue for the entire City. Scientists expect that with the current trends in fossil fuel use, Californians may see more intense heat waves, droughts, rainstorms, floods, wildfires and landslides in the future. These impacts affect our natural environment, our built infrastructure, and the health and safety of the people in our community, especially people of color and the poor.^[2] The City of Emeryville has been an active environmental player in the last decade. In 2008, Emeryville was among the first wave of US Cities to adopt a climate action plan (CAP) to reduce greenhouse

gas (GHG) emissions by 25% by the year 2020. The City made progress towards this goal with the installation of solar panels on several city facilities, street lighting upgrades, adoption of an eco-foodware ordinance, and city-wide multi-stream recycling. The Emeryville Climate Action Plan 2.0 updated and adopted in 2016, builds on this progress and sets a path for reaching Emeryville's 2030 and 2060 goals, creating a vision for a carbon-neutral City, and preparing the City for the impacts of climate change. This section identifies three main impacts of Climate Change on the City of Emeryville – Drought, Sea Level Rise and Extreme Weather.

Sea Level Rise^[3]

PROBABILITY – HIGH

SEVERITY – HIGH

Sea level rise will increase the likelihood and intensity of flooding in Emeryville, including more frequent storm surges, flooding during high tides, and rapidly increasing shoreline erosion.

As identified in the City of Emeryville Climate Action Plan 2.0 2016, the 2012 National Research Council (NRC) Report Sea Level Rise for the Coasts of California, Oregon and Washington: Past, Present and Future, identified likely sea level rise estimates throughout the 21st century for the west coast of the United States based on moderate greenhouse gas emissions and continued acceleration of glacial melt patterns. The projections applicable to Alameda County are six inches of sea level rise by 2030 (range: 2 – 12 in), 11 inches by 2050 (range: 5-24 in), and 36 inches by 2100 (range 17-66 in) relative to the year 2000.^[4] The assets most at risk from sea level rise in Emeryville include those structures and roads located on the marina and shoreline, along with those areas neighboring the railroad to the southwest.^[5] These assets include the police and fire Stations, several restaurants, high-rise office buildings, a hotel, and residential condominiums on the peninsula; the railway flooding would extend into Southern Emeryville and impact a few blocks of the area to the east of the railway, as well as a section of the Bay Street shopping center to the west.

At this time, there is no documented measurable sea level rise along the Emeryville Marina, but Emeryville crescent is suffering from erosion.

Maps of Projected Sea Level Rise^[6]



4.3.2.a (i). Projected 1 Ft of Sea Level Rise



4.3.2.a (ii). Projected 3 Ft of Sea Level Rise



4.3.2.a (iii). Projected 6 Ft of Sea Level Rise

Extreme Weather

PROBABILITY – HIGH

SEVERITY – HIGH

There have been changes in some types of extreme weather events in the United States over the last several decades, including more intense and frequent heat waves, less frequent and intense cold waves, and regional changes in floods, droughts and wildfires.⁽⁷⁾ As greenhouse gas emissions increase, temperatures are expected to

increase globally, placing growing stress on human health, water resources, energy systems and other critical assets.^[8]

Extreme Heat

The U.S. Environmental Protection Agency (EPA) defines extreme heat events as “periods of summertime weather that are substantially hotter and/or more humid than typical for a given location at that time of year.”^[9] From 1970 to 2000, Emeryville experienced a daily average temperature of about 59° F, an average maximum temperature of 66.5°F and an average minimum temperature of 51.5°F. According to Climate Change models, temperatures in the Bay Area are tending toward warmer average temperatures, which translate to more extreme temperatures. In the Bay Area temperatures are expected to increase between three degrees (in a low emission scenario) and six degrees Fahrenheit (in a high emission scenario).^[10]

Each year, approximately 20 people die in the State of California from heat-related emergencies. In the summer of 2006, a severe heatwave resulted in 655 deaths and over 16,000 emergency room visits throughout the State over a 13-day period.^[11]

The most recent heat wave in the Bay Area occurred in late August 2017 and continued through early September. On September 1, 2017, San Francisco broke its all-time heat record with a temperature of 106° F. Temperatures topped out in the Oakland/Emeryville area at 101° F.

Historically, Emeryville averages less than one day per year exceeding 90°F; however, this number could climb exponentially after mid-century. According to the City’s Climate Action Plan 2.0 2016, by century’s end the number of days per year above the 90°F could be up to 32 days a year if no changes are made in greenhouse gas emissions.

As most homes in Emeryville and other communities by the Bay, do not have air conditioning, this increase in number of extreme heat days would impact a larger number of households in the area, especially as the population ages. Although extreme heat will affect the entire Emeryville community, those most impacted in the City would be the very young, the elderly and the homeless. Heat-related illnesses can range from heat cramps to heat exhaustion to a life-threatening heat stroke. In the event of a heat wave, the City would need to plan to open more cooling centers in order to accommodate more people.

Freeze

Freezing temperatures in Emeryville are rare, and the number of very cold days is expected to decrease as temperatures increase. Under both high and low emissions scenarios, Emeryville is unlikely to experience a freeze throughout the entire century.

.....

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

-----Original Message-----

From: Nancy Humphrey <nancy.humphrey@gmail.com>

Sent: Wednesday, March 6, 2024 3:21 PM

To: Lori Elefant <lelefant@emeryville.org>

Subject: Shallow Groundwater Response to Sea Level Rise | San Francisco Estuary Institute

https://protect.checkpoint.com/v2/____https://www.sfei.org/projects/shallow-groundwater-response-sea-level-rise____.YzJ1OmNpdHlvZmVtZXJ5dmlsbGU6YzpvOjFhMTBkNWZhY2ExZWQ0NWlwOWFkOWI3MTIzMDhjMjdkOjY6ZTBjMTpkZWMyYzg0Mjc4YTYwMDIzMjEzNmNkNTdhNWVjY2QwYTRjMDYwM2NiODZiODkxOTBmMGRmNjdiZDcxNjg0MGFIOnA6VA

^[1] Emeryville Climate Hazard Analysis. Four Twenty Seven Climate Solutions. August 2016.

^[2] Morello-Frosch, R., M. Pastor, S. Shonkoff, and J. Sadd. "The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap PERE USC Dana and David Dornsife College of Letters, Arts and Sciences." The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap PERE USC Dana and David Dornsife College of Letters, Arts and Sciences. May 2009. Web. 17 Mar. 2017. <http://dornsife.usc.edu/pere/climategap>.

^[3] City of Emeryville. Climate Action Plan 2.0 2016. 2016. Web 17 Mar. 2017. Pages 46 – 47.

<http://www.ci.emeryville.ca.us/DocumentCenter/Home/View/9327>.

^[4] National Research Council; Division on Earth and Life Studies; Board on Earth Sciences and Resources; Ocean Studies Board; Committee on Sea Level Rise in California, Oregon, and Washington. "Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future." The National Academies Press. 22 June 2012. Web. 17 Mar. 2017.

<https://www.nap.edu/catalog/13389/sea-level-rise-for-the-coasts-of-california-oregon-and-washington>.

^[5] Emeryville Climate Hazard Analysis. Four Twenty Seven Climate Solutions. August 2016.

^[6] Project sea level rise maps generated based on NOAA Office for Coastal Management Sea Level Rise Impacts Viewer with layer data compiled from Bureau of Land Management, HERE, Garmin, INCREMENT P, Intermap, US Geological Survey, METI/NASA, EPA, and US Department of Agriculture; data sets reflect potential sea level rise inundation of 1, 3, and 6 feet above current Mean Higher High Water (MHHW) for the area. The data set illustrates the scale of potential flooding, and does not account for erosion, subsidence, or future construction.

^[7] Melillo, Jerry M., Terese C. Richmond, and Gary W. Yohe. "Climate Change Impacts in the United States: The Third National Climate Assessment." GlobalChange.gov. US Global Change Research Program, 2014. Web. 17 Mar. 2017.

<http://www.globalchange.gov/browse/reports/climate-change-impacts-united-states-third-national-climate-assessment-0>.

^[8] Emeryville Climate Hazard Analysis. Four Twenty Seven Climate Solutions. August 2016. Page 10.

^[9] US Environmental Protection Agency. Excessive Heat Events Guidebook. 2006. Web. 17 Mar. 2017.

<https://www.epa.gov/heat-islands/excessive-heat-events-guidebook>.

^[10] California Energy Commission. Climate Change Scenarios and Sea Level Rise Estimates for the California 2008 Climate Change Scenarios Assessment. By Dan Cayan, Mary Tyree, Mike Dettinger, Hugo Hidalgo, Tapash Das, Ed Maurer, Peter Bromirski, Nicholas Graham, and Reinhard Flick. California Climate Change Center, 2009. Web. 17 Mar. 2017.

<http://www.energy.ca.gov/2009publications/CEC-500-2009-014/CEC-500-2009-014-D.PDF>.

^[11] Be Prepared for Hot Weather in California and Beat the Heat. Web. 2019 State of California.

<https://www.caloes.ca.gov/ICESite/pages/summer-heat-resources.aspx>

Lori Elefant

Subject: LHMP check in
Location: Microsoft Teams Meeting

Start: Thu 3/7/2024 11:30 AM
End: Thu 3/7/2024 12:30 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Pedro Jimenez
Required Attendees: Lori Elefant

Or my office if you prefer to meet in person. If this does not work maybe 2:00p? or Monday ?

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 250 832 574 825

Passcode: zQgxDo

[Download Teams](#) | [Join on the web](#)

[Learn More](#) | [Meeting options](#)

Lori Elefant

From: Lori Elefant
Sent: Friday, March 8, 2024 2:10 PM
To: Bott, Jacqueline@DOC
Cc: Pedro Jimenez
Subject: RE: [External] Tsunami Playbook for Berkeley-Emeryville

Hi Jackie,

I hope this email finds you well. I retired from the City of Emeryville at the end of 2022, but I returned in September 2023 as an annuitant and am helping the City out with their Local Hazard Mitigation Plan update. I was wondering if the new Tsunami Playbooks (The evacuation playbook for the City of Emeryville and the Maritime playbook that covers both the Berkeley and Emeryville Marinas) were ever finalized, and if so, if we could get a copy for our records.

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

From: Bott, Jacqueline@DOC <Jacqueline.Bott@conservation.ca.gov>
Sent: Thursday, October 20, 2022 3:39 PM
To: Lori Elefant <lelefant@emeryville.org>
Subject: RE: [External] Tsunami Playbook for Berkeley-Emeryville

Hi Lori

We have been creating a new playbook design and it has only recently been finalized, so we are sorry for the delay in distributing these. I believe Rick Wilson presented the new playbooks to Alameda County back in January. The new playbooks only really had changes to the max phase which is essentially the same as the new tsunami hazard area maps (THA), when compared to previous versions. I will ask my supervisor regarding expected timing for distributing the new playbooks to Alameda County. There will be a separate evacuation playbook for the City of Emeryville, but the Maritime playbook will cover both the Berkeley and Emeryville Marinas. The new playbooks can be used as is or can be edited to add local information that would be useful during response. The City and County of San Francisco integrated the playbooks into their tsunami annex and added lots of specific information for their own planning purposes to the document.

Jackie

From: Lori Elefant <lelefant@emeryville.org>
Sent: Thursday, October 20, 2022 1:54 PM
To: Bott, Jacqueline@DOC <Jacqueline.Bott@conservation.ca.gov>
Subject: Tsunami Playbook for Berkeley-Emeryville

Hi Jackie,

I participated in a meeting over zoom regarding a draft for Alameda County Tsunami Playbook which I believe would include Emeryville. Has this playbook update been finalized? If so, could I get a copy? Also, will there be a separate one for Berkeley and Emeryville similar to the attached?

Regards,

Lori M. Elefant

Lori M. Elefant, ARM
Management Analyst
Human Resources
1333 Park Avenue
Emeryville, CA 94608
(510) 596-3797
(510) 420-1299 (FAX)

Lori Elefant

From: Lori Elefant
Sent: Wednesday, April 17, 2024 5:02 PM
To: Pedro Jimenez; Michael Parenti; John Kennedy; Alyssa Chung; April Richardson; Lawrence Chiu; Rebecca Sermenio; Frederick Dauer; Randall West; Mohamed Alaoui; litai5986@mypacks.net; grmartin@geomartin.com; joseph.pred@me.com; Nancy Humphrey
Subject: Evaluation of Our Mitigation Ideas
Attachments: EvaluationCriteria_proposed handout.xlsx; 2nd Group of Mitigation ideas EvaluationCriteria_041724.xlsx; 3rd Group of Mitigation ideas EvaluationCriteria_041724.xlsx; 4th and Final Group of Mitigation ideas EvaluationCriteria_041724.xlsx

Good Afternoon,

First, I would like to thank everyone who has responded to my requests for information and/or provided information to be included in our plan update. Your responses help make my job a lot easier 😊.

Now that we have identified our mitigation ideas, we need to evaluate each idea for its feasibility, social benefits, economic benefits, environmental improvements, and community objectives. To that end, I have attached 4 worksheets for evaluating each of our mitigation ideas.

For every evaluation, you place a "1" if the criteria (feasibility, social, economic, environmental improvements and community objectives) has definitely been met, a "0" if you are unsure or don't know and a "-1" if you believe the criteria has not been met or the mitigation idea could have a negative effect. Then total your numbers in the last column on the right.

If you could get your ratings back to me by Tuesday, April 23rd it would be much appreciated.

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

Mitigation/Adaptation Strategy Evaluation Worksheet

| Strategy Name | Feasibility | | | | | | Social benefits* | | | | | |
|---|---|---------------------------------|--|--|--------------------------------------|---------------------------------------|-------------------------------------|--|----------------------------|---|--|---|
| | Funding | Political support* | Local Champion* | Administrative* | Technical* | Legal* | Access | Life Safety | Awareness | Social Capacity | Vulnerable Residents | Recreation |
| | With existing or expected funding sources | Likelihood of political support | Supported by a strong advocate or local champion | With existing operations or procedures | With existing technology or know-how | With existing authorities or policies | Protects access to jobs or services | Protects residents lives and prevents injuries | Increases public awareness | Builds social networks and community capacity | Protects especially vulnerable community members | Maintains recreational or educational opportunities |
| EXAMPLE: Develop a soft story retrofit program to protect most vulnerable residents | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Earthquake Warning System for Fire Station Doors | | | | | | | | | | | | |
| Promote Mass Notification Systems to Public (AC Alert, Zonehaven and My Shake) | | | | | | | | | | | | |
| Police Substation | | | | | | | | | | | | |
| Reduce Vulnerabilities to Non-City buildings by continuing a retrofit program for all nono-compliant unreinforced masonry in Emeryville | | | | | | | | | | | | |
| EOC/Disaster Training for All City Staff and City Council | | | | | | | | | | | | |
| Reduce Emeryville's vulnerability to severe storms and associated hazards through proactive research and planning | | | | | | | | | | | | |
| Reactivate the City's CERT Program | | | | | | | | | | | | |
| Work with Alameda County Fire to identify all labs located in the City and develop a list of potential impacts during an emergency | | | | | | | | | | | | |
| Fee Waiver for Earthquake retrofit projects on single family homes (Brace & bolts) | | | | | | | | | | | | |

* Indicates overlap with FEMA Worksheet 6.1, Mitigation Action Evaluation Worksheet

| Scoring Key | |
|-------------|-----------------------------------|
| +1 | Criteria definitely met |
| 0 | Unsure/don't know |
| -1 | Criteria not met/negative effects |



Mitigation/Adaptation Strategy Evaluation Worksheet

[illegible]

Mitigation/Adaptation Strategy Evaluation Worksheet

| Strategy Name | Feasibility | | | | | | Social benefits* | | | | | |
|--|---|---------------------------------|--|--|--------------------------------------|---------------------------------------|-------------------------------------|--|----------------------------|---|--|---|
| | Funding | Political support* | Local Champion* | Administrative* | Technical* | Legal* | Access | Life Safety | Awareness | Social Capacity | Vulnerable Residents | Recreation |
| | With existing or expected funding sources | Likelihood of political support | Supported by a strong advocate or local champion | With existing operations or procedures | With existing technology or know-how | With existing authorities or policies | Protects access to jobs or services | Protects residents lives and prevents injuries | Increases public awareness | Builds social networks and community capacity | Protects especially vulnerable community members | Maintains recreational or educational opportunities |
| EXAMPLE: Develop a soft story retrofit program to protect most vulnerable residents | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Disaster Preparedness Training for Residents who live in multi-unit buildings | | | | | | | | | | | | |
| Continue Storm Drain Cleaning | | | | | | | | | | | | |
| Increase earthquake awareness in the community | | | | | | | | | | | | |
| Provide Tsunami information to retail, hotels and restaurants | | | | | | | | | | | | |
| Leverage relationship with Berkeley and Oakland Offices of Emergency Services | | | | | | | | | | | | |
| Film on windows in City Hall to prevent Shattering | | | | | | | | | | | | |
| Promote awareness of Oakland and Berkeley's Public Address Systems until the City can obtain one of their own | | | | | | | | | | | | |
| Collaborate with Alameda County office of Emergency Services regarding their plans for Points of Distribution (medical or commodity) during a disaster | | | | | | | | | | | | |
| Work with Red Cross to install smoke detectors in single family homes | | | | | | | | | | | | |

* Indicates overlap with FEMA Worksheet 6.1, Mitigation Action Evaluation Worksheet

| Scoring Key | |
|-------------|-----------------------------------|
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| 0 | Unsure/don't know |
| -1 | Criteria not met/negative effects |



Mitigation/Adaptation Strategy Evaluation Worksheet

| Strategy Name | Feasibility | | | | | | Social benefits* | | | | | |
|---|---|---------------------------------|--|--|--------------------------------------|---------------------------------------|-------------------------------------|--|----------------------------|---|--|---|
| | Funding | Political support* | Local Champion* | Administrative* | Technical* | Legal* | Access | Life Safety | Awareness | Social Capacity | Vulnerable Residents | Recreation |
| | With existing or expected funding sources | Likelihood of political support | Supported by a strong advocate or local champion | With existing operations or procedures | With existing technology or know-how | With existing authorities or policies | Protects access to jobs or services | Protects residents lives and prevents injuries | Increases public awareness | Builds social networks and community capacity | Protects especially vulnerable community members | Maintains recreational or educational opportunities |
| EXAMPLE: Develop a soft story retrofit program to protect most vulnerable residents | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Promote locations of Public Disposal of hazardous materials (batteries, oil, e-waste) | | | | | | | | | | | | |
| Erect Evacuation Route signs in the City | | | | | | | | | | | | |
| Transfer Tax (%r rebated) to homebuyer for earthquake retrofit | | | | | | | | | | | | |
| Require automatic gas shut off valves with remodels | | | | | | | | | | | | |
| Provide information on grants (if available) to encourage renewable for businesses | | | | | | | | | | | | |
| Provide links on the City's webpage to publicly available GIS resources to identify risk and increase knowledge of earthquake and flood prone regions in the City | | | | | | | | | | | | |
| Update Flood Plain Map for City | | | | | | | | | | | | |
| Build a living levee or other protective measures in the Emeryville Crescent Marsh Levees (Regional for Sea Level Rise) | | | | | | | | | | | | |
| Collaborate with the Cal OES, the California Geological Survey and FEMA to document and explore additional tsunami hazard mitigation measures for the Emeryville Marina and Watergate Community | | | | | | | | | | | | |

| Scoring Key | |
|-------------|-----------------------------------|
| +1 | Criteria definitely met |
| 0 | Unsure/don't know |
| -1 | Criteria not met/negative effects |



Mitigation/Adaptation Strategy Evaluation Worksheet

[illegible]

Mitigation/Adaptation Strategy Evaluation Worksheet

| Strategy Name | Feasibility | | | | | | Social benefits* | | | | | |
|---|---|---------------------------------|--|--|--------------------------------------|---------------------------------------|-------------------------------------|--|----------------------------|---|--|---|
| | Funding | Political support* | Local Champion* | Administrative* | Technical* | Legal* | Access | Life Safety | Awareness | Social Capacity | Vulnerable Residents | Recreation |
| | With existing or expected funding sources | Likelihood of political support | Supported by a strong advocate or local champion | With existing operations or procedures | With existing technology or know-how | With existing authorities or policies | Protects access to jobs or services | Protects residents lives and prevents injuries | Increases public awareness | Builds social networks and community capacity | Protects especially vulnerable community members | Maintains recreational or educational opportunities |
| EXAMPLE: Develop a soft story retrofit program to protect most vulnerable residents | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Improve the City's Resilience to Disasters | | | | | | | | | | | | |
| Underground Utilities | | | | | | | | | | | | |
| Restoration/Buildup of Wetlands against sea level rise | | | | | | | | | | | | |
| Alternative Transportation (BikeShare) infrastructure and identify strategies to protect water supplies during droughts and disasters | | | | | | | | | | | | |
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| Scoring Key | |
|-------------|-----------------------------------|
| +1 | Criteria definitely met |
| 0 | Unsure/don't know |
| -1 | Criteria not met/negative effects |



Mitigation/Adaptation Strategy Evaluation Worksheet

[illegible]

Lori Elefant

From: Lori Elefant
Sent: Wednesday, May 8, 2024 11:32 AM
To: Pedro Jimenez
Subject: RE: LHMP survey: link, posted in Watergate HOA, 05/03 weekly digital, update
Attachments: Average Rating for Mitigation Ideas 4-24-2024.xlsx

Hi Pedro,

I put together the attached spreadsheet with everyone who responded ratings of our mitigation ideas. They are listed in order of their ranking. I would like to, as a group come up with for each mitigation idea the following:

Priority Ranking
The hazard addressed
Benefits
Agency Responsible
Funding Source
Time Frame

The ones included in blue are from our previous plan. I want to confirm if the priority has changed based on our current ratings and/or if there are any additions or changes. Then come up with these for the new mitigation ideas.

I would also like to see if there are any additional mitigation ideas that we might want to add – it would be great if we could come up with a least a few more.

If you can share this with the group on the screen during the meeting, I can facilitate the conversation.

I guess we should also share with them that we have had to push back our schedule for the plan.

Regards,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

From: Pedro Jimenez <pjimenez@emeryville.org>
Sent: Wednesday, May 8, 2024 11:19 AM
To: Lori Elefant <lelefant@emeryville.org>
Subject: RE: LHMP survey: link, posted in Watergate HOA, 05/03 weekly digital, update

Hi Lori,

I see we have 10 responses still, no new ones. Here's the link to the responses if you need it.
https://www.surveymonkey.com/results/SM-oKTnlvleBgAW0THyjXLKIQ_3D_3D/.

Are we good for the LHMP meeting at 3pm today? Can I do anything to help?

Thanks
Pedro

From: Lori Elefant <lelefant@emeryville.org>
Sent: Wednesday, May 8, 2024 9:04 AM
To: litai5986@mypacks.net; Pedro Jimenez <pjimenez@emeryville.org>
Subject: RE: LHMP survey: link, posted in Watergate HOA, 05/03 weekly digital, update

Thanks Louise!

Pedro,

Can you let me know if we get any additional responses.

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

From: litai5986@mypacks.net <litai5986@mypacks.net>
Sent: Tuesday, May 7, 2024 7:43 PM
To: Pedro Jimenez <pjimenez@emeryville.org>; Lori Elefant <lelefant@emeryville.org>
Subject: LHMP survey: link, posted in Watergate HOA, 05/03 weekly digital, update

Hi Pedro:

Last Friday, 05/03, the Watergate HOA, weekly update (email blast to all residents) included information on the City's survey links for residents to comment on the LHMP update.

I'd asked the WCA office to post the information several weeks ago to meet the survey deadline. But the posting had been delayed. I tried the City survey link today. It still works.

Hope that this outreach generates added comments to the survey.

Louise Engel, AICP

AGENDA

LOCAL HAZARD MITIGATION PLAN UPDATE

TEAM MEETING

May 8, 2024, 3:00 PM

- I. Review Mitigations Rankings
 - a. For each mitigation idea:
 - i. Priority Ranking
 - ii. The hazard addressed
 - iii. Benefits
 - iv. Agency Responsible
 - v. Funding Source
 - vi. Time Frame
- II. Confirm if the priority has changed based on our current ratings and/or if there are any additions or changes. Then come up with these for the new mitigation ideas.
- III. Planning Process to Date
 - a. Timeline
 - i. Due 10/3/2024
 - ii. Committee meetings
 - 1. Transportation 7/8
 - 2. Public safety 7/9
 - 3. Sustainability 7/15
 - iii. City Council Study Session 7/16
 - iv. Planning Commission Meeting 7/25
 - v. Complete September 3, 2024, and submit for feedback
 - vi.

**Notes from Local Hazard Mitigation Plan Update Planning Team #4
May 8, 2024**

Facilitator: Lori Elefant, Management Analyst

Attendees: Joseph Pred, CEM, Community Member
Louise Engel, Community Member
Mohamed Alaoui, Public Works Director
Nancy Humphrey, PW Environmental Programs Supervisor
April Richardson, City Clerk
Michael Parenti, IT Director
Rebecca Sermenio, Community Services Director
Alyssa Chung, Assistant Planner
Nicholas Sayarad, Office Assistant II
Pedro Jimenez, Assistant City Manager

We reviewed everyone's evaluation of the identified mitigation ideas and then identified the following for each action:

Priority Ranking
Hazard or Hazards addressed
Benefits
Agency Responsible
Funding Source
Time Frame

We also identified 6 new mitigation actions to include in the plan for a total of 40 mitigation actions.

| MITIGATION IDEAS | April Richardson | John Kennedy | Chief West (Fire's View) | Pedro Jimenez | George Martin | Louise Engel | Joseph Fried | Rebecca Serrano | Mohamed Alsoul | Alyssa Chung | Michael Parenti | Lawrence Chia | Fred Bauer | Average Rating | Priority Classification - High, Medium or Low | Hazards Addressed | Benefits | Agency Responsible | Funding Source | Timeframe |
|---|------------------|--------------|--------------------------|---------------|---------------|--------------|--------------|-----------------|----------------|--------------|-----------------|---------------|------------|----------------|--|---|---|--|---|-------------------------|
| Promote Mass Notification System (AC Alert, Zonehaven and My Shake) | 14 | 15 | 15 | 16 | | 15 | 12 | | 13 | 11 | | 11 | 18 | 14 | High | All Hazards | Provide resources to the community and aid in disseminating information during an emergency or disaster | Police City Manager's Office | Disaster Preparedness Fund General Fund | Ongoing |
| Continue storm drain cleaning | 14 | 20 | 0 | 13 | | 19 | 14 | | 13 | 13 | | 14 | 19 | 14 | Medium | Floods | Reduce flooding of storm water system and backflow | Public Works | General-Capitol-Fund Operating Funds | Ongoing |
| Alternate Transportation | 15 | 20 | 0 | 13 | | 14 | 10 | | 17 | 10 | | 8 | 20 | 13 | Medium | Climate Change | Reduce GHG emissions | BikeShare, PW Environmental Programs MTC | Traffic Impact fee, Capital CIP Private-funding | Ongoing 1 - 5 years |
| EOC/Disaster Training for All City Staff & Council | 11 | 16 | 14 | 10 | | 16 | 8 | | 14 | 12 | | 8 | 17 | 13 | High | All Hazards | Provide emergency and City personnel with the ability to aid community and respond to a disaster in the community | Police Department Alameda County Fire Department City Manager's Office | General Fund | Ongoing 1 - 5 years |
| Provide information on grants (if available) to encourage renewable energy for businesses | 12 | 14 | 0 | 15 | | 17 | 10 | | 20 | 12 | | 10 | 15 | 13 | Medium | Climate Change | Incentivize positive small business actions around sustainability, helping to reduce business costs while being environmentally conscious | Economic Development and Housing PW Environmental Services | No funding required | 1 - 5 years |
| Reactivate Improve the City's CERT training Program to educate and train community members in times of emergency | 11 | 15 | 11 | 10 | | 17 | 10 | na | | 12 | | 8 | 16 | 12 | High | All Hazards | Provide resources to the community and aid in disseminating information during an emergency or disaster | Police Department Alameda County Fire Department | General Fund | 1 - 5 years |
| Increase earthquake preparedness awareness in the community to residents in single family homes and multi-unit buildings | 13 | 17 | 0 | 14 | | 17 | 10 | | 9 | 9 | | 14 | 17 | 12 | Medium | Earthquake | Earthquake Preparedness | Police Department Fire Department | | Ongoing, 1 - 5 years |
| Reach out annually to Collaborate with Cal OES, the California Geological Survey and FEMA for any new data on best practices for tsunami hazard mitigation measures to document and explore additional tsunami hazard mitigation measures for the Emeryville Marina and Watergate Community | 11 | 17 | 0 | 12 | | 21 | 11 | | 15 | 7 | | 8 | 17 | 12 | Medium | Tsunamis | Increase City's resiliency to a tsunami | Public Works Police Planning | No funding required | Ongoing |
| Work with Alameda County Fire to identify all labs located in the City and develop list of potential impacts during an emergency | 4 | 17 | 7 | 12 | | 16 | 7 | | 13 | 12 | | 8 | 17 | 11 | High | All Hazards | Transparency of where potential hazardous materials release may occur during emergency event | Police Department ACFD | No funding required | 1 - 5 years |
| Disaster Training for Residents who live in multi-unit buildings Combine this with Disaster Preparedness Mitigation Action | 11 | 15 | 0 | 10 | | 14 | 11 | | 10 | 10 | | 12 | 17 | 11 | INCLUDED UNDER DISASTER PREPAREDNESS | | | | | |
| Improve the City's Resilience to Disasters - too broad | 15 | 12 | 0 | 11 | | 22 | 9 | | 13 | 0 | | 11 | 17 | 11 | INCLUDED UNDER DISASTER PREPAREDNESS | | | | | |
| Earthquake Warning System for Fire Station Doors | 11 | 12 | 10 | 12 | | 14 | 11 | | 10 | 8 | | 11 | 9 | 11 | High | Earthquake | Provides egress for Fire Trucks in the event of structural damage to the Fire Station | Fire Department Public Works | CIP Grants | 1 - 5 years |
| Require automatic gas shut-off valves with remodels - Completed | 10 | 16 | 0 | 10 | | 17 | 4 | | 15 | 10 | | 15 | 11 | 11 | Low | Earthquake Hazardous Materials Release Fires Utility Infrastructure Failure Terrorism | Increase building safety | Planning/Building | No funding required | Completed? |

| MITIGATION IDEAS | April Richardson | John Kennedy | Chief West (Fire's View) | Pedro Jimenez | George Martin | Louise Engel | Joseph Fred | Rebecca Sarmento | Mohamed Alsaou | Alysa Chung | Michael Parenti | Lawrence Chiu | Fred Duer | Average Rating | Priority Classification - High, Medium or Low | Hazards Addressed | Benefits | Agency Responsible | Funding Source | Timeframe |
|--|------------------|--------------|--------------------------|---------------|---------------|--------------|-------------|------------------|----------------|-------------|-----------------|---------------|-----------|----------------|--|--|--|--|---|------------------------|
| Provide Links to the City's webpage to publicly available GIS resources to identify risk and increase knowledge of earthquake and flood prone regions in the City | 11 | 15 | 0 | 10 | | 17 | 8 | | 12 | 8 | | 11 | 15 | 11 | Low | Earthquake Floods | Resource available for residents to identify areas of risk and increase knowledge of earthquake and flood prone regions in the City | Public Works IT | No funding required | 1 - 5 years |
| Reduce Emeryville's vulnerability to severe storms and associated hazards through proactive research and planning | 14 | 17 | 0 | 4 | | 16 | 10 | | 9 | 16 | | 8 | 12 | 11 | Medium | Floods Extreme Weather Climate Change | Emergency Preparedness Reduce recovery costs | Public Works Community Development Department | Grants General Fund | 1 - 5 years |
| Leverage relationship with Berkeley and Oakland Offices of Emergency Services | 13 | 18 | 0 | 11 | | 17 | 8 | | 9 | 9 | | 8 | 13 | 11 | Medium | All Hazards | Resource sharing and coordination of neighboring cities to increase emergency response and preparedness for the city and for residents | Police Department | No funding required | Ongoing |
| Provide Tsunami information to retail, hotels and restaurants | 10 | 17 | 0 | 8 | | 17 | 9 | | 10 | 10 | | 9 | 16 | 11 | Medium | Earthquake, Floods Tsunamis | Emergency Preparedness | Police Department ACFD | Disaster Preparedness Fund Grants | Ongoing |
| Collaborate Coordinate with Alameda County Office of Emergency Services regarding their plans for Points of Distribution (medical or commodity) during a disaster | 9 | 16 | 0 | 12 | | 14 | 10 | | 11 | 11 | | 8 | 14 | 11 | Medium | Earthquake Tsunamis Floods Biological Threats | Provide critical services and resources to impacted communities and aid in the City's ability to quickly respond to an emergency or a disaster | City Manager's Office Police Department Alameda County OES ACFD | No funding required | Ongoing |
| Promote locations of public disposal of hazardous Materials (batteries, e-waste) | 8 | 19 | 0 | 11 | | 18 | 11 | | 14 | 0 | | 7 | 15 | 10 | Low | Hazardous Materials Release Climate Change | Waste reduction/ diversion | PW Environmental Programs | No funding required | Ongoing |
| Fee Waiver for Earthquake retrofit projects on single family homes (Brace & Bolts) | 7 | 16 | 0 | 11 | | 16 | 9 | | 10 | 8 | | 11 | 14 | 10 | High | Earthquake | Encourages people to upgrade homes and buildings to mitigate earthquake impacts | Planning Building | No funding required | 1 - 5 years |
| Reduce Explore reducing Vulnerabilities to Non-City Buildings by developing a retrofit program for all non-compliant unreinforced masonry in Emeryville | 12 | 16 | 0 | 4 | | 15 | 11 | | 11 | 10 | | 11 | 12 | 10 | Medium | Earthquake | Increase building safety | Community Development Department | Grants | 1 - 5 years |
| Relocate all Underground Utilities to reduce further City damage | 8 | 9 | 0 | 10 | | 21 | 9 | na | | 8 | | 9 | 17 | 10 | Medium | Earthquake Floods | Prevent additional utility damages during emergency events | Public Works | Partial Funding from General Capital Fund and PG&E | Long Range |
| Build a Police Substation | 10 | 15 | 0 | 12 | | 16 | 10 | | 16 | 7 | | 9 | 5 | 10 | High | Earthquake Utility Infrastructure Failure Flood Climate Change | Additional City police-enforcement-and-response-Ensuring rapid detect and resilience for the City's Police Force and their ability to respond | Police Department Public Works | General Capital Fund | Ongoing 1 - 5 years |
| Promote Awareness of Oakland and Berkeley's Public Address Systems until the City can obtain one of their own | 13 | 17 | 0 | 11 | | 15 | 12 | | 6 | 6 | | 8 | 11 | 10 | Medium | All Hazards | Increase dissemination of information | Police Department City Manager's Office | No funding required | Ongoing |
| Update Flood Plain Map for the City | 6 | 17 | 0 | 9 | | 17 | 7 | | 16 | 0 | | 9 | 17 | 10 | INCLUDED UNDER MITIGATION ACTION TO PROVIDE PUBLICLY AVAILABLE GIS RESOURCES FOR RESIDENTS | | | | | |
| Erect Evacuation Route Signs in the City | 9 | 12 | 0 | 7 | | 16 | 5 | | 10 | 11 | | 14 | 13 | 10 | High | All Hazards | Inform Community evacuation actions | Public Works | General Capital Fund or emergency preparedness fund | 1 - 5 years |
| Work with the Red Cross to install smoke detectors in single family homes | 11 | 15 | 0 | 9 | | 14 | 11 | | 7 | 7 | | 8 | 13 | 10 | Low | Fires Hazardous Materials Release | Early detection of fire and potential chemical release prevention | ACFD Community Services | Red Cross | Ongoing |

| MITIGATION IDEAS | April Richardson | John Kennedy | Chief West (Fire's View) | Pedro Jimenez | George Martin | Josie Engel | Joseph Pied | Rebecca Serrano | Mohamed Alsoul | Alysa Chung | Michael Parenti | Lawrence Chiu | Fred Dauer | Average Rating | Priority Classification - High, Medium or Low | Hazards Addressed | Benefits | Agency Responsible | Funding Source | Timeframe |
|--|------------------|--------------|--------------------------|---------------|---------------|-------------|-------------|-----------------|----------------|-------------|-----------------|---------------|------------|----------------|--|---|---|---|---------------------------------------|---------------------|
| Restoration/Buildup of Wetlands and shoreline against Sea Level Rise | 9 | 10 | 0 | 9 | | 21 | 11 | | 11 | 8 | | 2 | 13 | 9 | Medium | Climate Change | Reduce negative impacts from sea level rise | Public Works Environmental Programs Planning/Building | ???? | Long Range |
| Work with EBMUD to update infrastructure and identify strategies to protect water supplies during droughts and disasters | 2 | 16 | 0 | 15 | | 16 | 9 | | 12 | 0 | | 9 | 15 | 9 | High | Earthquake Hazardous Materials Release Utility Infrastructure Failure Climate Change | Increase regional adaptability to drought and other hazards; improve resources and stakeholder response | EBMUD Public Works | EBMUD | 1 - 5 years |
| Transfer Tax (% Rebate) to homebuyer for earthquake retrofit | 6 | 15 | 0 | 11 | | 14 | 6 | | 9 | 8 | | 0 | 8 | 8 | Low | Earthquake | Funding for earthquake impact mitigation | Finance Planning/Building City Manager's Office | No funding required | 1 - 5 years |
| Build a living levee or other protective measures in the Emeryville Crescent Marsh Levees (Regional for Sea Level Rise) | 7 | 5 | 0 | 9 | | 17 | 12 | | 6 | 8 | | 2 | 8 | 7 | Low | Climate Change | Reduce negative impacts from sea level rise | EBRPD Public Works Planning and Building | Regional Sources | Long Range |
| Film on Windows in City Hall to prevent shattering | 6 | 11 | 0 | 4 | | 16 | 7 | | 8 | 8 | | 2 | 10 | 7 | Low | Earthquake Climate Change | Encourage-heat retention-or-reduction; minimize earthquake damage | Public Works Planning Department | Major Maintenance Fund, PG&E, OBF, AP | Ongoing 1 - 5 years |

Keep:
 Movement of critical services to a more secure location
 Build a bioswale
 Add:
 Public Safety Mirrored
 Structural update to 2 pedestrian bridges
 Seismic Update to 4050 Hollis Street
 Seismic Update to PW Corp Yard and Police Administration Building
 Draft Recovery Plan for City
 Create a Written Pandemic Business Continuity Plan

Lori Elefant

From: Pedro Jimenez
Sent: Monday, August 19, 2024 4:24 PM
To: Michael Parenti; John Kennedy; Alyssa Chung; April Richardson; Lawrence Chiu; Rebecca Sermenio; Frederick Dauer; Randall West; Mohamed Alaoui; litai5986@mypacks.net; joseph.pred@me.com; Nancy Humphrey; Lori Elefant
Subject: RE: LHMP Planning Team Meeting-review the draft update
Attachments: Local Hazard Mitigation Plan Update 2024 - 2029 Draft (Formatted v.4) 081924.docx

Hi all,

Attached is the rough draft of the Local Hazard Mitigation Plan for your review. We will be discussing this draft in our meeting on Wednesday at 3 p.m. Please take some time to go through it, and please bring up any comments or questions you may have during our meeting.

Thanks
Pedro



PEDRO JIMENEZ
CITY OF EMERYVILLE
Assistant City Manager
1333 Park Ave, Emeryville, 94608
510-596-3770 (direct)
pjimenez@emeryville.org

-----Original Appointment-----

From: Pedro Jimenez
Sent: Wednesday, August 14, 2024 1:20 PM
To: Pedro Jimenez; Michael Parenti; John Kennedy; Alyssa Chung; April Richardson; Lawrence Chiu; Rebecca Sermenio; Frederick Dauer; Randall West; Mohamed Alaoui; litai5986@mypacks.net; joseph.pred@me.com; Nancy Humphrey; Lori Elefant
Subject: LHMP Planning Team Meeting-review the draft update
When: Wednesday, August 21, 2024 3:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Conference Room - 2nd Floor Large

Lori Elefant

From: Pedro Jimenez
Sent: Wednesday, August 21, 2024 10:09 AM
To: Lori Elefant; Nicholas Sayarad
Subject: FW: Local Hazard Mitigation Plan Update 2024 - 2029 Draft (Formatted v.1) (002)-mp and PJ edits.docx

Hi Lori,

I apologize, but I might be a few minutes late to the meeting. Rebecca is working from home, so we'll need to call her to join remotely. Also Mike and April can't make it, but they have shared their edits and comments, which Nick has updated and will have for additional discussion if needed. I haven't received confirmation from the two community members about their attendance, and John is on vacation, it looks like we might have a small group of 4-6.

Thanks
Pedro

From: Nicholas Sayarad <nicholas.sayarad@emeryville.org>
Sent: Wednesday, August 21, 2024 9:04 AM
To: Pedro Jimenez <pjimenez@emeryville.org>
Subject: Re: Local Hazard Mitigation Plan Update 2024 - 2029 Draft (Formatted v.1) (002)-mp and PJ edits.docx

Good morning Pedro,

No problem, I'll have it all prepared.

Best,
Nick

From: Pedro Jimenez <pjimenez@emeryville.org>
Sent: Wednesday, August 21, 2024 8:57 AM
To: Nicholas Sayarad <nicholas.sayarad@emeryville.org>
Subject: Local Hazard Mitigation Plan Update 2024 - 2029 Draft (Formatted v.1) (002)-mp and PJ edits.docx

Good morning Nick,

Could you please incorporate these suggested edits from Mike and me if you haven't already received or implemented them? Also, for today's meeting, could you prepare a list of the questions we need clarification on from the group so we don't forget to ask?

Thanks
Pedro

**Notes from Local Hazard Mitigation Plan Update Planning Team #4
August 21, 2024**

Facilitator: Lori Elefant, Management Analyst

Attendees: Joseph Pred, CEM, Community Member
Louise Engel, Community Member
Mohamed Alaoui, Public Works Director
Nancy Humphrey, PW Environmental Programs Supervisor
Rebecca Sermeno, Community Services Director
Alyssa Chung, Assistant Planner
Nicholas Sayarad, Office Assistant II
Pedro Jimenez, Assistant City Manager

Remote: Rebecca Sermeno, Community Services Director

At this meeting, we reviewed and discussed the proposed draft of the LHMP Update and made updates to the plan based on the team's comments and recommendations.

PUBLIC AND OUTSIDE STAKEHOLDERS OUTREACH



City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

Dear Community Members

The City of Emeryville is beginning the process of updating our Local Hazard Mitigation Plan (LHMP). The purpose of the update and the LHMP is (1) be compliant with FEMA requirements and (2) to identify the City's natural, environmental and man-made hazards and develop a risk assessment and mitigation plan for those hazards. This plan will result in better emergency management during an event and as well as identified projects that could potentially reduce risk in the community. With a plan in place, we can prioritize projects and the City will continue to be eligible to obtain FEMA Hazard Mitigation Grant Funds if a disaster is declared.

The City is soliciting community input regarding what natural and man-made hazards, face our city, as well as opinions regarding methods, and/or techniques for reducing these risks and any losses associated with these hazards.

This is a public opinion survey which will help inform our mitigation planning process for the City. There will be public outreach meetings throughout the update process; however, for our first step, this survey is available for people to become involved and give their opinions as well as provide information which will help guide the plan. If you are interested in being part of the planning team, please send an email to pjimenez@emeryville.org.

Your taking a moment to complete the service is greatly appreciated. All responses must be received no later than November 22, 2023.

Paul Buddenhagen
City Manager

1. Which of the following natural hazards have you ever been impacted by within the City of Emeryville? (Check all that apply)

- ☐ Act of Terrorism
- ☐ Dam Failure
- ☐ Drought
- ☐ Earthquake
- ☐ Energy Shortage
- ☐ Epidemic or Pandemic
- ☐ Extreme Heat
- ☐ Flood
- ☐ Freeze
- ☐ Gas Explosion
- ☐ Hazardous Material Release
- ☐ Severe Weather
- ☐ Structural Fire
- ☐ Train Derailment
- ☐ Tsunami
- ☐ Wildfire

☐ Other Hazards (please specify)

Civil Unrest, data breach, telecommunication failure, explosion, infrastructure/utility failure, transportation incident including airplane, unexploded munitions, arson, commercial fire and others

2. We would like your opinion on how to best reduce the risk from the natural or man-made hazards for the City. Please briefly describe at least one project to mitigate each of the following hazards:

| | |
|----------------------------|----------------------|
| Act of Terrorism | <input type="text"/> |
| Dam Failure | <input type="text"/> |
| Drought | <input type="text"/> |
| Earthquake | <input type="text"/> |
| Energy Shortage | <input type="text"/> |
| Epidemic or Pandemic | <input type="text"/> |
| Extreme Heat | <input type="text"/> |
| Flood | <input type="text"/> |
| Freeze | <input type="text"/> |
| Gas Explosion | <input type="text"/> |
| Hazardous Material Release | <input type="text"/> |
| Severe Weather | <input type="text"/> |
| Structure Fire | <input type="text"/> |
| Train Derailment | <input type="text"/> |
| Tsunami | <input type="text"/> |
| Wildfire | <input type="text"/> |

3. Is there another significant natural or man-made hazard that is a threat to your household or neighborhood that is not listed above ?

☐ No

☐ If Yes (please specify)

4. Please rank how prepared you feel you and your household are for a probable impacts of a natural or man-made hazard events. Rank on a scale of 1 to 5, with 5 representing the most prepared.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

5. What are the most effective ways for you to receive information about how to protect your family and prepare your home from hazard events? (Check all that apply)

☐ Television

☐ Radio

☐ Internet

☐ Mail

☐ Email

☐ Public Meetings/Workshops

☐ School Meetings

☐ Text

☐ Social Media

6. How long have you lived or worked in Emeryville?

☐ Less than 1 year

☐ 1 to 5 years

☐ 6 to 9 years

☐ 10 to 19 years

☐ 20 years or more

7. Please indicate your age?

☐ 18-30

☐ 31- 40

☐ 41 -50

☐ 51 - 60

☐ 61 or over

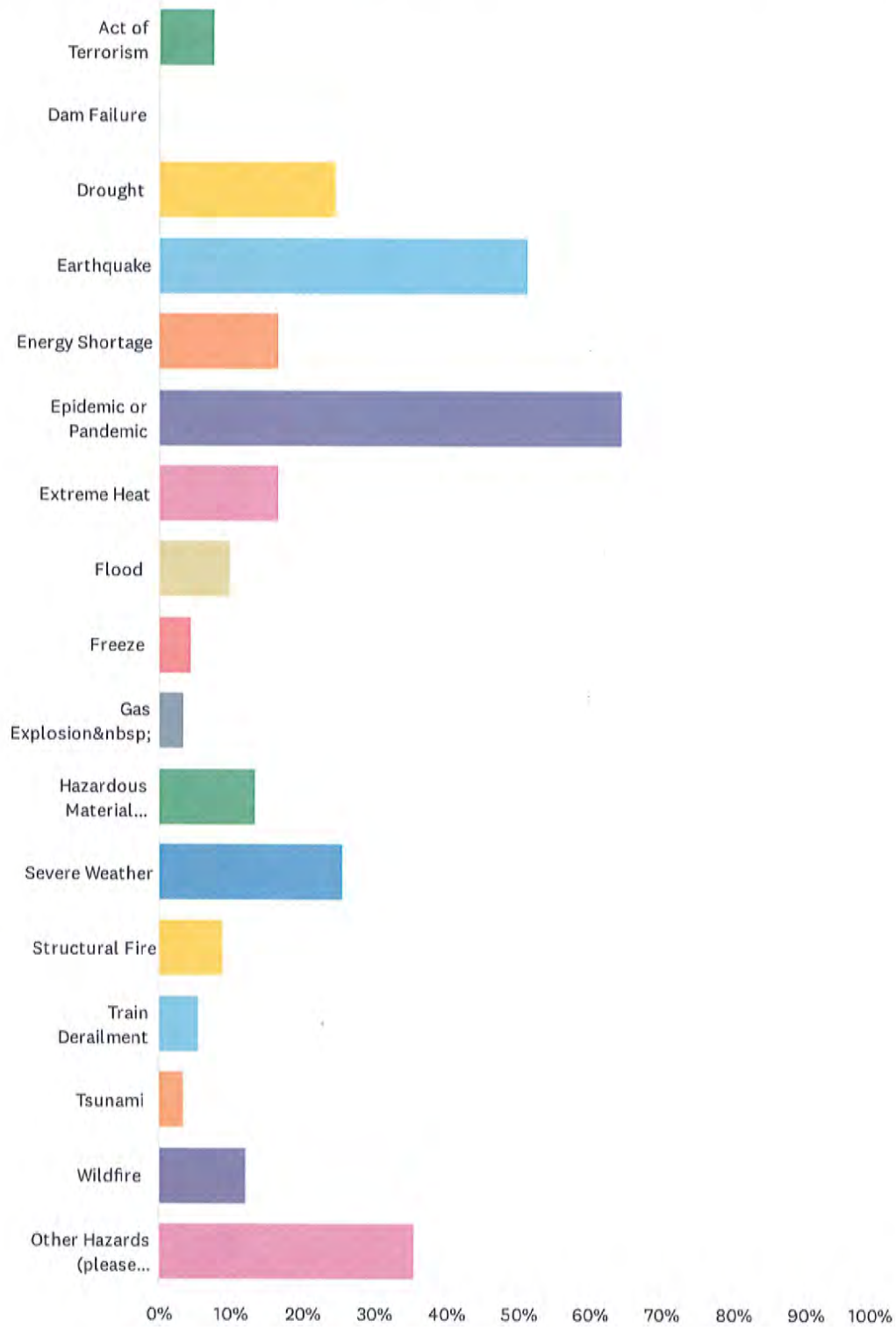
8. Other comments are welcome:

9. If you would like to stay up to date on future hazard mitigation efforts in the City or would like to be a part of the committee, we invite you to provide your email address.

Q1 Which of the following natural hazards have you ever been impacted by within the City of Emeryville? (Check all that apply)

Answered: 90 Skipped: 7

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey



City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| ANSWER CHOICES | RESPONSES | |
|--|-----------|----|
| Act of Terrorism | 7.78% | 7 |
| Dam Failure | 0.00% | 0 |
| Drought | 24.44% | 22 |
| Earthquake | 51.11% | 46 |
| Energy Shortage | 16.67% | 15 |
| Epidemic or Pandemic | 64.44% | 58 |
| Extreme Heat | 16.67% | 15 |
| Flood | 10.00% | 9 |
| Freeze | 4.44% | 4 |
| Gas Explosion | 3.33% | 3 |
| Hazardous Material Release | 13.33% | 12 |
| Severe Weather | 25.56% | 23 |
| Structural Fire | 8.89% | 8 |
| Train Derailment | 5.56% | 5 |
| Tsunami | 3.33% | 3 |
| Wildfire | 12.22% | 11 |
| Other Hazards (please specify)Civil Unrest, data breach, telecommunication failure, explosion, infrastructure/utility failure, transportation incident including airplane, unexploded munitions, arson, commercial fire and others | 35.56% | 32 |
| Total Respondents: 90 | | |

| # | OTHER HAZARDS (PLEASE SPECIFY)CIVIL UNREST, DATA BREACH, TELECOMMUNICATION FAILURE, EXPLOSION, INFRASTRUCTURE/UTILITY FAILURE, TRANSPORTATION INCIDENT INCLUDING AIRPLANE, UNEXPLODED MUNITIONS, ARSON, COMMERCIAL FIRE AND OTHERS | DATE |
|----|--|---------------------|
| 1 | Sidewalk Pavers on Hollis Street between 53rd Street & Stanford Ave. are raised and are tripping hazards. This should be fixed. | 11/27/2023 2:07 PM |
| 2 | Civil unrest/ protests | 11/22/2023 12:30 PM |
| 3 | multi-year soil remediation projects (can greatly increase airborne pollutants) | 11/21/2023 8:29 AM |
| 4 | petty crime | 11/20/2023 9:47 PM |
| 5 | Civil unrest at Bay Street, emergency gas line work by PG&E in front or near my house on multiple occasions | 11/20/2023 8:42 PM |
| 6 | Crime/break ins/car theft/vandalism/destruction of property | 11/20/2023 6:34 PM |
| 7 | Robbery, Shooting | 11/20/2023 4:23 PM |
| 8 | data breach | 11/20/2023 3:32 PM |
| 9 | Earthquake damage from other areas causing issues in Emeryville. Power Outages. | 11/20/2023 3:27 PM |
| 10 | Utility Failure, Smoke from wildfire, civil unrest | 11/20/2023 3:21 PM |
| 11 | civil unrest, data privacy exposure, mail theft/postal failure | 11/20/2023 3:18 PM |
| 12 | bomb scare | 11/20/2023 3:15 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|--|---------------------|
| 13 | Telecommunication Failure | 11/20/2023 3:05 PM |
| 14 | Civil unrest has made my insurance premiums rise | 11/20/2023 2:41 PM |
| 15 | Public safety from crimes that usually go unpunished to any deterring effect: vehicle theft/damage, shoplifting, burglary | 11/20/2023 2:15 PM |
| 16 | Wildfire Smoke | 11/20/2023 2:11 PM |
| 17 | When my wife goes ballistic, and I don't understand! | 11/20/2023 2:05 PM |
| 18 | telecom failure - low quality internet connectivity | 11/18/2023 11:09 PM |
| 19 | Civil unrest, arson, mentally unstable individuals, crime | 11/18/2023 9:20 AM |
| 20 | Telecommunications failure | 11/17/2023 2:06 PM |
| 21 | speeding cars, wildfire smoke, crime | 11/1/2023 2:45 PM |
| 22 | Utility failure | 11/1/2023 1:17 PM |
| 23 | 1- telecommunications failure; 2- utility failure | 10/30/2023 5:48 PM |
| 24 | not sure | 10/30/2023 4:51 PM |
| 25 | Violence of pedestrians-people attacking people walking dogs. People entering 1500 Park Avenue illegally | 10/30/2023 4:49 PM |
| 26 | Smoke from distant wildfires | 10/30/2023 4:40 PM |
| 27 | crime, water tank bursting | 10/30/2023 4:37 PM |
| 28 | Uptick of theft with physical safety concerns | 10/26/2023 8:39 PM |
| 29 | Gun violence. | 10/26/2023 7:12 PM |
| 30 | (1) automobile, trucks, bus, Service Station traffic, and BART pollution which residue from the trains covers my cars every day, (2) Tue, Oct 24, as a senior due to Xfinity outage, I had no access to Tv, internet, phone and felt alone and cut off for more than eight (8) hours. I thought my landline worked, but it didn't and neither did my cell phone. | 10/26/2023 7:12 PM |
| 31 | civil unrest | 10/26/2023 4:47 PM |
| 32 | Testing -multiple choices work | 10/25/2023 12:42 PM |

Q2 We would like your opinion on how to best reduce the risk from the natural or man-made hazards for the City. Please briefly describe at least one project to mitigate each of the following hazards:

Answered: 67 Skipped: 30

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|----|
| Act of Terrorism | 37.31% | 25 |
| Dam Failure | 19.40% | 13 |
| Drought | 31.34% | 21 |
| Earthquake | 56.72% | 38 |
| Energy Shortage | 28.36% | 19 |
| Epidemic or Pandemic | 29.85% | 20 |
| Extreme Heat | 32.84% | 22 |
| Flood | 29.85% | 20 |
| Freeze | 17.91% | 12 |
| Gas Explosion | 20.90% | 14 |
| Hazardous Material Release | 31.34% | 21 |
| Severe Weather | 29.85% | 20 |
| Structure Fire | 17.91% | 12 |
| Train Derailment | 23.88% | 16 |
| Tsunami | 26.87% | 18 |
| Wildfire | 28.36% | 19 |

| # | ACT OF TERRORISM | DATE |
|---|--|---------------------|
| 1 | police | 11/29/2023 12:27 AM |
| 2 | More police and volunteers to help us keep the business thriving | 11/25/2023 1:12 PM |
| 3 | Early warning system | 11/22/2023 12:30 PM |
| 4 | I wish this is predictable | 11/21/2023 7:01 AM |
| 5 | Scenario planning especially for places of business with large groups of people and evacuation or shelter in place plans that are rehearsed and understood by management (example would be AMC staff knows what to do and how to advise the public in the event of a terrorist attack or civil unrest - a plan that emergency responders and city management know and expect because of pre planning. This is not what happened when we were in amc during a riot. | 11/20/2023 8:42 PM |
| 6 | Burglaries | 11/20/2023 6:50 PM |
| 7 | start stopping cars with no license plates - illegal paper plates | 11/20/2023 5:28 PM |
| 8 | camera surveillance | 11/20/2023 4:12 PM |
| 9 | See: https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of- | 11/20/2023 3:32 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|--|---------------------|
| | emergencies/terrorism.html | |
| 10 | Public Awareness | 11/20/2023 3:27 PM |
| 11 | Train local emergency responders to identify and respond; provide information and suggested responses to local businesses especially commercial high rises | 11/20/2023 3:05 PM |
| 12 | Hold monthly city wide drills to observe vulnerabilities and correct them as noted. | 11/20/2023 2:51 PM |
| 13 | I don't think the City can really do anything to mitigate this. This is a societal issue. | 11/20/2023 2:15 PM |
| 14 | Educate community living immediately adjacent to schools what the active shooter lockdown audible alarms are if they are home during an incident. | 11/20/2023 2:11 PM |
| 15 | More police | 11/20/2023 1:59 PM |
| 16 | City cameras and more police presence | 11/18/2023 9:20 AM |
| 17 | Stop animal testing in City | 11/3/2023 10:26 AM |
| 18 | City ban on assault rifles | 10/30/2023 4:58 PM |
| 19 | more police presence or personnel to patrol | 10/30/2023 4:49 PM |
| 20 | Training | 10/27/2023 6:23 AM |
| 21 | Cost of living vs. wages, affordable housing, community connection events | 10/26/2023 8:39 PM |
| 22 | Regular training conducted by EPD with City staff, management of apartment buildings, neighborhood watch groups, shopping centers, large stores, transport centers, USPOST etc. Also create/test an alert system, similar to Amber alerts, for shelter in place & evasive actions. | 10/26/2023 7:12 PM |
| 23 | catalog potential targets and update periodically, coordinate/drill with targets and EOC joint exercises, monitor for threats | 10/26/2023 4:47 PM |
| 24 | Text alert | 10/26/2023 11:15 AM |
| 25 | Teating | 10/25/2023 12:42 PM |
| # | DAM FAILURE | DATE |
| 1 | rip rap | 11/29/2023 12:27 AM |
| 2 | Early warning system | 11/22/2023 12:30 PM |
| 3 | do we have a dam? | 11/21/2023 7:01 AM |
| 4 | Repair dams before they are a danger | 11/20/2023 3:32 PM |
| 5 | Not applicable as there is no dam | 11/20/2023 3:05 PM |
| 6 | Not a concern for Emeryville. | 11/20/2023 2:15 PM |
| 7 | N/A | 11/20/2023 1:59 PM |
| 8 | I don't believe there are any dams in Emeryville - so moot point? | 11/20/2023 1:54 PM |
| 9 | More work to mitigate sea level rise along our coast | 11/18/2023 9:20 AM |
| 10 | Inspection and repair as needed in EBRPD dams in our watershed - pass bond if needed for EBRPD/EBMUD repairs | 11/3/2023 10:26 AM |
| 11 | Training, town-wide sirens | 10/27/2023 6:23 AM |
| 12 | n/a | 10/26/2023 4:47 PM |
| 13 | Text alert | 10/26/2023 11:15 AM |
| # | DROUGHT | DATE |
| 1 | ration landscape watering | 11/29/2023 12:27 AM |
| 2 | more drought tolerant landscaping | 11/21/2023 7:01 AM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|---|---------------------|
| 3 | Programs, and resources and clear/easy planning and permitting for gray water or rain collection for homeowners. | 11/20/2023 8:42 PM |
| 4 | underground cisterns | 11/20/2023 4:12 PM |
| 5 | Encourage conscious water usage | 11/20/2023 3:32 PM |
| 6 | Better water containment of rainwater runoff | 11/20/2023 3:21 PM |
| 7 | Encourage conservation; enforce low watering rules | 11/20/2023 3:05 PM |
| 8 | Incentives to use less water and plant drought tolerant plants | 11/20/2023 2:51 PM |
| 9 | The State has been through several. There should be plans in existence already. | 11/20/2023 2:15 PM |
| 10 | EBMUD should limit new connections & golf course use | 11/20/2023 1:59 PM |
| 11 | Water conservation programs for the city, businesses, and residents | 11/18/2023 9:20 AM |
| 12 | Drought Tolerant Landscaping | 11/8/2023 2:01 PM |
| 13 | Zeriscape plantings | 11/3/2023 10:26 AM |
| 14 | more green spaces and less asphalt | 11/1/2023 2:45 PM |
| 15 | Way to recycle grey water | 10/30/2023 4:58 PM |
| 16 | save water | 10/30/2023 4:43 PM |
| 17 | Rainfall catcher programs, lawn conversion incentives | 10/28/2023 1:51 PM |
| 18 | Water saving programs and education, conscious city planning for making parks and green spaces | 10/28/2023 1:51 PM |
| 19 | Water recycling for all landscaping | 10/27/2023 6:23 AM |
| 20 | reduce reliance on water generally in landscaping and facilities | 10/26/2023 4:47 PM |
| 21 | Multimedia alerts over time | 10/26/2023 11:15 AM |
| # | EARTHQUAKE | DATE |
| 1 | police, fire, Emergency services | 11/29/2023 12:27 AM |
| 2 | Early warning system | 11/22/2023 12:30 PM |
| 3 | I believe codes are already up to date to address this | 11/21/2023 7:01 AM |
| 4 | Communications to inform citizens what area's are affected and to avoid | 11/20/2023 10:04 PM |
| 5 | City administered affordable earthquake insurance or public private partnership with Home Depot or Target for dispensing emergency kits or go bags for Emeryville residents at a discount? | 11/20/2023 8:42 PM |
| 6 | provide earthquake retro-fitting to public buildings | 11/20/2023 3:35 PM |
| 7 | Make sure all buildings are retrofitted and help people prepare for disaster... more than just a list. | 11/20/2023 3:32 PM |
| 8 | Public action plan in case of hazardous situations. | 11/20/2023 3:27 PM |
| 9 | Annual city-wide drill for evac and community safety gathering spots | 11/20/2023 3:18 PM |
| 10 | city wide evacuation drills (to muster points outside buildings) | 11/20/2023 3:15 PM |
| 11 | Inspect larger structures for EQ safety | 11/20/2023 3:05 PM |
| 12 | Educate the community on what to do in the event of an earthquake and prior to an earthquake, provide information on who to contact after an event as well as what resources might be available (building inspectors, structural engineers - to deem a building safe) | 11/20/2023 2:51 PM |
| 13 | Widen the road from Watergate to the Freeway | 11/20/2023 2:45 PM |
| 14 | You can't really do anything about this. Make sure all new infrastructure meets adequate code. | 11/20/2023 2:15 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|---|---------------------|
| 15 | Review of City Infrastructure and plan for reinforcement if needed. | 11/20/2023 2:11 PM |
| 16 | create safety zones/ buildings for evacuation; teach building residents how to turn off utilities (espec. water & gas) themselves right after an earthquake | 11/20/2023 2:08 PM |
| 17 | Deliver earthquake kits to businesses for a fee | 11/20/2023 2:01 PM |
| 18 | Pray | 11/20/2023 1:59 PM |
| 19 | Be ready to clear major roads so people can get out | 11/20/2023 1:54 PM |
| 20 | Weakness of the land in most of the Emeryville | 11/20/2023 1:53 PM |
| 21 | Earthquake improvement programs and much more green space for safe gathering spaces in the city. Very strong and clear emergency response program where residents know they can sago with their pets if a earthquake hits | 11/18/2023 9:20 AM |
| 22 | Seismic re-infrgment, CERT training | 11/3/2023 10:26 AM |
| 23 | An earthquake kit event / engagement/ social posting reminders | 11/1/2023 1:17 PM |
| 24 | Road plan, if bridges or other traffic structures are not functional, have well planned road routes for traffic (including safe bike and walking) | 10/30/2023 5:48 PM |
| 25 | help neighbors get to know each other | 10/30/2023 5:00 PM |
| 26 | sesmic retrofit | 10/30/2023 4:59 PM |
| 27 | Check retrofitting | 10/30/2023 4:58 PM |
| 28 | be prepare | 10/30/2023 4:45 PM |
| 29 | preparedness kit | 10/30/2023 4:44 PM |
| 30 | Plan of Action | 10/30/2023 4:38 PM |
| 31 | stronger buildings | 10/30/2023 4:29 PM |
| 32 | Dedicated earthquake safety zones, liquefaction awareness | 10/28/2023 1:51 PM |
| 33 | Education, preparedness, emergency plan from city | 10/28/2023 1:51 PM |
| 34 | Kit distribution | 10/28/2023 11:27 AM |
| 35 | Local water storage | 10/27/2023 6:23 AM |
| 36 | EOC drills, catalog resources and assets for emergency response, establish emergency contracts with vendors (and vendor relationships) coordinate EOC exercises with sensitive facilities (residential, commercial) | 10/26/2023 4:47 PM |
| 37 | Text alert before and after with resources | 10/26/2023 11:15 AM |
| 38 | Testing | 10/25/2023 12:42 PM |
| # | ENERGY SHORTAGE | DATE |
| 1 | ration, vary useage times | 11/29/2023 12:27 AM |
| 2 | Early warning system | 11/22/2023 12:30 PM |
| 3 | Update and maintain infrastructure | 11/21/2023 11:16 PM |
| 4 | no rolling blackouts lately | 11/21/2023 7:01 AM |
| 5 | More personal in the Energy Company for Winter days. | 11/21/2023 12:00 AM |
| 6 | Making sure emergency centers (I.E. 911, police, fire stations). Have alternative power available | 11/20/2023 10:04 PM |
| 7 | Put pressure on PGE to reduce dividends to shareholders so the public doesn't have to pay outrageous amounts for infrastructure. Better yet, make our utilities community owned. | 11/20/2023 3:32 PM |
| 8 | Encourage conservation | 11/20/2023 3:05 PM |
| 9 | Underground utilities | 11/20/2023 1:59 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|---|---------------------|
| 10 | Make sure most of the residents are all vaccinated | 11/20/2023 1:52 PM |
| 11 | City subsidized programs to support replacing old appliances to energy efficient ones and adding solar panels and car chargers to homes and businesses. These need to be mandatory and required across the city. City center/ places with resources such as cooling or warming centers for residents and their pets | 11/18/2023 9:20 AM |
| 12 | Solar and micro wind installations. | 11/3/2023 10:26 AM |
| 13 | Warnings/ notification about the occurrence | 11/1/2023 1:17 PM |
| 14 | Use more LED lights | 10/30/2023 4:58 PM |
| 15 | solar panels on all possible rooftops | 10/30/2023 1:16 PM |
| 16 | Subsidized solar and house battery | 10/28/2023 1:51 PM |
| 17 | Street light motion controls | 10/27/2023 6:23 AM |
| 18 | reduce energy use, encourage battery backup systems | 10/26/2023 4:47 PM |
| 19 | Text alert with updates | 10/26/2023 11:15 AM |
| # | EPIDEMIC OR PANDEMIC | DATE |
| 1 | join with County | 11/29/2023 12:27 AM |
| 2 | Quickly implement and enforce requirements to protect public from health risks | 11/21/2023 8:29 AM |
| 3 | mindfulness and help to not spread germs by masking | 11/21/2023 7:01 AM |
| 4 | More Emergency Health places for Test and Vaccinations to attend the persons of the community. | 11/21/2023 12:00 AM |
| 5 | neighborhood assistance circles | 11/20/2023 4:12 PM |
| 6 | Make mask wearing popular again and condemn mask shaming | 11/20/2023 3:32 PM |
| 7 | Health system needs better financial help and prevent small business from collapsing. | 11/20/2023 3:21 PM |
| 8 | City should be prepared to respond and have contact info ready | 11/20/2023 3:05 PM |
| 9 | Keep the community informed | 11/20/2023 2:51 PM |
| 10 | Not a concern. | 11/20/2023 2:15 PM |
| 11 | React quickly and quarantine | 11/20/2023 1:59 PM |
| 12 | Create local centers for vaccinations, quarantining, getting food, etc | 11/20/2023 1:57 PM |
| 13 | Resource centers to provide masks, vaccinations, food, water, and clear information for residents | 11/18/2023 9:20 AM |
| 14 | PIO at City | 11/3/2023 10:26 AM |
| 15 | Make masks available | 10/30/2023 4:58 PM |
| 16 | Debt relief, UBI | 10/28/2023 1:51 PM |
| 17 | Health care funding | 10/28/2023 1:51 PM |
| 18 | Health programs | 10/27/2023 6:23 AM |
| 19 | coordinate with county health on preparedness exercises and best practices, maintain supplies for response | 10/26/2023 4:47 PM |
| 20 | Multimedia alerts over time | 10/26/2023 11:15 AM |
| # | EXTREME HEAT | DATE |
| 1 | building codes regarding roofing, insulation, etc. | 11/29/2023 12:27 AM |
| 2 | by the bay luckily not too bad yet | 11/21/2023 7:01 AM |
| 3 | Local cooling centers within Emeryville? | 11/20/2023 8:42 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|--|---------------------|
| 4 | text message alerts | 11/20/2023 4:12 PM |
| 5 | Create incentives to install mini-splits in all homes. | 11/20/2023 3:32 PM |
| 6 | More cooling stations for the public to use | 11/20/2023 3:21 PM |
| 7 | Open A/C shelters | 11/20/2023 3:05 PM |
| 8 | Provide access to air conditioned city buildings | 11/20/2023 2:51 PM |
| 9 | Home can be almost unloveable on hot sunny days, with no A/C. | 11/20/2023 2:28 PM |
| 10 | Not a concern. | 11/20/2023 2:15 PM |
| 11 | Promote EV use | 11/20/2023 1:59 PM |
| 12 | More public green spaces! City programs for subsidized home insulation and window and door upgrades for extreme weather conditions. Cooling centers with water, supplies, and information for residents and their pets | 11/18/2023 9:20 AM |
| 13 | Heat pump, tree planting shade awnings a condition of approval for developments Canvas shade in public seating areas in parks plazas | 11/3/2023 10:26 AM |
| 14 | green buildings | 10/30/2023 4:59 PM |
| 15 | Cooling spaces | 10/30/2023 4:58 PM |
| 16 | cooling station | 10/30/2023 4:43 PM |
| 17 | Building cooling, ways to keep heat out | 10/30/2023 4:37 PM |
| 18 | insulate building | 10/30/2023 4:29 PM |
| 19 | Water and cooling stations | 10/28/2023 1:51 PM |
| 20 | Grants for passive cooling | 10/27/2023 6:23 AM |
| 21 | establish cooling centers for unhoused | 10/26/2023 4:47 PM |
| 22 | Text alerts with updates and safety resources | 10/26/2023 11:15 AM |
| # | FLOOD | DATE |
| 1 | rising SF Bay waters is more likely to be an issue | 11/29/2023 12:27 AM |
| 2 | Early warning system | 11/22/2023 12:30 PM |
| 3 | up to date sewer system | 11/21/2023 7:01 AM |
| 4 | Damage in the basement. Water damage | 11/20/2023 6:50 PM |
| 5 | Better drainage | 11/20/2023 5:39 PM |
| 6 | text message alerts | 11/20/2023 4:12 PM |
| 7 | Think ahead to mitigate damage from rising sea levels. | 11/20/2023 3:32 PM |
| 8 | Keep drains and streets free of debris; identify and monitor low lying areas prone to flooding | 11/20/2023 3:05 PM |
| 9 | If streets are impassable, provide a map with suggested detours | 11/20/2023 2:51 PM |
| 10 | In the short term maintenance and improvement in drainage. In the long term sea level rise and salt water intrusion | 11/20/2023 2:38 PM |
| 11 | Make sure all new roads drain appropriately and adequately given some expected maximum rainfall/runoff expectation. | 11/20/2023 2:15 PM |
| 12 | Sea wall along Bay frontage | 11/20/2023 1:59 PM |
| 13 | City programs for improved trenching and flood mitigation management for homes and businesses. Resource centers with support, supplies, and information for residents and their pets | 11/18/2023 9:20 AM |
| 14 | Daylighting Temescal Creek and using bioswales for mitigation | 11/3/2023 10:26 AM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|--|---------------------|
| 15 | impervious surfaces | 10/30/2023 5:00 PM |
| 16 | better drainage on city streets, retail properties | 10/30/2023 1:16 PM |
| 17 | Keep some wetland space to protect | 10/28/2023 1:51 PM |
| 18 | Natural culverts, bay marsh restoration | 10/27/2023 6:23 AM |
| 19 | sea level rise preparedness planning and capital projects | 10/26/2023 4:47 PM |
| 20 | Text alerts with updates and resources | 10/26/2023 11:15 AM |
| # | FREEZE | DATE |
| 1 | City Alerts describing practical actions to protect pipes, etc. | 11/29/2023 12:27 AM |
| 2 | Early warning system | 11/22/2023 12:30 PM |
| 3 | knock on wood we don't get this any time soon | 11/21/2023 7:01 AM |
| 4 | Make sure all pipes are wrapped everywhere | 11/20/2023 3:32 PM |
| 5 | Not likely | 11/20/2023 3:05 PM |
| 6 | Not a concern. | 11/20/2023 2:15 PM |
| 7 | N/A | 11/20/2023 1:59 PM |
| 8 | City programs for home insulation and window upgrades. Warming centers with water, supplies, and information for residents and their pets | 11/18/2023 9:20 AM |
| 9 | Subsidized low income | 11/3/2023 10:26 AM |
| 10 | Grants for sealing homes | 10/27/2023 6:23 AM |
| 11 | establish warming centers for unhoused | 10/26/2023 4:47 PM |
| 12 | Text alert with updates and FAQs | 10/26/2023 11:15 AM |
| # | GAS EXPLOSION | DATE |
| 1 | Pre alerts regarding actions to take to reduce potential of explosion | 11/29/2023 12:27 AM |
| 2 | Replace aging infrastructure | 11/22/2023 12:30 PM |
| 3 | routine maintenance of gas lines and valves | 11/21/2023 7:01 AM |
| 4 | text warning system | 11/20/2023 9:47 PM |
| 5 | See: https://ehs.cornell.edu/research-safety/chemical-safety/laboratory-safety-manual/chapter-5-emergency-preparation/53-3 | 11/20/2023 3:32 PM |
| 6 | Monitor movement of gas through city (via truck or rail) | 11/20/2023 3:05 PM |
| 7 | The average resident has no idea what kinds of pipelines/storage tanks exist in Emeryville, where they are, affected range, etc. | 11/20/2023 2:15 PM |
| 8 | Have PG&E inspect their distribution pipes | 11/20/2023 1:59 PM |
| 9 | Better laws and enforcement of these laws to better protect people. Safe harborage with supplies, support and information for residents and their pets | 11/18/2023 9:20 AM |
| 10 | AC Transit partnership for PIO | 11/3/2023 10:26 AM |
| 11 | Have PG&E monitor often | 10/30/2023 4:58 PM |
| 12 | Evacuation plan awareness | 10/28/2023 1:51 PM |
| 13 | training for City staff in coordination with utility provider on risks and response, EOC drills | 10/26/2023 4:47 PM |
| 14 | Text alert with updates | 10/26/2023 11:15 AM |
| # | HAZARDOUS MATERIAL RELEASE | DATE |
| 1 | Shelter in place. City/County alerts. City information e blast: actions to take to "wash, keep away distance" and the like. | 11/29/2023 12:27 AM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|---|---------------------|
| 2 | Audible warning system | 11/22/2023 12:30 PM |
| 3 | Do not allow hazardous materials into the city. This includes on railways. | 11/21/2023 11:16 PM |
| 4 | training of personnel to know what Haz material is | 11/21/2023 7:01 AM |
| 5 | Proactively rid Emeryville of hazardous sites | 11/20/2023 6:25 PM |
| 6 | text message alerts | 11/20/2023 4:12 PM |
| 7 | See: https://ready.uic.edu/emergency-guidelines/hazardous-material-suspicious-odor/before-during-and-after-hazmat-release/ | 11/20/2023 3:32 PM |
| 8 | Require annual inspections for all businesses within the Bay airflow; quickly and deeply fine all businesses who do not comply, who don't meet, or who break regulations. | 11/20/2023 3:18 PM |
| 9 | Monitor movement of Hazardous material through city (via truck or rail); practice response | 11/20/2023 3:05 PM |
| 10 | Have a way to reach out to all registered businesses to notify them of the situation | 11/20/2023 2:51 PM |
| 11 | We have hazardous wastes and brown fields in Emeryville. With salt water intrusion these presumed safe buried materials may be forced to the surface. Remove contaminated soil | 11/20/2023 2:38 PM |
| 12 | Not a concern. | 11/20/2023 2:15 PM |
| 13 | Review and update any existing hazard mitigation plans for Hydrogen fuel station and public/high school swimming pool chlorine storage accidental release, or create plans if none exist. | 11/20/2023 2:11 PM |
| 14 | Develop a quick response hazmat unit | 11/20/2023 1:59 PM |
| 15 | Better policing of what is allowed in city limits and shoreline. Banning large vehicles carrying hazardous materials. Safe harborage with supplies, support | 11/18/2023 9:20 AM |
| 16 | Concern living so close to MycoWorks that makes mushroom leather products | 11/17/2023 2:06 PM |
| 17 | Be open to the idea that the Department of Toxic Substances Control (DTSC) has fallen under undue influences from the developer of the Sherwin Williams clean-up site (Lennar). This idea, increasingly common among government agencies tasked with regulating a corporation, instead becomes enthralled with the corporation; a condition known as "Regulatory Capture". This is what happened at the SW Site. The result is unwarranted exposure to toxics in the air and water. | 11/7/2023 4:08 PM |
| 18 | PIO/mapping (GIS) | 11/3/2023 10:26 AM |
| 19 | Sirens | 10/27/2023 6:23 AM |
| 20 | Coordinate EOC drills with railroad and other facility owners who have hazmat | 10/26/2023 4:47 PM |
| 21 | Text alert with updates and resources/Faqs | 10/26/2023 11:15 AM |
| # | SEVERE WEATHER | DATE |
| 1 | City landscape building codes for residential/ commercial/industrial with mitigation during new build and remodel. | 11/29/2023 12:27 AM |
| 2 | Early warning system | 11/22/2023 12:30 PM |
| 3 | knock on wood we don't get this | 11/21/2023 7:01 AM |
| 4 | text message alerts | 11/20/2023 4:12 PM |
| 5 | Community prep for severe weather conditions | 11/20/2023 3:32 PM |
| 6 | Keep drains and streets free of debris; identify and monitor low lying areas prone to flooding | 11/20/2023 3:05 PM |
| 7 | Annual inspection of storm drains, power lines, trees, etc. that might pose a problem in cases of severe weather | 11/20/2023 2:51 PM |
| 8 | There are a few intersections that flood, these should have better drainage | 11/20/2023 2:38 PM |
| 9 | Not a concern. | 11/20/2023 2:15 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|--|---------------------|
| 10 | Review of drainage system to handle severe storms | 11/20/2023 2:11 PM |
| 11 | Too late... | 11/20/2023 1:59 PM |
| 12 | More public green spaces! Safe harborage with supplies, support, and information for residents and their pets | 11/18/2023 9:20 AM |
| 13 | Cooling centers | 11/3/2023 10:26 AM |
| 14 | more neighborhood emergency planning support | 11/1/2023 2:45 PM |
| 15 | green roofs | 10/30/2023 5:00 PM |
| 16 | cell phone | 10/30/2023 4:52 PM |
| 17 | Storm shelters | 10/27/2023 6:23 AM |
| 18 | establish standard protocol for messaging and proactive weather response | 10/26/2023 4:47 PM |
| 19 | Multimedia alerts with updates | 10/26/2023 11:15 AM |
| 20 | Testing | 10/25/2023 12:42 PM |
| # | STRUCTURE FIRE | DATE |
| 1 | City codes: preventative actions to reduce fire spread. | 11/29/2023 12:27 AM |
| 2 | make sure buildings are up to fire code | 11/21/2023 7:01 AM |
| 3 | text message alerts | 11/20/2023 4:12 PM |
| 4 | See: https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/fire/home-fire-preparedness.html | 11/20/2023 3:32 PM |
| 5 | Inspect older buildings and enforce fire codes | 11/20/2023 3:05 PM |
| 6 | Plans for moving handicapped people down the stairs when the elevator can't be used | 11/20/2023 2:45 PM |
| 7 | Make sure all new buildings meets adequate code. | 11/20/2023 2:15 PM |
| 8 | Have EFD do more inspections and enforce codes | 11/20/2023 1:59 PM |
| 9 | Updated city code for fire resistant materials for structures. City sirens for awareness of hazardous air quality. City subsidized programs for air quality control in homes and businesses. | 11/18/2023 9:20 AM |
| 10 | GIS of hazard if fire occurs | 11/3/2023 10:26 AM |
| 11 | enhance/maintain fire prevention services and inspections | 10/26/2023 4:47 PM |
| 12 | Text alerts with updates to those affected | 10/26/2023 11:15 AM |
| # | TRAIN DERAILMENT | DATE |
| 1 | Emergency services training to City staff and volunteers prior to emergency. | 11/29/2023 12:27 AM |
| 2 | maintain train tracks and crossings | 11/21/2023 7:01 AM |
| 3 | text message alerts | 11/20/2023 4:12 PM |
| 4 | See: https://www.nlc.org/article/2023/04/11/key-steps-to-prepare-your-city-for-a-train-derailment/ | 11/20/2023 3:32 PM |
| 5 | build train-resistant bollard line between train tracks and Huichin park | 11/20/2023 3:18 PM |
| 6 | Regularly inspect tracks and run surprise inspections | 11/20/2023 3:05 PM |
| 7 | Same as hazardous material release, have a way to reach out to Emeryville businesses | 11/20/2023 2:51 PM |
| 8 | Loudspeaker warning system | 11/20/2023 2:38 PM |
| 9 | Keep tracks and traffic control up to state of the art with required maintenance and systematic upgrades. | 11/20/2023 2:15 PM |
| 10 | Keep homeless away from tracks | 11/20/2023 1:59 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

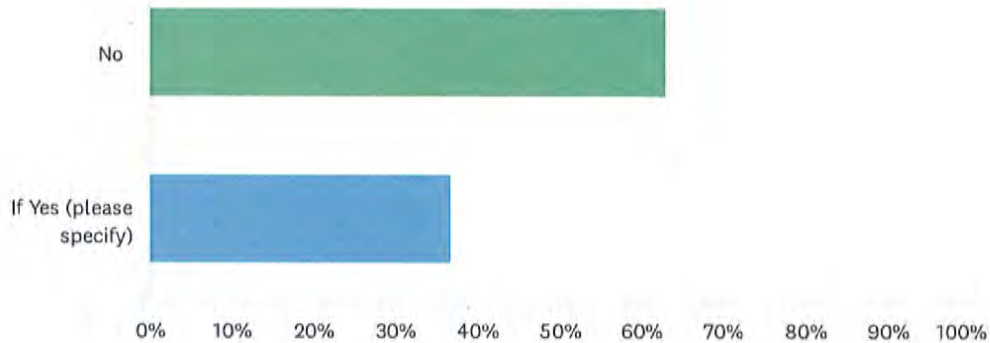
| | | |
|----|--|---------------------|
| 11 | with supplies, support, and information for residents and their pets | 11/18/2023 9:20 AM |
| 12 | Storage of retardant/hazard mitigations on | 11/3/2023 10:26 AM |
| 13 | Designate a meeting location, with resources, for residents within train impact zone | 10/30/2023 5:48 PM |
| 14 | invest in rail maintenance | 10/30/2023 5:00 PM |
| 15 | training with UP, collaborative EOC exercise, trainings with adjacent/potentially impacted property owners | 10/26/2023 4:47 PM |
| 16 | Text alerts with updates if transpo affected | 10/26/2023 11:15 AM |
| # | TSUNAMI | DATE |
| 1 | The last time a Tsunami warning occurred, years ago, I phoned the City. Staff were not even aware of the warning. Thus "communication process" with state, federal/count agencies is definitely a first step | 11/29/2023 12:27 AM |
| 2 | Early warning system | 11/22/2023 12:30 PM |
| 3 | hoping the distance from the pacific ocean helps temper the Tsunami | 11/21/2023 7:01 AM |
| 4 | warning sirens and text message alerts | 11/20/2023 4:12 PM |
| 5 | See: https://www.ready.gov/tsunamis | 11/20/2023 3:32 PM |
| 6 | Keep drains and streets free of debris; identify and monitor low lying areas prone to flooding; provide seaside buildings with Tsunami response protocol | 11/20/2023 3:05 PM |
| 7 | sirens | 11/20/2023 2:51 PM |
| 8 | Loudspeaker warning system | 11/20/2023 2:38 PM |
| 9 | Not a concern. | 11/20/2023 2:15 PM |
| 10 | Educate community about existing Tsunami plan, including preplanned evacuation routes. | 11/20/2023 2:11 PM |
| 11 | VERY IMPORTANT to create an evacuation plan & pre-tsunami notification protocol, also identify safety zones and have them posted along the streets | 11/20/2023 2:08 PM |
| 12 | A sea wall would help | 11/20/2023 1:59 PM |
| 13 | with supplies, support, and information for residents and their pets | 11/18/2023 9:20 AM |
| 14 | living sea walls | 11/3/2023 10:26 AM |
| 15 | Better warning system | 10/30/2023 4:58 PM |
| 16 | Sirens | 10/27/2023 6:23 AM |
| 17 | drills, community meetings on response plans | 10/26/2023 4:47 PM |
| 18 | Multimedia alerts with updates and resources | 10/26/2023 11:15 AM |
| # | WILDFIRE | DATE |
| 1 | In Emeryville, smoke from hill fires (Berkeley/Oakland, surrounding cities, would be the most likely impacts. | 11/29/2023 12:27 AM |
| 2 | we don't have enough trees | 11/21/2023 7:01 AM |
| 3 | Air quality is an issue with wildfires - make k or n95 masks available. Plant more trees? | 11/20/2023 8:42 PM |
| 4 | See: https://www.ready.gov/wildfires | 11/20/2023 3:32 PM |
| 5 | Control burns and fire mitigation management needs to be performed. | 11/20/2023 3:21 PM |
| 6 | Ensure all threatened areas have evacuation plan and regularly inspect and clear evacuation routes | 11/20/2023 3:05 PM |
| 7 | Same as extreme heat, provide access to city buildings that might have filtered air | 11/20/2023 2:51 PM |
| 8 | While wildfire in Emeryville proper is unlikely we could be affected by people fleeing another Oakland/Berkley hills fire. Designated and labeled escape routs would be useful | 11/20/2023 2:38 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|---|---------------------|
| 9 | Not a concern. | 11/20/2023 2:15 PM |
| 10 | Enforce weed abatement | 11/20/2023 1:59 PM |
| 11 | Have agricultural expert survey all the forest on yearly basis | 11/20/2023 1:52 PM |
| 12 | Clear information in advance of any hazard or risk provided to all residents so everyone is clear about what to do in these events, where to go, and where to find supplies/ support in all of these situations. Understanding how to mitigate and avoid these are also key so programs and policies that can be implemented now makes a huge impact. | 11/18/2023 9:20 AM |
| 13 | Mask provision, air quality monitoring centers in public sites | 11/3/2023 10:26 AM |
| 14 | cleanup | 10/30/2023 4:29 PM |
| 15 | Air filter assistance, fire mitigation garden and house planning | 10/28/2023 1:51 PM |
| 16 | Have exit plan | 10/28/2023 11:30 AM |
| 17 | Local water storage | 10/27/2023 6:23 AM |
| 18 | n/a | 10/26/2023 4:47 PM |
| 19 | Multimedia alerts with updates and resources | 10/26/2023 11:15 AM |

Q3 Is there another significant natural or man-made hazard that is a threat to your household or neighborhood that is not listed above ?

Answered: 87 Skipped: 10



| ANSWER CHOICES | RESPONSES | |
|-------------------------|-----------|----|
| No | 63.22% | 55 |
| If Yes (please specify) | 36.78% | 32 |
| TOTAL | | 87 |

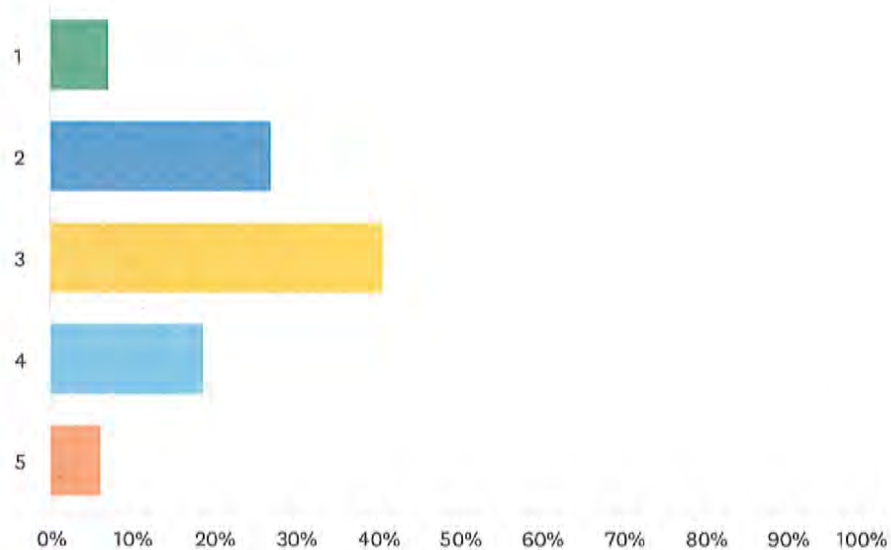
| # | IF YES (PLEASE SPECIFY) | DATE |
|----|---|---------------------|
| 1 | Seawater rise. The rip rap along the City shoreline is significantly degraded. | 11/29/2023 12:27 AM |
| 2 | Rise in crime | 11/25/2023 7:12 PM |
| 3 | night light pollution, over cutting of trees and more concrete developments with landscaped areas maintained by commercial landscape maintenance companies. | 11/21/2023 11:16 PM |
| 4 | Theft / steal car inside garage. | 11/21/2023 10:11 AM |
| 5 | personnel with mental illness and bold criminals | 11/21/2023 7:01 AM |
| 6 | Has the city plan for total loss of electrical power, sewerage system, water, road repair, etc | 11/20/2023 10:04 PM |
| 7 | petty crime | 11/20/2023 9:47 PM |
| 8 | Crime | 11/20/2023 8:42 PM |
| 9 | Crossing the street | 11/20/2023 6:50 PM |
| 10 | The crime wave throughout the east bay is insane. Between the bipping, car theft, catalytic theft, small business break ins, driving stolen vehicles into storefronts to steal a pittance of cash, we small business are being pummeled. Ordinary folk and small business are the victims. Nobody feels safe. All of those other threats, are hypothetical, and less likely to occur. Meanwhile i cant get through the day without hearing about some kind of crazy crime. That is the real threat. | 11/20/2023 6:34 PM |
| 11 | Crime | 11/20/2023 5:39 PM |
| 12 | container ship bunker fuel spill from hitting the bay bridge | 11/20/2023 5:28 PM |
| 13 | Robbery, Shooting | 11/20/2023 4:23 PM |
| 14 | Lack of road maintenance, dodging giant pot holes. | 11/20/2023 3:32 PM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

| | | |
|----|--|---------------------|
| 15 | Postal fraud/theft and mail theft; we had a neighbor confronted at gunpoint when our condo mailbox was being breached and mail stolen. | 11/20/2023 3:18 PM |
| 16 | Freeway and Bridge Access | 11/20/2023 2:51 PM |
| 17 | Long term power outages as were experienced a few years back with PG&E PSPS | 11/20/2023 2:38 PM |
| 18 | Complete disregard for human life or property by some elements of Bay Area society. | 11/20/2023 2:15 PM |
| 19 | Evacuation routes from Watergate. There is only one main Artery. | 11/20/2023 2:11 PM |
| 20 | Donald Trump | 11/20/2023 1:59 PM |
| 21 | Mentally unstable or drug addicted people | 11/18/2023 9:20 AM |
| 22 | As above - MycoWorks Doyle & 64th St. | 11/17/2023 2:06 PM |
| 23 | climate change, speeding cars, wildfire smoke, rampant crime | 11/1/2023 2:45 PM |
| 24 | education about rail crossings | 10/30/2023 5:00 PM |
| 25 | fuel exhaust near overpass often smells like gas. | 10/30/2023 4:51 PM |
| 26 | Vandalism of cars on streets, violence/attacks | 10/30/2023 4:49 PM |
| 27 | Homelessness | 10/28/2023 11:31 AM |
| 28 | Mass unrest | 10/27/2023 6:23 AM |
| 29 | (1) automobile, trucks, bus, Service Station traffic, and BART pollution which white residue comes from the trains covers my cars every day and I must be breathing it in, (2) Tue, Oct 24, as a senior due to Xfinity outage, I had no access to Tv, internet, phone and felt alone and cut off for more than eight (8) hours. I thought my landline worked, but it didn't and neither did my cell phone. | 10/26/2023 7:12 PM |
| 30 | civil unrest | 10/26/2023 4:47 PM |
| 31 | Testing | 10/25/2023 12:42 PM |
| 32 | Covid | 10/25/2023 12:33 PM |

Q4 Please rank how prepared you feel you and your household are for a probable impacts of a natural or man-made hazard events. Rank on a scale of 1 to 5, with 5 representing the most prepared.

Answered: 96 Skipped: 1



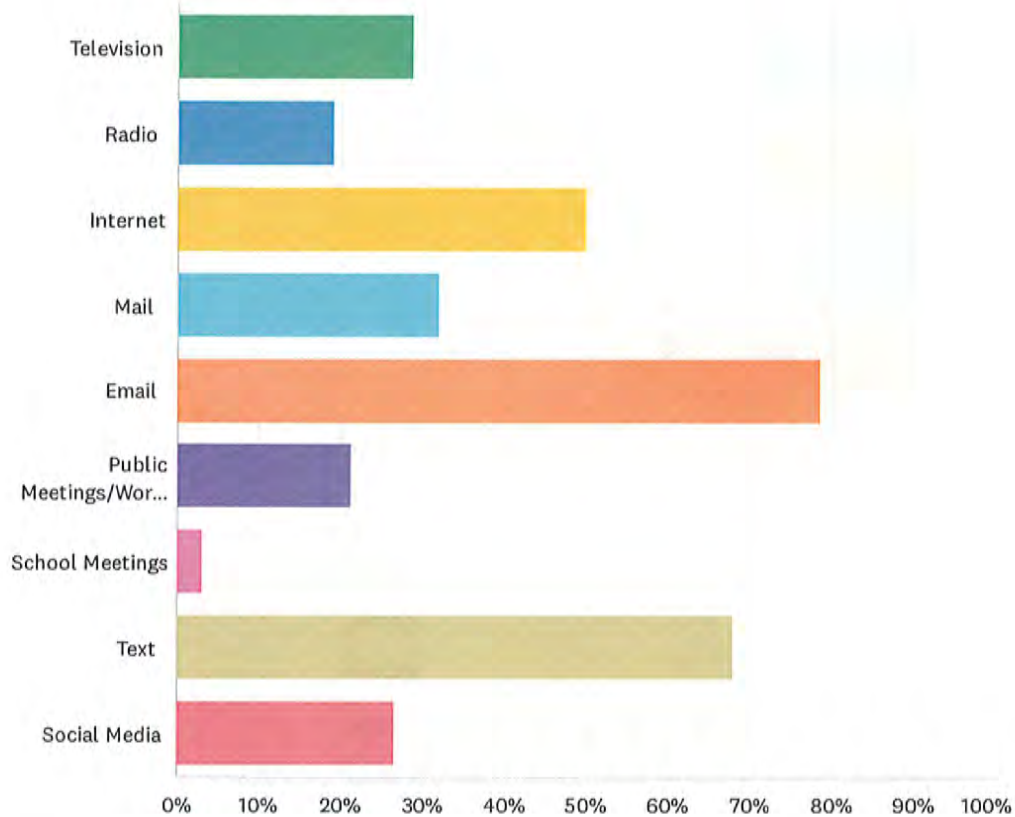
ANSWER CHOICES

RESPONSES

| | | |
|-------|--------|----|
| 1 | 7.29% | 7 |
| 2 | 27.08% | 26 |
| 3 | 40.63% | 39 |
| 4 | 18.75% | 18 |
| 5 | 6.25% | 6 |
| TOTAL | | 96 |

Q5 What are the most effective ways for you to receive information about how to protect your family and prepare your home from hazard events? (Check all that apply)

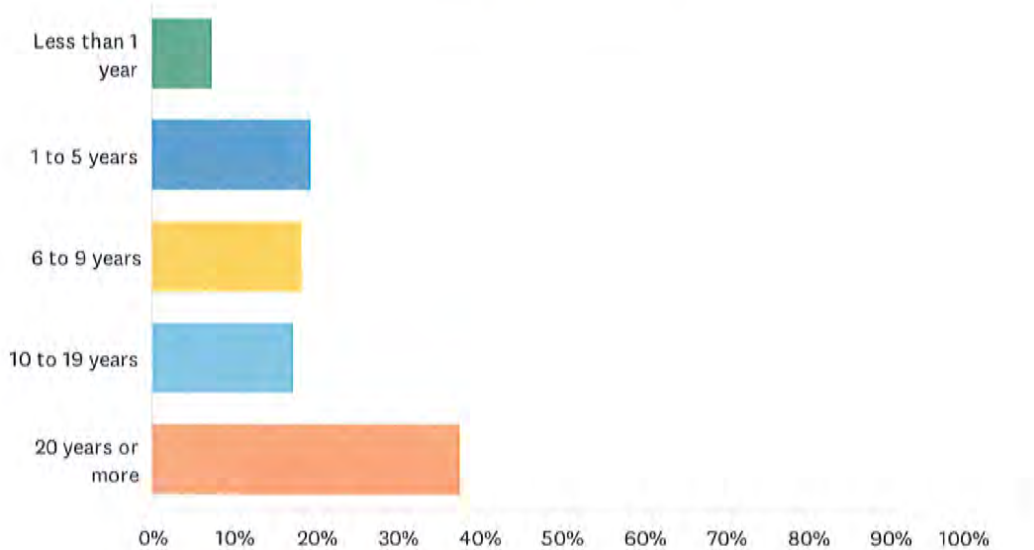
Answered: 94 Skipped: 3



| ANSWER CHOICES | RESPONSES | |
|---------------------------|-----------|----|
| Television | 28.72% | 27 |
| Radio | 19.15% | 18 |
| Internet | 50.00% | 47 |
| Mail | 31.91% | 30 |
| Email | 78.72% | 74 |
| Public Meetings/Workshops | 21.28% | 20 |
| School Meetings | 3.19% | 3 |
| Text | 68.09% | 64 |
| Social Media | 26.60% | 25 |
| Total Respondents: 94 | | |

Q6 How long have you lived or worked in Emeryville?

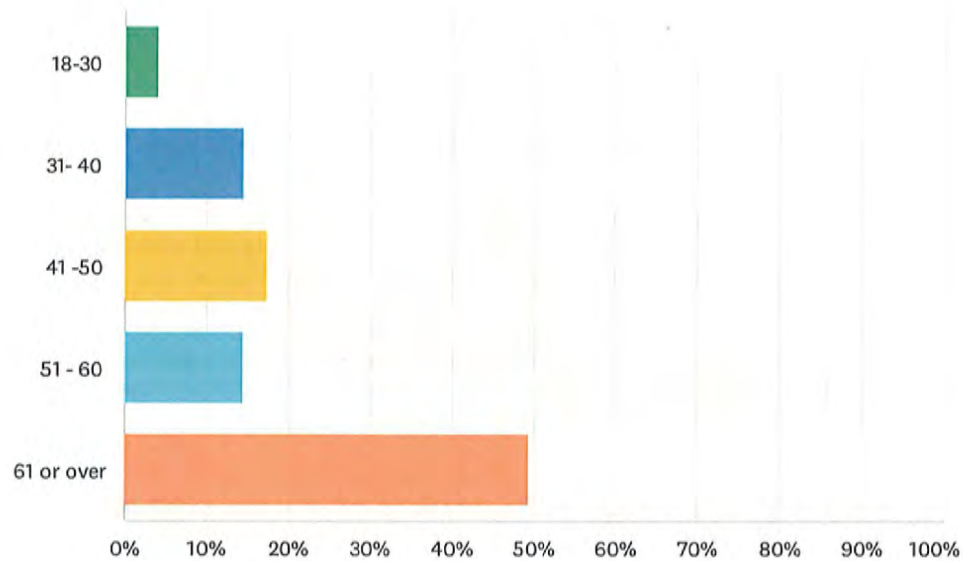
Answered: 93 Skipped: 4



| ANSWER CHOICES | RESPONSES | |
|------------------|-----------|----|
| Less than 1 year | 7.53% | 7 |
| 1 to 5 years | 19.35% | 18 |
| 6 to 9 years | 18.28% | 17 |
| 10 to 19 years | 17.20% | 16 |
| 20 years or more | 37.63% | 35 |
| TOTAL | | 93 |

Q7 Please indicate your age?

Answered: 97 Skipped: 0



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|----|
| 18-30 | 4.12% | 4 |
| 31- 40 | 14.43% | 14 |
| 41 -50 | 17.53% | 17 |
| 51 - 60 | 14.43% | 14 |
| 61 or over | 49.48% | 48 |
| TOTAL | | 97 |

Q8 Other comments are welcome:

Answered: 26 Skipped: 71

| # | RESPONSES | DATE |
|----|--|---------------------|
| 1 | I would like to participate. | 11/29/2023 12:27 AM |
| 2 | Sidewalk Pavers on Hollis Street between 53rd Street & Stanford Ave. are raised and are tripping hazards. This should be fixed. | 11/27/2023 2:07 PM |
| 3 | As Emeryville becomes more paved and built upon with fewer trees, I am concerned about our air quality and run off from large scale institutional landscaping poisoning the ground water. Not good for wildlife or humans. In general, stop cutting trees, regulate the toxic materials that travel through the city on railways and stop using pesticides in the city. We have more light pollution now than in recent years, pay attn to the lighting in the city, much increased night lighting with all the new buildings. Make sure lighting complies with dark night sky guidelines for our, for animals and birds health and well being. Do not let developers control how things are done in Emeryville. Be educated and let Emeryville be a leader. | 11/21/2023 11:16 PM |
| 4 | NA | 11/21/2023 10:11 AM |
| 5 | Would like to see any mitigation or planning to include the care of /accommodation of people's pets. | 11/20/2023 8:42 PM |
| 6 | The worst man-made hazard are the criminals who the politicians allow to roam freely without any consequences to their actions. Change the policies and laws to harshly punish criminals who are robbing us blind and endangering our lives. We no longer feel safe anywhere, including our home. | 11/20/2023 5:39 PM |
| 7 | Each home would benefit from having a simple, rank-ordered list available they can follow to gather most important things quickly from home so they don't have to try and remember while escaping safely. Like, if you only have 5 minutes to get out, or 15 minutes, or longer. Create neighborhood ambassadors to connect neighbors with each other so disasters can be weathered together. Don't allow homes to be taken away if property taxes cannot be paid, especially if a disabled or retired person can only live off of social security. | 11/20/2023 3:32 PM |
| 8 | Work with USPS to keep our mail safe! The theft is off the charts, and is a public hazard. | 11/20/2023 3:18 PM |
| 9 | This process is a good start. Any effective mitigations will be expensive. Keeping residents informed through the process will help the ultimate request for funds more likely to succede | 11/20/2023 2:38 PM |
| 10 | Please do all you can to reduce air and carbon emissions, including making public transportation better and more flexible, and installing more charging stations! | 11/20/2023 2:28 PM |
| 11 | I think the City's list of 16 hazards to mitigate is a bit ambitious. Focus on natural disasters (earthquakes/fire) and public safety/crime prevention. Make the City so that criminals don't want to operate here - not with a carrot but a stick. | 11/20/2023 2:15 PM |
| 12 | Professionally I'm an emergency manager consultant and would love to volunteer my services to the LHMP planning committee. Some of my credentials include: IAEM Certified Emergency Manager, FEMA National Emergency Management Advanced Academy graduate, and CalOES Emergency Management Specialist. | 11/20/2023 2:11 PM |
| 13 | I feel unqualified to answer all parts of question # 2. | 11/20/2023 2:05 PM |
| 14 | RE question 2: so many of those things are outside the city's control. Not sure why you're asking citizens to come up with risk mitigation measures. | 11/20/2023 1:54 PM |
| 15 | To work against the "digital divide", perhaps Emeryville could pursue providing municipal (high speed) broadband? | 11/18/2023 11:09 PM |
| 16 | Please stop building multistory units and packing more into the city. Prioritize more parks and green spaces. We don't have enough to satisfy the current green space to resident ratio. | 11/18/2023 9:20 AM |

City of Emeryville 2023 Hazard Mitigation Plan Update: Community Hazard Awareness Survey

Please add green park spaces in the city before building any new residence or business.
You're stealing any green space opportunities.

| | | |
|----|--|---------------------|
| 17 | I wish my city was more interested in protecting me and my family from V.O.Cs & heavy metals from the S.W. site. | 11/7/2023 4:08 PM |
| 18 | The issue of crime impacts all the other issues. When I don't feel safe in my neighborhood (or when my property doesn't feel safe), it makes me less likely to want to spend time creating human connections in my neighborhood--even though this would make it safer! If community-planning is going to happen, the issue of crime needs to be addressed. | 11/1/2023 2:45 PM |
| 19 | Use of mass text sms messages may be a useful method to communicate with residents/employees in Emeryville | 10/30/2023 5:48 PM |
| 20 | I couldn't answer all the questions on idea to mitigate problem-not informed enough | 10/30/2023 4:58 PM |
| 21 | Thank you | 10/30/2023 4:51 PM |
| 22 | 20 years or more have lived or worked in Emeryville | 10/30/2023 4:40 PM |
| 23 | I would love to be more involved in community! | 10/26/2023 8:39 PM |
| 24 | Does City of Emeryville have rules against gun violence that are over and above those enforced by the State? | 10/26/2023 7:12 PM |
| 25 | i live in Oakland, just over the Emeryville line. | 10/26/2023 7:12 PM |
| 26 | Question 5, do want one choice or multiple? If multiple "way" be "ways"? | 10/25/2023 12:42 PM |

Q9 If you would like to stay up to date on future hazard mitigation efforts in the City or would like to be a part of the committee, we invite you to provide your email address.

Answered: 23 Skipped: 74

| # | RESPONSES | DATE |
|----|--|---------------------|
| 1 | litai5986@mypacks.net | 11/29/2023 12:27 AM |
| 2 | Tammy624@comcast.net | 11/25/2023 7:12 PM |
| 3 | Hello@tannproperties.com | 11/22/2023 12:30 PM |
| 4 | Stay updated : john@asapdoors.com | 11/21/2023 1:52 PM |
| 5 | cnie@omniab.com | 11/21/2023 7:01 AM |
| 6 | Eddie_lee35@yahoo.com | 11/20/2023 10:04 PM |
| 7 | annanikitaras@yahoo.com | 11/20/2023 6:50 PM |
| 8 | Darylmrush@gmail.com | 11/20/2023 3:55 PM |
| 9 | I would be happy to participate in this process. | 11/20/2023 3:27 PM |
| 10 | gsears@warehamdevelopment.com | 11/20/2023 3:15 PM |
| 11 | curtis@ardourel.com | 11/20/2023 2:38 PM |
| 12 | Joseph.pred@me.com | 11/20/2023 2:11 PM |
| 13 | cassadams7@gmail.com | 11/20/2023 2:08 PM |
| 14 | missandregg@gmail.com | 11/18/2023 9:20 AM |
| 15 | sophbeau@yahoo.com | 11/7/2023 4:08 PM |
| 16 | Etimme3@gmail.com | 10/30/2023 5:48 PM |
| 17 | noah.gallo@gmail.com | 10/30/2023 4:43 PM |
| 18 | sam@fldmn.com | 10/27/2023 6:23 AM |
| 19 | 798christine@gmail.com | 10/26/2023 8:39 PM |
| 20 | I am not physically or mentally able. My biggest concern is how to store WATER. IF I COULD JUST GET SOMEONE TO TAKE THE TIME TO WORK WITH ME TO SHOW ME WHAT TO DO WITH THE WATER KIT I RECEIVED FROM LAMORINDA AND HOW TO USE THE SHORTWAVE RADIO I PURCHASED AS IT WILL BE MY ONLY MEANS TO COMMUNICATE. I HAVE THE EQUIPMENT BUT DON'T KNOW WHAT TO DO WITH IT. almetas@icloud.com | 10/26/2023 7:12 PM |
| 21 | Xanwalker@comcast.net | 10/26/2023 11:15 AM |
| 22 | Thank you. It allows you to take it multiple times via phone but not on pc. Strange.. | 10/25/2023 12:42 PM |
| 23 | pjimenez@emeryville.org | 10/25/2023 12:33 PM |

Lori Elefant

From: Lori Elefant
Sent: Friday, March 8, 2024 4:14 PM
To: tperkins@operationdignity.org
Cc: Pedro Jimenez
Subject: City of Emeryville Local Hazard Mitigation Plan
Attachments: Final Prioritization of Mitigation Ideas 030724.xlsx; Priority Ranking of Hazards for LHMP Update 030424.pub

Hi Tomika,

My name is Lori Elefant, and I am a Management Analyst (working as an annuitant) with the City of Emeryville. The City is in the process of updating our Local Hazard Mitigation Plan for 2024 – 2029 and one of the requirements for this update is for us to work collaboratively with leaders from underserved and socially vulnerable communities and so we are reaching out to you.

Attached are our proposed identified hazards we will be addressing in our plan along with our proposed mitigation ideas for these hazards. We are reaching out to you for any thoughts you have about these hazards or mitigation ideas and how these could impact the community you work with, either good or bad.

Any ideas or insights you want to share with us in our planning process would be greatly appreciated. If you know of others you think we should reach out to, please let me know.

I look forward to hearing from you.

Regards,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

[News Flash Home](#)

The original item was published from 4/10/2024 2:45:00 PM to 5/2/2024 12:00:01 AM.

News Flash

Posted on: March 14, 2024

[ARCHIVED] Local Hazard Mitigation Plan (LHMP) Community Outreach

The City has commenced the process of updating our LHMP. The LHMP pinpoints hazards within the community, evaluates the City's susceptibility to these hazards, and outlines specific measures to mitigate risks. Furthermore, it outlines potential projects that could diminish risks from both natural and man-made hazards in the community.

We invite your feedback to assist us in assessing the identified hazards, their prioritization, as well as the proposed hazard mitigation strategies and their ranking, aiming to enhance the City's planning process.



Please click the link below to provide comments.

<https://www.surveymonkey.com/r/GNQ2RKM>

[Click here](#) for information on the current LHMP Plan.

We thank you for your participation!

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- [News Flash](#)

Other News in News Flash

[Eco-Art at Big Daddy's](#)

Posted on: August 12, 2024



[Back To School Supply Drive](#)

Posted on: August 8, 2024



City of Emeryville Quiet Zone Effective August 5th, 9 AM

Posted on: August 1, 2024

We're Recruiting Community and Advisory Committee

Posted on: July 17, 2024



Department of Toxic Substance Control Work Notice

Posted on: May 30, 2024



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LOCAL HAZARD MITIGATION PLAN (LHMP) COMMUNITY OUTREACH

The City has commenced the process of updating our LHMP. The LHMP pinpoints hazards within the community, evaluates the City's susceptibility to these hazards, and outlines specific measures to mitigate risks. Furthermore, it outlines potential projects that could diminish risks from both natural and man-made hazards in the community.

We invite your feedback to assist us in assessing the identified hazards, their prioritization, as well as the proposed hazard mitigation strategies and their ranking, aiming to enhance the City's planning process.

Please click or use the QR code below to provide comments.

<https://www.surveymonkey.com/r/GNQ2RKM>



[Click here](#) for information on the current LHMP Plan.

We thank you for your participation!

Lori Elefant

From: Lori Elefant
Sent: Sunday, March 17, 2024 3:19 PM
To: Frew, Steven (steven.frew@ebmud.com); lilian.leung@ebmud.com
Cc: Pedro Jimenez
Subject: City of Emeryville Local Hazard Mitigation Plan Update

Hi Steven and Lilian,

I hope this email finds you well. The City of Emeryville is updating its Local Hazard Mitigation Plan and as one of the City's key partners in the event of a major earthquake event I am reaching out to you for your assistance and input.

Below is the section on EBMUD from our 2019-2024 LHMP. If you could be so kind to review the information below and let me know if you have any recommended changes to this section, it would be greatly appreciated.

Water System – Key Partner: East Bay Municipal Utility District^[1]

The East Bay Municipal Utility District (EBMUD) provides drinking water to approximately 1.3 million people and sewer services to 650,000 in the East Bay. After an earthquake, EBMUD will be responsible for maintaining and providing water and sewer services to its customers, including water for post-earthquake fire suppression.

EBMUD relies on a network of reservoirs to collect local watershed runoff and store imported water.^[2] It draws its imported water from the Mokelumne Water System. If there is an interruption to this imported water source, EBMUD would need to rely on local sources and storage until repairs were made to restore the transmission supply. However, this would only work if the local pipelines remained intact. EBMUD's aging distribution system makes it particularly vulnerable to damage in an earthquake.

EBMUD has studied the impacts of earthquake shaking, liquefaction, landslides, and fault rupture on most of its infrastructure. In a major seismic event, an earthquake induced landslide in either the Oakland or Berkeley Hills could affect water lines reducing water availability for firefighting in Emeryville. If there is an actual fault rupture, water lines within the fault rupture could be broken. Liquefaction causes the greatest percent of pipe failure associated with a seismic event. As the entire City of Emeryville lies within liquefaction zones, a large event earthquake could severely impact water service to the City.

In the event that water service to the City is compromised, the City will establish a centrally located water distribution site (Commodity Point of Distribution or C-Pod) to distribute water to the community.

EBMUD Notable Mitigation Activities

EBMUD has taken aggressive steps to strengthen its systems. Since the 1989 Loma Prieta Earthquake, EBMUD has invested more than \$350 million in seismic safety. They have also taken steps to provide system redundancy.

After a major seismic event, it could take seven days or more to restore basic services to the majority of customers; however, full service may not be restored for up to six months. EBMUD will work with the city to support our disaster recovery efforts, while focusing on infrastructure repairs so water service can be restored as quickly possible.

Please let me know if you are not the appropriate individuals to review this information, to whom I should forward this request.

Thank you in advance for your attention to this matter.

Regards,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

^[1] Information provided by Lilian Leung, P.E. Assistant Engineer, and Steven Frew, Manager of Security and Emergency Preparedness at East Bay Municipal Utility District.

^[2] "Cascading Failures: Earthquake Threats to Transportation and Utilities." Association of Bay Area Governments Resilience Program. Association of Bay Area Governments, Dec. 2014. Web. 17 Mar. 2017.
http://resilience.abag.ca.gov/projects/transportation_utilities_2014.

Lori Elefant

From: Guillermo Navarro
Sent: Monday, March 18, 2024 6:03 PM
Cc: Rebecca Sermen; Ellen Han
Subject: Healthy Family Festival & Egg Hunt: Vendors
Attachments: HFF & Egg Hunt Event Map 2024.pdf

Greetings,

Thank you for registering to participate in City of Emeryville's Healthy Family Festival & Egg Hunt this year. We are very excited to have you join us!

Event Details:

- Date: Saturday, March 23, 2024
- Time: 10:00am – 1:00pm (Set-up time 9am - 10am and breakdown 1:00pm - 2:00pm)
- Location: Doyle Hollis Park, 1327 62nd Street Emeryville, CA 94608

A few things leading up to the event we encourage all vendors to arrive between **9am - 9:30am** to allow yourselves time to set-up your booth. We will be providing one table and two chairs per booth. You must provide your own pop-up tent and it cannot be larger than 10x10. Lastly, the tent will need to be secured down without the use of stakes incase of inclement weather - sand bags or tent weights are acceptable.

We encourage vendors to come ready as we anticipate large crowds and children (expect a thousand or so attendees). Feel free to bring literature and swag to pass out during the event and/or activities to engage with the community.

Vendors will be located on 61st street (south of Doyle Hollis) and vendors will be allowed to park on 62nd street (north of Doyle Hollis). When approaching 62nd street please inform gate attendant that you are a vendor for the event so they may give you access to park. Each table will have a reserved sign.

If you have questions leading up to or day of the event please don't hesitate to reach out (510) 542-1840
Guillermo Navarro



Guillermo Navarro

Recreation Supervisor

Community Services

City of Emeryville/MESA

4727 San Pablo Avenue, Emeryville, CA 94608-3517

Work: (510) 596-4314 Cell: (510) 542-1840

Guillermo.Navarro@Emeryville.org



█ Barricade

of Barricades: 10

█ A-Frame

▴ Rock Wall

of cones: 20

of delineators: 10

| | | | |
|---|---------------------------------|-------------------------------|---------------------------|
| 1. Dipped | 6. DEA of SF | 11. Emeryville PD | 16. Lifelong Medical |
| 2. ALCO Fire + Engine | 7. Stanford Healthcare | 12. American Cancer Society | 17. Pixar Giveaways |
| 3. Topsy Putt | 8. Citizens' Climate Lobby | 13. EBRPD Lifeguard Services | 18. |
| 4. Alameda County Transportation Commission | 9. Emeryville Children & Nature | 14. City of Emeryville (Lori) | 19. Village Square |
| 5. Waste Managment | 10. Bike East Bay | 15. Emeryville CSD | 20. Senior Center - Zumba |



CITY OF EMERYVILLE

LOCAL HAZARD MITIGATION PLAN (LHMP) COMMUNITY OUTREACH

THE CITY HAS COMMENCED THE PROCESS OF UPDATING OUR LHMP. THE LHMP PINPOINTS HAZARDS WITHIN THE COMMUNITY, EVALUATES THE CITY'S SUSCEPTIBILITY TO THESE HAZARDS, AND OUTLINES SPECIFIC MEASURES TO MITIGATE RISKS. FURTHERMORE, IT OUTLINES POTENTIAL PROJECTS THAT COULD DIMINISH RISKS FROM BOTH NATURAL AND MAN-MADE HAZARDS IN THE COMMUNITY.

WE INVITE YOUR FEEDBACK TO ASSIST US IN ASSESSING THE IDENTIFIED HAZARDS, THEIR PRIORITIZATION, AS WELL AS THE PROPOSED HAZARD MITIGATION STRATEGIES AND THEIR RANKING, AIMING TO ENHANCE THE CITY'S PLANNING PROCESS.



For more info:
on our current LHMP Plan:

**[www.ci.emeryville.ca.us/1106/
Local-Hazard-Mitigation-Plan](http://www.ci.emeryville.ca.us/1106/Local-Hazard-Mitigation-Plan)**

Scan the QR code to provide a comment.
We thank you for your participation!

CITY OF EMERYVILLE LOCAL HAZARD MITIGATION PLAN UPDATE PRIORITY RANKING OF HAZARDS

1. EARTHQUAKE

- A. Ground Shaking
- B. Liquefaction
- C. Fire
- D. Built Environment
 - i. City owned buildings
 - ii. Privately owned buildings
 - iii. Soft story housing
 - iv. Unreinforced masonry
 - v. Utilities
 - a. Water
 - b. Gas
 - c. Electricity
 - d. Telecommunications
 - e. Jet Fuel Pipe line
 - f. Sanitary Sewer System
 - g. Storm Drains
 - vi. Transportation
 - a. City Roads
 - b. Interstates
 - c. Railroad/train tracks
 - d. Amtrak
 - e. Emery Go Round

2. CLIMATE CHANGE

- A. Drought
- B. Sea Level Rise
- C. Extreme Weather
 - i. Heat
 - ii. Freeze
 - iii. High Winds

3. HAZARDOUS MATERIALS

- A. Gas main
- B. Jet fuel line
- C. On the freeway
- D. Train Derailment
- E. Development Dust

4. INFRASTRUCTURE/UTILITY FAILURE

- A. Energy Shortage
- B. Public Safety Power Shutoffs
- C. Cellular/Internet Outage

5. FLOODS

- A. Seasonal
- B. Tsunamis
- C. Dam Failure

6. FIRES

- A. Wildfires
- B. Urban Fires
- C. Poor Air Quality

7. BIOLOGICAL THREATS

- A. Pandemic
- B. Ebola
- C. MERS
- D. Monkeypox
- E. Biotech Companies

8. CIVIL UNREST/PROTESTS

9. TERRORISM

- A. Cybersecurity
 - i. Ransomware
 - ii. Phishing
- B. Bioterrorism
 - i. Anthrax
 - ii. Smallpox

PRIORITIZING OF IDENTIFIED LOCAL HAZARD MITIGATION IDEAS

| High Priority | Medium Priority | Low Priority | Long Range Ideas |
|--|--|---|--|
| Building a Bioswale | Continue Storm Drain Cleaning | Work with the Red Cross to install smoke detectors in single family homes | Build a living levee or other protective measures in the Emeryville Crescent Marsh Levees (Regional for Sea Level) Rise |
| Earthquake Warning System for Fire Station Doors | Increase Earthquake Awareness in the community | Promote locations of Public Disposal of hazardous materials (batteries, oil, e-waste) | Emergency Services, the California Geological Survey and FEMA to document and explore additional tsunami hazard mitigation measures for the Emeryville |
| Promote Mass Notification Systems to the Public (AC Alert, Zonehaven and My Shake) | Providing Tsunami information to retail, hotels and restaurants | Erect Evacuation Route Signs in the City | Improve the City's resilience to disasters |
| Police Substation | Leverage relationship with Berkeley and Oakland Offices of Emergency Services | Transfer Tax (% rebated) to homebuyer for earthquake retrofit | Underground utilities |
| Reduce vulnerabilities to non-City buildings by continuing the retrofit program for all remaining non-compliant unreinforced masonry throughout Emeryville | Film on windows at City Hall to prevent shattering | Requiring automatic gas shut off valves with remodels | Restoration/Build up of Wetlands against sea level rise (Long Range/Regional) |
| EOC/Disaster Training for all City Staff and City Council | Promote Awareness of Oakland and Berkeley's Public Address Systems until City can obtain one of their own | Provide information on grants (if available) to encourage renewables for businesses. | Alternative Transportation (Bike Share) Already doing |
| Reduce Emeryville's vulnerability to severe storms and associated hazards through proactive research and planning | Collaborate with Alameda County Office of Emergency Services regarding their plans for Points of Distribution (medical or commodity) during a disaster | Provide links on the City's webpage to publicly available GIS resources to identify risk and increase knowledge of earthquake and flood prone regions in the City | Work with EBMUD to update infrastructure and identify strategies to protect water supplied during droughts and disasters |
| Reactivate the City's CERT Program | | Update Flood Plain Map for City | Public Address System for the City (emergency sirens) |
| Work with Alameda County Fire to identify all labs located in the City and develop a list of potential impacts during an emergency event. | | | |
| Fee waiver for Earthquake retrofit projects on single family homes (Braces & Bolts) | | | |
| Disaster Preparedness Training for residents who live in multi-unit buildings | | | |



EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES DATA TRENDS INDIVIDUAL RESPONSES

Respondent #1 ▾ ◀ ▶

SINGLE

COMPLETE

Started: Saturday, March 16, 2024 5:03:03 PM
Last Modified: Saturday, March 16, 2024 5:08:48 PM
Time Spent: 00:05:44
IP Address: 135.180.161.165

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

Drought and climate change should be higher, above earthquakes, because the costs and risks are higher on a long-term basis. Also heat events should be included.

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

Good but I would focus more on sea level rise, and do more to mitigate heat events as well. Maybe a program where if you do solar and air conditioning install at the same time, you get a credit of some kind, maybe a credit against building fees. But only if done together.

EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES DATA TRENDS INDIVIDUAL RESPONSES

Respondent #2 ▾ ◀ ▶

SINGLE

COMPLETE

Started: Wednesday, April 10, 2024 5:02:04 PM
Last Modified: Wednesday, April 10, 2024 5:09:34 PM
Time Spent: 00:07:29
IP Address: 98.37.86.151

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

I'd go for #3, #4 and 7 being highest priority. Not sure what the medical buildings are spewing out.

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

Not sure about the bioswale to be so highly ranked. The one on Doyle Street is not a great example. If they are all going to not work like the one on Doyle, I'd consider an alternative like cleaning the drains or making bioswales low priority.



EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES DATA TRENDS **INDIVIDUAL RESPONSES**

Respondent #3 ▾ ◀ ▶

SINGLE

COMPLETE

Started: Wednesday, April 10, 2024 6:38:31 PM
Last Modified: Wednesday, April 10, 2024 6:42:23 PM
Time Spent: 00:03:52
IP Address: 172.56.209.94

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

The buoswale project for costal sea water/ground water rise needs to include much more than a bioswale. Especially the very vulnerable peninsula to the south of the bioswale location.

A combination of in-water stabization such as man-made reefs/sea walls, combined with root systems stabilizers such as salt- tolerant willows and other plants then backed up with on-shore stabilization is one idea

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

Respondent skipped this question

EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES

DATA TRENDS

INDIVIDUAL RESPONSES

Respondent #4 ▼



SINGLE

COMPLETE

Started: Wednesday, April 10, 2024 6:53:54 PM
Last Modified: Wednesday, April 10, 2024 7:31:13 PM
Time Spent: 00:37:19
IP Address: 136.25.169.149

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

I am surprised that Groundwater Rise and its effects on underground infrastructure corrosion as well as mobilization of contaminants in the soil. Why is this not considered? This should be a high priority risk, based on recent research in this area.

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

How are the mitigation strategies related to the accumulation sediments in the sewer system as well as the creeks that carry runoff to the Bay? Also I did not see proper priorities articulated for adaptation planning to address environmental contamination risks as identified in the Draft: State of California Sea Level Rise Guidance: 2024 Science and Policy Update, published in January of this year. Regarding Bioswales, my understanding is that these elements of so-called green infrastructure are designed to allow infiltration of stormwater but they may inadvertently transport contaminants present in stormwater runoff into groundwater systems as groundwater levels rise. This can exacerbate contamination issues and pose risks to groundwater quality. Again this relates to the mobilization of contaminants in soil and surfaces. In this area with numerous relic industrial sites and non-systematic cleanup, this issue should be a very high priority.

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11 responses



EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES

DATA TRENDS

INDIVIDUAL RESPONSES

Respondent #5 ▾



SINGLE

COMPLETE

Started: Wednesday, April 10, 2024 8:16:35 PM
Last Modified: Wednesday, April 10, 2024 8:39:23 PM
Time Spent: 00:22:47
IP Address: 135.180.192.103

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

terrorism should be 8, civil unrest should be removed

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

cybersecurity: stop selling PII; implement right to privacy & right to delete PII legislation for constituents; articulate a plan for what happens WHEN Emeryville has a security breach -- what does continuity of services look like?

Fire/Earthquake/Flood: implement community resources for unhoused neighbors & low income constituents (emergency locations where we can avoid heat/smoke/etc); cash aid for constituents impacted by enviromental disasters to help them rebuild; free air filters, n95 masks for smoke, other resources

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11 responses



EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES

DATA TRENDS

INDIVIDUAL RESPONSES

Respondent #6 ▾



SINGLE

COMPLETE

Started: Wednesday, April 10, 2024 10:49:04 PM
Last Modified: Wednesday, April 10, 2024 11:00:51 PM
Time Spent: 00:11:46
IP Address: 73.92.81.92

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

My personal hazard is the Avalon garage exit on 64th St. and the corner of 64th and Shellmound. Buses stack up on 64th blocking the view from cars coming from Chrisite. Tethered buses park all the way up to the gate and in the red curb. And cars constantly park illegally on the corner - even on the corner curve. Today it was an Amazon truck. These tall vehicles make visibility impossible when I exit and need to turn left (north) onto Shellmound.

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

I have complained once about this, once before - to the 2 Emeryville employees responsible for our safety. I never heard back. If and when an accident occurs, it won't be the fault of the person exiting the garage or turning left onto Shellmound. I am fearful and shouldn't have to feel that way.

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11 responses



EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES

DATA TRENDS

INDIVIDUAL RESPONSES

Respondent #7 ▼



SINGLE

COMPLETE

Started: Thursday, April 11, 2024 8:04:22 AM
Last Modified: Thursday, April 11, 2024 8:05:57 AM
Time Spent: 00:01:34
IP Address: 68.233.193.210

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

i would move bio threat up above floods

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

looks good, maybe add sirens in Emeryville for all emergencies.

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11 responses

EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES

DATA TRENDS

INDIVIDUAL RESPONSES

Respondent #8 ▾

◀▶

SINGLE

COMPLETE

Started: Friday, April 12, 2024 2:21:11 PM

Last Modified: Friday, April 12, 2024 2:48:14 PM

Time Spent: 00:27:02

IP Address: 199.116.118.234

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

Respondent skipped this question

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

Liquification does not appear to have a mitigation proposed beyond public awareness. Much of Emeryville and especially new development are in zones of high risk of liquifaction. Active mitigation by reducing the water table is an area of active research that should be investigated.

EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES

DATA TRENDS

INDIVIDUAL RESPONSES

Respondent #9 ▼



SINGLE

COMPLETE

Started: Saturday, April 13, 2024 2:28:37 PM
Last Modified: Saturday, April 13, 2024 2:30:50 PM
Time Spent: 00:02:12
IP Address: 108.69.135.121

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

Here are identified hazards not answered by DTSC. Please respond to this:

November 16, 2022

Jeanne Rizzo-Board Appointee Chair
Sushma Bhatia- Board Appointee
Georgette Gomez- Board Appointee
Lizette Ruiz- Board Appointee
Alexis Strauss Hacker- Board Appointee
Board of Environmental Safety
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806
Via email: BESinfo@bes.dtsc.ca.gov

Re: Complaint regarding DTSC oversight of the Sherwin Williams site at 1450 Sherwin Avenue in Emeryville and Request for Corrective Actions Regarding DTSC's Approval of the Pre-Occupancy Indoor Air Sampling Report for Buildings B1 and B2; Former Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California dated May 31, 2022

To Ms. Rizzo, Ms. Bhatia, Ms. Gomez, Ms. Ruiz, and Ms. Hacker:

As an investigative reporter and publisher/editor of the online news site the Emeryville Tattler, I am filing this complaint regarding deficiencies in regulatory oversight provided by the Department of Toxic Substances Control (DTSC) and requesting corrective actions.

On June 17, 2021 DTSC held a virtual public meeting to allow stakeholders and community members to present comments regarding a pending Five Year Review Report for the former Sherwin Williams site at 1450 Sherwin Avenue in Emeryville (the Site). I attended the meeting and expressed concerns regarding deficiencies related to soil vapor testing and indoor air testing that was planned prior to occupancy of residential units at the site. On September 29, 2021 I received written responses to my comments from DTSC, a copy of which I have attached to this letter (see Attachment 1). In the first bulleted response to my request for more comprehensive testing to including chlorinated solvents (which have been documented to have been released at the site and were not properly investigated or cleaned up), DTSC pledged to require testing of a "full scan" for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

On May 31, 2022 the consultant Arcadis submitted the Pre-Occupancy Indoor Air Sampling Report for Buildings B1 and B2; Former Sherwin Williams Facility, 1450 Sherwin Avenue, Emeryville, California (Report, which DTSC approved, see Attachment 2) which included laboratory testing results. However, the testing program fell short of what DTSC assured the community would be conducted. Rather than the full scan of VOCs and SVOCs, Tables 1 and 2 of the Report show that only the following compounds were tested for: benzene, ethyl-benzene, toluene, and xylenes, and naphthalene. Attachment C of Report includes "Laboratory Analytical Reports and Chain of Custody Records". The Chain of Custody Records show that the tests ordered for reporting included: "TO-15 SIM Benzene, Ethyl-Benzene, Naphthalene". The Chain of Custody Records show that the consultant ordered an abbreviated list of target analytes usually tested in a TO-15 scan. For the "TO-15" sampling method, I understand the acronym "TO" stands for Total Organics and the TO-15 method tests for a listing of 74 VOCs. That listing includes contaminants of concern (COCs) for the Site including perchloroethylene (PCE), trichloroethylene (TCE), dichloroethene (DCE), and vinyl chloride (VC) which are chlorinated solvents.

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11 responses

the laboratory to request them to pull up the computerized testing results to generate a full scan based on the existing mass spectroscopy data set. Alternatively, if a full scan data cannot be obtained in this manner, the sampling and testing program should be repeated. Please require the developer to take this corrective action. Also, for SVOCs, only naphthalene was tested despite DTSC promising that a full scan for SVOCs would also be required; please also require the developer and consultant to provide those testing results.

The available testing results for benzene, ethyl-benzene, toluene, and xylenes, and naphthalene showed positive testing results for sub-slab monitoring points (SSMP) on Table 1 of the Report for Building B1 and Building B2. Also, the indoor air sample analytical results shown on Table 2 of the Report show exceedences of indoor air standards for Building B1 and Building B2. Based on this raw data, it is readily apparent that a vapor intrusion risk for buildings at the Site may be significant despite the consultants' attempt to correlate the observed indoor air concentrations of hazardous substances to building materials. Since only a very limited number of ground floor units were tested (see Report Figures 3, 4, 7, and 8), their evidence is insufficient to make such sweeping conclusions. And it appears that chlorinated solvents may be present in indoor air which has yet to be confirmed. Therefore, I hereby request that all ground floor residential units at the Site be properly tested for the full scan of VOCs and SVOCs. Figure 2 of the Report shows the buildings at the Site and so far only buildings B1 and B2 have been tested. However, Figure 2 of the Report shows additional buildings (Building C and Building D) which have not been tested at all. Since there appears to be a significant issue with Buildings B1 and B2, it appears that buildings C and D should also be tested. Please require the developer to take this corrective actions immediately. Building A, which is located just 40-feet from Buildings B1 and B2 has a history of indoor air concentrations exceeding standards for PCE which is another concerning line of evidence for occupants at the site being exposed to PCE and other hazardous substances.

Please understand that the indoor air pre-occupancy testing program is deficient for the following reasons: 1) lack of a full scan of tests for VOCs and SVOCs as DTSC promised in a public meeting, 2) insufficient number of ground floor units tested in locations that potentially correspond to former underground storage tanks (USTs) that were not adequately investigated, 3) no planned long-term monitoring of indoor air, 4) Building A, located just 40-feet from Buildings B1 and B2 has a documented history of vapor intrusion for PCE, 5) and Buildings C and D were not included in the current testing program, and 6) the correlation of indoor air concentrations of hazardous substances to construction materials is statistically inadequate to support the sweeping conclusions presented in the report.

and whether the community should inform the future residents of the vapor intrusion problems at the site, esp. for ground floor units if the developer, the City of Emeryville, or DTSC failed to do so. I live nearby and I am aware that residents are starting to move in. Since those residents may be unaware of the potential risk of vapor intrusion by hazardous substances to their residential units which carry human health risks, they should be notified.

You are hereby notified that I will be notifying the residents of these concerning Site conditions and the failure of the developer to conduct appropriate testing and the failure of DTSC to provide adequate oversight to require the appropriate testing. Please also require DTSC staff and the developer to inform the residents of these concerning Site conditions.

Also, please visit the Tattler website at <http://emeryilletattler.blogspot.com/> where this complaint letter will be posted to inform the Emeryville community (including the residents of the Site, hopefully) of this environmental issue.

Please let me know your intentions regarding these matters I address here.

Sincerely,

Brian Donahue
Publisher/Editor
Emeryville Tattler

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

Here are hazards not answered by the DTSC in Emeryville. Please respond back to me:

November 16, 2022

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Sushma Bhatia- Board Appointee
Georgette Gomez- Board Appointee
Lizette Ruiz- Board Appointee
Alexis Strauss Hacker- Board Appointee
Board of Environmental Safety
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806
Via email: BESinfo@bes.dtsc.ca.gov

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I posed a question to DTSC during the June 17, 2021 public meeting, as shown in Attachment 2, 4th bullet regarding notification of future occupants and whether the community should inform the future residents of the vapor intrusion problems at the Site, esp. for ground floor units if the developer, the City of Emeryville, or DTSC failed to do so. I live nearby and I am aware that residents are starting to move in. Since those residents may be unaware of the potential risk of vapor intrusion by hazardous substances to their residential units which carry human health risks, they should be notified.

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Also, please visit the Tattler website at <http://emeryvilletattler.blogspot.com/> where this complaint letter will be posted to inform the Emeryville community (including the residents of the Site, hopefully) of this environmental issue.

Please let me know your intentions regarding these matters I address here.

Sincerely,

Brian Donahue
Publisher/Editor
Emeryville Tattler

EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES

DATA TRENDS

INDIVIDUAL RESPONSES

Respondent #10 ▾

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SINGLE

COMPLETE

Started: Sunday, April 14, 2024 1:54:09 PM

Last Modified: Sunday, April 14, 2024 2:13:12 PM

Time Spent: 00:19:03

IP Address: 135.180.146.218

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

The ideas regarding this chart are somewhat bizarre in my opinion. Most of these ideas seem like they have been submitted by lobbyists and special interest groups. Some seem to have nothing to do with actual hazard mitigation. You really should have some unbiased people take a look at this list and rearrange the priorities and even add many missing truly hazardous conditions that are facing Emeryville. There are too many items missing for me to write up for this information box. If anyone is interested in what a 29 year resident of Emeryville thinks you could contact me by email at eric_gascoyne@yahoo.com.

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

Definitely item #2 does not belong at #2 as a highest level priority on the list for Emeryville. Some of the other details if each item also do not belong as they have no hazard effect in our city. There are many items that are missing as priorities that directly effect the lives and health of every resident in our city.

EMERYVILLE COMMUNITY OUTREACH

QUESTION SUMMARIES

DATA TRENDS

INDIVIDUAL RESPONSES

Respondent #11 ▾

◀

▶

SINGLE

COMPLETE

Started:

Monday, May 27, 2024 7:46:35 AM

Last Modified:

Monday, May 27, 2024 7:56:33 AM

Time Spent:

00:09:58

IP Address:

146.75.154.0

Page 1: LOCAL HAZARD MITIGATION PLAN UPDATE

Q1

Comments on the Identified Hazards and their Priority Ranking

Flooding, earthquake hazards should be top priorities

Q2

Comments on the Identified Hazard Mitigation Ideas and their Priority Ranking

Multi family buildings emergency preparedness trainings should also be in the top priorities, Watergate alone has -4000 residents. There is no evacuation plan training and we are right on flooding and Tsunami prone area. Not sure how many more thousand people in the other nearby towers. Police and fireman station is also nearby but we only one exit street on Powell.

Lori Elefant

From: Lori Elefant
Sent: Friday, April 12, 2024 2:59 PM
To: sena_fitzmaurice@comcast.com
Subject: Comcast's Plans for a Disaster

Dear Ms. Fitzmaurice:

My name is Lori Elefant and I am a Management Analyst with the City of Emeryville (California). I am working on the City's Local Hazard Mitigation Plan Update for 2024-2029. Comcast is included in our plan as a key partner for communications. I am hoping someone from your organization could take the time to review what we have written for accuracy. This is what we have written for Comcast for this plan update:

Key Partner: Comcast⁽¹⁾

Comcast provides voice (wireline telephone service), video (television), Data (high-speed internet, Wi-Fi hotspots, cellular backhaul services), Home security/home automation services to the Emeryville community.

Comcast's distribution telephony network depends on other communication providers. If supporting providers' networks are operational, Comcast will maintain connectivity to all its customers. If an individual network should fail, Comcast will lose its connection to the customers using that particular network.

To protect its infrastructure in earthquakes and other disaster, Comcast has hardened its sites. Additionally, all sites are connected via redundant fiber networks to maintain service to greater service areas. Major metro fiber routes are backed up by redundant routes and failover technologies.

After a catastrophic earthquake, comcast will follow specific procedures to restore services to affected areas. They will prioritize critical infrastructure, such as communication hubs and network nodes to restore connectivity. The restoration timeline will vary depending on the severity of the damage and the availability of resources.

Comcast services require commercial power to operate. Internet and video, as well as landline and even mobile phone services for homes and businesses, may stop functioning within hours after commercial power is shut off. Technicians will need to wait for power to be restored before they can determine if repairs to their network are needed. In the event of a power outage, Comcast may use battery backup to maintain services for up to eight hours. Comcast monitors its power supplies, and in the event of the backup batteries being depleted, generators may be available to maintain service.

Comcast also provides cellular backhaul services for Verizon Wireless. Impacts to Comcast's infrastructure could potentially impact Verizon's service to customers.

We would so appreciate if you could review the above and let us know if it is accurate or if we should include any other additional information.

I realize you may not be the correct person for this request and if you are not, could you please point me to the correct person in your organization who could assist me with this project.

I thank you in advance for your help with this project.

Regards,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

⁽¹⁾ City of Berkeley. Local Hazard Mitigation Plan. City of Berkeley Fire Department, 1 June 2014. Web. 17 Mar. 2017, pgs 3-59 to 3-60. http://www.ci.berkeley.ca.us/uploadedFiles/Fire/Level_3_-_General/2014%20LHMP.pdf.

Lori Elefant

From: Lori Elefant
Sent: Friday, April 12, 2024 1:29 PM
To: Putnam, Les
Subject: RE: Safety Speaker Request

Hi Les,

Like you – I do not retire well either. I officially retired from Emeryville at the end of 2022 but am back working part time as an annuitant.

The reason I wrote to you is I am working on the City's Local Hazard Mitigation Plan Update for 2024 - 2029 and we include information in our plan about the utilities that could impact the City, specifically PG&E, under two hazard sections we have identified – Earthquakes and Infrastructure/Utility Failure.

Below is what we have so far for under our hazard analysis for earthquakes for PG&E (much of it I took from your website):

Electricity and Natural Gas Systems Key Partner: Pacific Gas and Electric Company (PG&E)^[1]

Pacific Gas and Electric (PG&E) provides electricity and natural gas to 16 million people throughout a 70,000 square-mile service area in northern and central California. They have a staff of 23,000 employees who carry out PG&E's primary business of the transmission and delivery of energy.^[2] Their staff is prepared to respond to restore electrical and natural gas service after disasters and storms. They also have a well-established priority system for restoring power to emergency services before other community needs. PG&E recognizes that large earthquakes may damage key facilities and that electric power might be lost for limited periods of time. The potential for a loss of power means that emergency and critical uses should have dedicated emergency power sources.

The electrical system is vulnerable to many different hazards. In storm events downed trees or high winds can damage overhead lines. In earthquakes, overhead lines are not typically damaged, but electrical substations components can be destroyed by strong shaking, often requiring more extensive and time intensive repairs to return service.

Natural gas is subject to damage and disruption in areas with soil failure, for example landslide and liquefaction. Broken lines can create fires if ignited until the fuel supply is exhausted. The repair of damaged underground lines will take time. Following the Loma Prieta earthquake it took about 30 days to repair damaged lines in the San Francisco Marina.

The large scale natural gas transmission lines that service the cities along the East Bay shoreline of Alameda County are primarily located near the Bay shore. The transmission line runs along a single corridor through Albany, Berkeley, and Emeryville before splitting into two parallel lines in Oakland that run through Oakland, San Leandro and Hayward. Across the entirety of the natural gas line between Albany and Hayward the natural gas transmission line(s) pass through medium-level susceptibility zones with some lines passing through very high liquefaction susceptibility zones in East Oakland and San Leandro. The thousands of miles of natural gas distribution lines are also at risk to damage from liquefaction. Neighborhoods that experience significant liquefaction are not likely to have gas service for a significant amount of time.

PG&E Notable Mitigation Activities^[3]

PG&E has assessed the seismic vulnerability of many elements of its system and has taken steps to improve its functionality after an earthquake, such as replacing bushings on high voltage lines, anchoring substation equipment and replacing old

gas lines with more flexible alternatives. In addition, PG&E is installing next-generation technology on its gas transmission lines to be able to more accurately determine the full-length strain profile on affected pipelines from seismic activities.

Since our last plan update, PG&E has also created a 24/7 Gas Control Center that monitors nearly 8,000 points on its system along with automated or remote-controlled shut-off valves.

Additionally, PG&E has a First Responders Safety website, which provides secure access to maps and information on their natural gas transmission lines, natural gas storage facilities, valve and regulator locations and current size and pressure within the pipes as well as access to an electronic version of their Gas Emergency Response Plan.

I realize you may not be the appropriate person in your organization to review this information and make comments. If that is so, could you point me to the right person who could help me with this.

Also, in a separate section we have "Infrastructure/Utility Failure" listed as another hazard for the City. Since our last plan Public Safety Power Shutoffs have become a thing 😊. Is there a blurb about the mitigation activities that PG&E has instituted over the past 5 years to mitigate the issues that happened in the past in high wind events as well as the need for PSPS's.

Thank you in advance for your help with this.

Regards,

Lori M. Elephant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

From: Putnam, Les <lrp0@pge.com>
Sent: Wednesday, April 10, 2024 6:40 PM
To: Lori Elephant <lelephant@emeryville.org>
Subject: RE: Safety Speaker Request

Classification: Public

Hi Lori, yes I still do, apparently I do not retire well! We have reorganized our team a bit since we last spoke, I now only cover one County, Contra Costa. However, I can help with what ever you need, I will include your new PG&E rep. Barry Stallard.

Les Putnam | Senior Public Safety Specialist
Pacific Gas & Electric Co. / Emergency Management and Public Safety
1030 Detroit Ave., Concord 94518 Space # 433
Cell: (925)334-0501
lrp0@pge.com

Providing training for Fire, Law Enforcement, EMS, CERT, 911, construction and agricultural



First Responder Website:
<http://www.pge.com/firstresponder>

From: Lori Elephant <lelephant@emeryville.org>
Sent: Wednesday, April 10, 2024 12:46 PM

To: Putnam, Les <lrp0@pge.com>
Subject: RE: Safety Speaker Request

CAUTION: EXTERNAL SENDER!

This email was sent from an EXTERNAL source. Do you know this person? Are you expecting this email? Are you expecting any links or attachments? If suspicious, do not click links, open attachments, or provide credentials. Don't delete it. **Report it by using the "Report Phish" button.**

Hi Les,

Do you still work at PG&E?

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

From: Lori Elefant
Sent: Tuesday, May 14, 2019 11:37 AM
To: 'lrp0@pge.com' <lrp0@pge.com>
Subject: FW: Safety Speaker Request

Hi Les,

I hope this email finds you well. I don't believe the below email belongs to me 😊.

Thanks,

Lori Elefant

Lori M. Elefant, ARM
Management Analyst
Human Resources
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608
(510) 596-3797
(510) 420-1299 (FAX)

"We provide high quality support and services."

This message contains confidential information intended only for the use of the addressee(s) named above and may contain information that is legally privileged. If you are not the addressee, or the person responsible for delivering it to the addressee, you are hereby notified that reading, disseminating, distributing or copying this message is strictly prohibited. If you have received this message by mistake,

please immediately notify us by replying to the message and delete the original message immediately thereafter. Thank You.

From: SafetyDemoRequest <SafetyDemoRequest@pge.com>
Sent: Monday, May 6, 2019 5:57 PM
To: Putnam, Les <LRP0@pge.com>
Cc: Lori Elefant <lelefant@emeryville.org>
Subject: Re: Safety Speaker Request

Thank you,

Received. We will look for a presenter shortly.

From: Putnam, Les
Sent: Monday, May 6, 2019 11:25:57 AM
To: SafetyDemoRequest
Cc: Putnam, Les; Lori Elefant
Subject: Safety Speaker Request

Please complete all areas below

(All information should be provided, missing or incomplete information may cause a delay in fulfilling your request)

Requestors Name: Les Putnam

Organization Name (if applicable): Discovery Bay Kids Summer Camp

Event Name (if any):

Best Phone Number: (925) 334-0501

Email Address: lrp0@pge.com

Date of Event: 07/18/2019

Address of Event: 1601 Discovery Bay Blvd Discovery Bay Ca Discovery Bay Community Center

Start Time of Event: 09:00 am

End Time of Event: 03:30 PM

Target Audience (RESIDENTIAL / COMMERCIAL / AGRICULTURE / OTHER(S)): Kids 5-12 yrs old

Expected Attendance: 50

Any Additional Notes as needed: Please provide information for target audience of kids 5-12 yrs.

Event Coordinator Contact Info: Tony Fontenot, Crime Prevention Investigator, CCC Sheriff, afont@so.cccounty.us , (925) 584-9878

Thank you

Les Putnam

PG&E Public Safety Specialist

You can read about PG&E's data privacy practices at [PGE.com/privacy](https://www.pge.com/privacy).

^[1] Information provided by Les Putnam, Senior Public Safety Specialist – Gas, from PG&E.

^[2] "Company Profile." [www.pge.com](https://www.pge.com/en/about/company-information/company-profile.html), www.pge.com/en/about/company-information/company-profile.html.

^[3] "PG&E Installing New Technology to Enhance Pipeline Safety during Seismic Activity." [www.pgecurrents.com](https://www.pgecurrents.com/articles/3815-pg-e-installing-new-technology-enhance-pipeline-safety-seismic-activity), www.pgecurrents.com/articles/3815-pg-e-installing-new-technology-enhance-pipeline-safety-seismic-activity. Accessed 26 Nov. 2023.

Lori Elefant

From: Lori Elefant
Sent: Wednesday, April 17, 2024 3:03 PM
To: earthquakesafety@bart.gov
Subject: City of Emeryville's Local Hazard Mitigation Plan Update for 2024-2029

Good Afternoon,

My name is Lori Elefant, and I am a Management Analyst (Annuitant) working with the City of Emeryville on their Local Hazard Mitigation Plan update for 2024-2029. I am hoping you may be able to help me with a section of our plan.

Under our Hazard Analysis on earthquakes, we review key transportation partners, BART being one of them. In our 2019 plan, we included the following information for BART:

Key Transportation Partner – Bay Area Rapid Transit (BART)^[1]

Although BART does not run through the City directly, it provides an important transportation link to the City of Emeryville. BART is one of the San Francisco Bay Area's most vital transportation links throughout the East Bay and between the East Bay and San Francisco, carrying an average of 392,300 passenger trips a day.

BART Notable Mitigation Activities

In 2002 BART completed a study of the earthquake vulnerability of the entire system, analyzing multiple earthquakes, predicting damage, and assessing cost-effectiveness of retrofits. This study was the most comprehensive evaluation of BART facilities since the original construction of the system. It involved one and one-half years of engineering and statistical analyses. The study also incorporated information from the 1994 Northridge, California and 1995 Kobe, Japan earthquakes.

The results of the Seismic Vulnerability Study indicated that if the BART system was not strengthened, it would take years to restore service after a major earthquake. The study found that portions of the system most susceptible to earthquake damage included the Transbay Tube, various aerial structures, stations and equipment. The study recommended that priority be given to the Transbay Tube, where soil backfill is prone to liquefaction. Though the consequences of liquefaction on the Tube are uncertain, a worst-case scenario could cause excessive movement of the seismic joints and structural stress that could result in significant damage. Work to upgrade the Transbay Tube seismic joints was completed in 2010. BART continues to secure the Transbay Tube to a higher level of strength against future large earthquakes.

Through its Earthquake Safety Program, BART is working to prepare the entire BART system to better withstand future earthquakes. Upgrades to the system are being funded by \$980 million in General Obligation Bonds, authorized by voters in Alameda, Contra Costa, and San Francisco counties, supplemented with an additional \$240 million from other sources. BART anticipates the completion of all earthquake upgrades by 2022.

BART's investment in earthquake retrofit is strengthened by its earthquake early warning system, which can help prevent train derailments in the system by slowing or stopping trains upon notification of an earthquake. Currently, BART has a system in place, which is activated when an earthquake larger than magnitude 4 or 5 is experienced within the BART system. BART is working with UC Berkeley and others to implement a statewide earthquake early warning system. This system would issue notification to operators such as BART upon detection of P-waves.^[2] Upon notification, BART would automatically slow or stop trains within the system. The length of advance warning depends on how far away the earthquake originates.

Is this information still valid? I know that the average number of passengers has been drastically reduced since COVID. I calculated it to be about 161,000 on a weekday. Could you provide me with any mitigation activities BART has completed since 2019 as well any recommended changes you feel are needed for this section.

I thank you in advance for your help with this project.

Regards,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

^[1] City of Berkeley. Local Hazard Mitigation Plan. City of Berkeley Fire Department, 1 June 2014. Web. 17 Mar. 2017. Pages 3-55 – 3-56. http://www.ci.berkeley.ca.us/uploadedFiles/Fire/Level_3_-_General/2014%20LHMP.pdf.

^[2] P-waves are non-destructive, earthquake-generated waves. They travel faster than secondary waves (S-waves), which create the strong shaking responsible for structural damage in earthquakes.

Lori Elefant

From: Lori Elefant
Sent: Wednesday, April 17, 2024 12:48 PM
To: John_Rocha@kindermorgan.com
Cc: Pedro Jimenez
Subject: City of Emeryville Local Hazard Mitigation Plan

Hi John,

It was a pleasure speaking with you today. As I mentioned, I am in the process of writing the City of Emeryville's Local Hazard Mitigation Update for 2024-2029. In our hazard analysis of Earthquakes and Hazardous Material Releases, the Kinder Morgan Jet Fuel line is mentioned. Below is the information we previously included about the jet fuel line that runs through Emeryville under both of these sections.

Earthquake Section:

Aviation Fuel Pipeline – Key partner: Kinder Morgan Corporation^[1]

Two aviation and multi-purpose pipelines run along the railroad tracks from Richmond to the Oakland Airport, through Emeryville. The pipes are made of high-pressure welded steel, installed primarily in the 1960s, although a few segments were installed in the 1950s. The company has not conducted a study of the impacts of an earthquake on the Hayward fault. This type of pipeline, however, is known to have performed well, due to its ductile nature, in earthquakes elsewhere in the world. Kinder Morgan has focused on developing procedures to respond immediately after a disaster to shut down the pipeline. Each pipeline has automatic, remote control and other manual valves along its length and the flow can be shut down within minutes. Kinder-Morgan reported that after the 1989 Loma Prieta earthquake, these pipelines were shut down and monitored for leaks, breaks and changes in pressure. No damage was found.

Hazardous Release Section:

PIPELINES

As previously noted, there are two aviation and multi-purpose pipelines that run through Emeryville, along the railroad tracks from Richmond to the Oakland Airport. These pipes are made of high-pressure welded steel, installed primarily in the 1960s, although a few segments were installed in the 1950s. Each pipeline has automatic, remote control and other manual valves along its length and the flow can be shut down within minutes.

If you could please review and let me know if the information included is still valid and/or provide me with any information updates (e.g., any new mitigation efforts that have been implemented since 2019), I would greatly appreciate it.

Thanks for your help with this project!

Regards,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

^[1] Information provided by Nicole Stewart, Area Manager for Brisbane Terminal and Richmond Station.

Lori Elefant

From: Lori Elefant
Sent: Wednesday, June 12, 2024 4:10 PM
To: caltrans_d4@dot.ca.gov
Cc: Pedro Jimenez
Subject: Need Caltrans Input for the City of Emeryville's Local Hazard Mitigation Plan Update

Good Afternoon,

My name is Lori Elefant and I am a Management Analyst (Annuitant) with the City of Emeryville. The City is in the process of updating their Local Hazard Mitigation Plan and we are hoping that someone in your organization could help us update our information for Caltrans.

In our previous plan from 2019, I emailed with Bob Braga regarding the I-80 Powell Street overpass. This is what we included in our plan for Caltrans:

Key Transportation Partner – Caltrans^[1]

Interstate 80 sits entirely in a very high liquefaction zone. In the scenario of a 7.1 earthquake on the Hayward Fault, the ground underneath Emeryville's portions of Interstate 80 is predicted to liquefy. Interstate 80 bisects the City and is a major thoroughfare for not only Emeryville but for the whole Bay Area. If the portion of Interstate 80 that runs through Emeryville should fail, the peninsula could find itself isolated from the rest of the City. The City's only Police Station is located on the peninsula.

Caltrans is responsible for constructing and maintaining the statewide highway system which includes Interstate 80 and State Route 123 (San Pablo Avenue). The 1989 Loma Prieta earthquake caused significant damage to Caltrans structures, such as bridges, overpasses, and on-ramps.

Caltrans Notable Mitigation Activities

After Loma Prieta, Caltrans launched a comprehensive review of earthquake safety on highways throughout the State. A program to retrofit all vulnerable structures was started and the overpass structure over Powell Street was widened and subsequently retrofitted to the "non-collapse" criteria as of 1998. Caltrans seismic design of structures involves utilizing site specific geological conditions and selecting a 'maximum credible quake' expected to impact the structure.

Recently, Caltrans did some rough modeling on structure response (damage) in the San Francisco Bay Area according to a few likely quake scenarios. The Powell Street structure indicated 'low to moderate' damage expected at worst, which most likely would result in imposing 'load restrictions' on the structure until damages are repaired but was not expected to be in danger of a collapse.

After a significant quake, the City can contact Caltrans directly for a priority inspection of the Powell Street structure for purpose of 'life and safety' operations and to promptly resolve securing access across Interstate 80 if the passing under the overpass is prohibited.

If you could reply to just let us know if this information is still accurate, it would be greatly appreciated. On the other hand, if any updates need to be made, could you please provide us with what new information we should include in our plan.

We thank you in advance for your attention to this matter.

Regards,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

⁽¹⁾ Information provided by Bob Braga, PE, Branch Chief – Maintenance Services; Emergency Management; Planning and Training, Caltrans – District 4.

Lori Elefant

From: Lori Elefant
Sent: Wednesday, June 12, 2024 3:46 PM
To: earthquakesafety@bart.gov
Subject: Transbay Tube Retrofit Project

Good Afternoon,

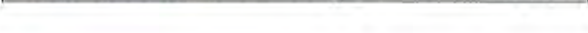
I am working on the City of Emeryville's Local Hazard Mitigation Plan update and I was wondering if the retrofit of the Transbay Tube which began in February 2017 was completed and if so, when? The website just states that it was forecasted to be completed by the start of 2023, but I also thought I saw somewhere else on the site that that date was extended to Fall 2023.

Any information you can provide would be greatly appreciated.

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

Journal of Management Inquiry 20(4) 403-417



Regards,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

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The original item was published from 9/4/2024 3:14:03 PM to 10/2/2024 12:00:01 AM.

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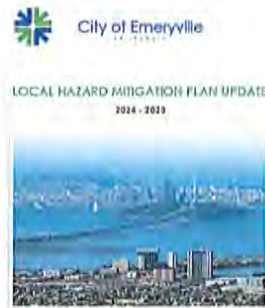
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Posted on: September 4, 2024

[ARCHIVED] Local Hazard Mitigation Plan 2024 - 2029 Draft Update

The Local Hazard Mitigation Plan (LHMP) identifies hazards to the community, assesses the City's vulnerability to those hazards and identifies specific actions that can be taken to reduce the risk. It also identifies projects that could potentially reduce risks in the community from these natural and human-made hazards. The City is required to adopt a LHMP every 5 years under the Federal Disaster Mitigation Act. The City's last LHMP was adopted in October 2019. The City of Emeryville will be presenting the draft of the 2024 – 2029 Local Hazard Mitigation Plan Update at the [City's Community Advisory Committees' meetings](#) as shown below:



Transportation Committee

Monday, September 9, 2024

3:00 PM - City Hall, Garden Level

Public Safety Committee

Tuesday, September 10, 2024

4:00 PM - City Hall, Garden Level

Sustainability Committee

Monday, September 16, 2024

4:00 PM - City Hall, Garden Level

City Council – Study Session

Tuesday, September 17, 2024

6:00 PM - City Hall, Council Chambers

Planning Commission

Thursday, September 26, 2024

6:30 PM - City Hall, Council Chambers

Emeryville residents and business owners are welcome and encouraged to attend these meetings, and to provide either written or oral comments. Please address all written comments to Lori Elephant, 1333 Park Avenue, Emeryville, CA 94608; (510) 420-1299 (fax); or via email at lelephant@emeryville.org.

The FINAL DRAFT Plan can be viewed by clicking on the Link below:
[Local Hazard Mitigation Plan 2024 -2029 Draft Update](#)

Other News in News Flash

The New City News & Activity Guide Fall 2024

Posted on: August 19, 2024



Free Shuttle Service From The Emery to West Oakland BART Station

Posted on: September 19, 2024



Rotten City Cultural District (RCCD) Creative Residency Program

Posted on: October 10, 2024



Old Town Hall and Civic Center Exterior Painting

Posted on: September 18, 2024 | Last Modified on: September 18, 2024



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Lori Elefant

From: Lori Elefant
Sent: Wednesday, September 4, 2024 5:02 PM
To: Lana, Sarah; kjackson@piedmont.ca.gov; jfeil@oaklandca.gov; Benenson, Heidi; Putnam, Les; sena_fitzmaurice@comcast.com; Bott, Jacqueline@DOC; caltrans-d4@dot.ca.gov; wgilchrist@oaklandca.gov; Alma Balmes; Randall West; dsprague@berkeleyca.gov; dbrannigan@piedmont.ca.gov; John_Rocha@kindermorgan.com; Casimere, Lincoln, ACFD; planning@albanyca.org; greenalbany@albanyca.org; dturner@sanleandro.org; Tliao@sanleandro.org; planning@alamedaca.gov; lhmp@acgov.org; eric.vollmer@hayward-ca.gov; Ricardo Martinez; jbowers@piedmont.ca.gov; tperkins@operationdignity.org; Leung, Lilian; earthquakesafety@bart.gov; phess@acgov.org
Cc: Pedro Jimenez; Adam Politzer
Subject: Public Meetings - City of Emeryville Local Hazard Mitigation Plan 2024 - 2029 Update



CITY OF EMERYVILLE

OPPORTUNITY FOR PUBLIC COMMENT ON LOCAL HAZARD MITIGATION PLAN UPDATE

The Disaster Mitigation Act of 2000 (DMA 2000) requires communities to create a Local Hazard Mitigation Plan (LHMP) to access federal funding through various hazard mitigation programs. The LHMP must also be updated every five years. The City's current plan was approved in October 2019. The City of Emeryville will be presenting the draft of the 2024 – 2029 Local Hazard Mitigation Plan Update at the [City's Community Advisory Committees' meetings](#) as shown below:

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6:00 pm, City Hall, Council Chambers

Planning Commission

Thursday, September 26, 2024

6:30 PM, City Hall, Council Chambers

Emeryville residents, business owners and other stakeholders are welcome and encouraged to attend these meetings and to provide either written or oral comments. Please address all written comments to Lori Elefant, 1333 Park Avenue, Emeryville, CA 94608; (510) 420-1299 (fax); or via email at lelefant@emeryville.org.

The FINAL DRAFT Plan can be viewed by clicking on the Link below:

[City of Emeryville Local Hazard Mitigation Plan 2024 - 2029 Draft Update](#)

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

Lori Elefant

From: Lori Elefant
Sent: Wednesday, September 4, 2024 5:13 PM
To: caltrans_d4@dot.ca.gov
Subject: Public Meetings - City of Emeryville Local Hazard Mitigation Plan 2024 - 2029 Update



CITY OF EMERYVILLE

OPPORTUNITY FOR PUBLIC COMMENT ON LOCAL HAZARD MITIGATION PLAN UPDATE

The Disaster Mitigation Act of 2000 (DMA 2000) requires communities to create a Local Hazard Mitigation Plan (LHMP) to access federal funding through various hazard mitigation programs. The LHMP must also be updated every five years. The City's current plan was approved in October 2019. The City of Emeryville will be presenting the draft of the 2024 – 2029 Local Hazard Mitigation Plan Update at the [City's Community Advisory Committees' meetings](#) as shown below:

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Monday, September 16, 2024
4:00 PM, City Hall, Garden Level

City Council – Study Session

Tuesday, September 17, 2024
6:00 pm, City Hall, Council Chambers

Planning Commission

Thursday, September 26, 2024
6:30 PM, City Hall, Council Chambers

Emeryville residents, business owners and other stakeholders are welcome and encouraged to attend these meetings and to provide either written or oral comments. Please address all written comments to Lori Elefant, 1333 Park Avenue, Emeryville, CA 94608; (510) 420-1299 (fax); or via email at lelefant@emeryville.org.

The FINAL DRAFT Plan can be viewed by clicking on the Link below:

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392

Lori Elefant

From: Lori Elefant
Sent: Wednesday, September 4, 2024 5:03 PM
To: bblaser@acgov.org
Subject: FW: Public Meetings - City of Emeryville Local Hazard Mitigation Plan 2024 - 2029 Update



CITY OF EMERYVILLE

OPPORTUNITY FOR PUBLIC COMMENT ON LOCAL HAZARD MITIGATION PLAN UPDATE

The Disaster Mitigation Act of 2000 (DMA 2000) requires communities to create a Local Hazard Mitigation Plan (LHMP) to access federal funding through various hazard mitigation programs. The LHMP must also be updated every five years. The City's current plan was approved in October 2019. The City of Emeryville will be presenting the draft of the 2024 – 2029 Local Hazard Mitigation Plan Update at the [City's Community Advisory Committees' meetings](#) as shown below:

Transportation Committee

Monday, September 9, 2024
3:00 PM City Hall, Garden Level

Public Safety Committee

Tuesday, September 10, 2024
4:00 PM City Hall, Garden Level

Sustainability Committee

Monday, September 16, 2024
4:00 PM, City Hall, Garden Level

City Council – Study Session

Tuesday, September 17, 2024
6:00 pm, City Hall, Council Chambers

Planning Commission

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Emeryville residents, business owners and other stakeholders are welcome and encouraged to attend these meetings and to provide either written or oral comments. Please address all written comments to Lori Elefant, 1333 Park Avenue, Emeryville, CA 94608; (510) 420-1299 (fax); or via email at lelefant@emeryville.org.

The FINAL DRAFT Plan can be viewed by clicking on the Link below:

Thanks,

Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392



PUBLIC COMMENT ON LOCAL HAZARD MITIGATION PLAN UPDATE

The Local Hazard Mitigation Plan (LHMP) identifies hazards to the community, assesses the City's vulnerability to those hazards and identifies specific actions that can be taken to reduce the risk. It also identifies projects that could potentially reduce risks in the community from these natural and man-made hazards. The City is required to adopt a LHMP every 5 years under the Federal Disaster Mitigation Act.

The City of Emeryville will be presenting the draft of the 2024 – 2029 Local Hazard Mitigation Plan Update at the [City's Community Advisory Committees'](#) meetings as shown below:

Transportation Committee

Monday, September 9, 2024

3:00 PM City Hall, Garden Level

Public Safety Committee

Tuesday, September 10, 2024

4:00 PM City Hall, Garden Level

Sustainability Committee

Monday, September 16, 2024 - **CANCELLED**

4:00 PM, City Hall, Garden Level

City Council – First Study Session

Tuesday, September 17, 2024

6:00 pm, City Hall, Council Chambers

Planning Commission

Thursday, September 26, 2024

6:30 PM, City Hall, Council Chambers

Emeryville residents and business owners are welcome and encouraged to attend these meetings, and to provide either written or oral comments. Please address all written

comments to Lori Elefant, 1333 Park Avenue, Emeryville, CA 94608; (510) 420-1299 (fax); or via email at lelefant@emeryville.org.

The **FINAL DRAFT PLAN** can be viewed by clicking on the Link below:

[City of Emeryville Local Hazard Mitigation Plan 2024 - 2029 Draft Update](#)

Lori Elefant

From: Lori Elefant
Sent: Friday, September 6, 2024 5:30 PM
To: tperkins@operationdignity.org
Subject: City of Emeryville's Local Hazard Mitigation Plan 2024-2029 Update

Dear Ms. Perkins:

My name is Lori Elefant, and I am a Management Analyst (working as an annuitant) with the City of Emeryville. The City is in the process of updating our Local Hazard Mitigation Plan for 2024 – 2029 and one of the requirements for this update is for us to work collaboratively with leaders from underserved and socially vulnerable communities and so we are reaching out to you.

We are in the process of finalizing our draft plan and am reaching out to you for any thoughts you have about the hazards we identified, our mitigation ideas as well as the plan itself and these could impact the community you work with, either good or bad.

Any ideas or insights you want to share with us in our planning process would be greatly appreciated. If you know of others you think we should reach out to, please let me know.

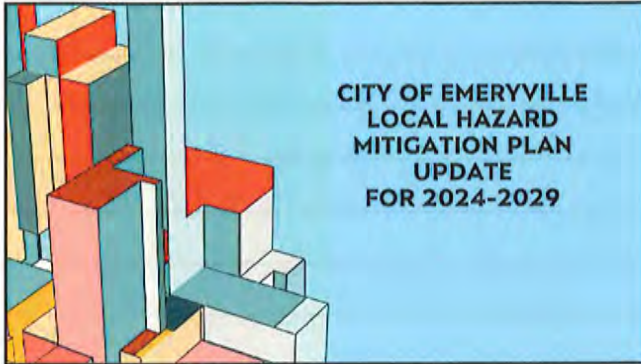
You may use the link below to access the plan.

I look forward to hearing from you.

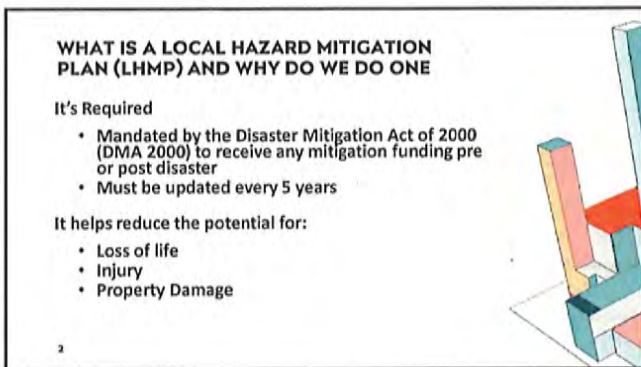
[City of Emeryville Local Hazard Mitigation Plan 2024 - 2029 Draft Update](#)

Regards,

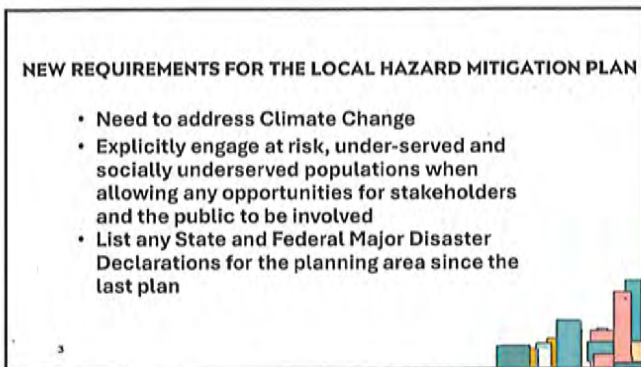
Lori M. Elefant, ARM
Management Analyst – Annuitant
Human Resources
City of Emeryville
(510) 596-4392



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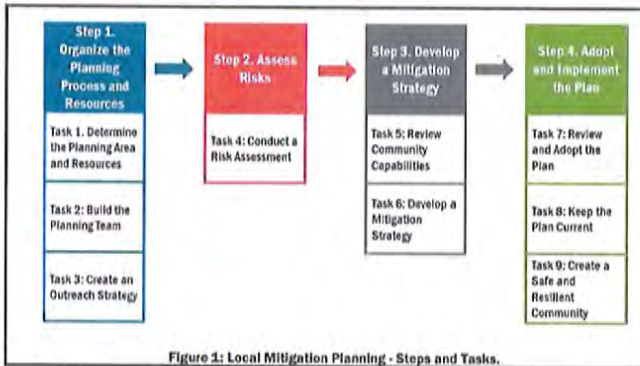
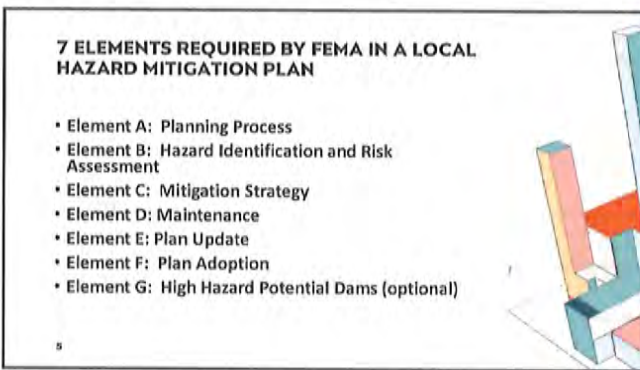
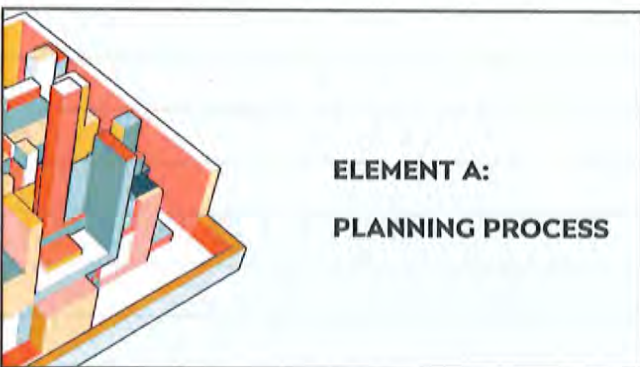


Figure 1: Local Mitigation Planning - Steps and Tasks.

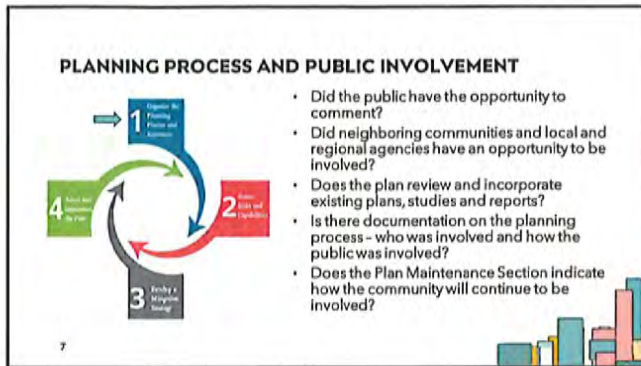
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7

THE PLANNING PROCESS

Obtain Community Input

- To solicit the public's input, a Local Hazards Community Survey was posted on the City website from October 26, 2023 through November 17, 2023

Establish a Planning Team

- Our Planning Team was comprised of representatives from each City department, along with a representative from Alameda County Fire Department and two community members
- Planning Team first met in November 2023 and met 6 times over a 10-month period

8

ELEMENT B:

HAZARD IDENTIFICATION AND RISK ASSESSMENT

9

HAZARD IDENTIFICATION

NATURAL HAZARDS
Location
Extent
Frequency/Intensity
Potential for Damage

COMMUNITY ASSETS
Population
Built Environment
Social/Economic Structure

RISK

- Does the plan include a description of the types, location and extent of all natural hazards?
- Does the plan include a description of the jurisdiction's vulnerability to these hazards with the types and numbers of existing and future buildings?
- Does the plan show the potential dollar losses?
- Does the plan have a general description of the land uses and development trends?

10

5 STEPS TO A RISK ASSESSMENT

1 Identify the hazards
2 Describe the hazards
3 Identify the community's assets
4 Analyze the impacts
5 Summarize the vulnerability

- Identify the hazards
- Describe the hazards
- Identify the community's assets
- Analyze the impacts
- Summarize the vulnerability


11

HAZARD IDENTIFICATION

HAZARD IDENTIFICATION!

- The team met and reviewed the hazards that were identified in our previous plan as well as those listed in City of Berkeley's and Oakland's Local Hazard Mitigation Plan
- The team reviewed the hazards of concern identified by the community's responses to the survey
- The team identified the hazards to be included in the plan and their priority


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HAZARD IDENTIFIED (In Priority Order)

1. Earthquake
2. Climate Change
3. Hazardous Materials Release
4. Utility/Infrastructure Failure
5. Floods
6. Fires
7. Biological Threats
8. Civil Disturbance
9. Terrorism

13



HAZARD ANALYSIS/RISK ASSESSMENT

- A risk assessment explains what might happen in the event the hazard should occur.
- It helps identify the City's vulnerabilities
- It helps identify the potential for damage or loss when a hazard interacts with people or assets
- It guides the mitigation strategy to help minimize the impacts of the hazard

14

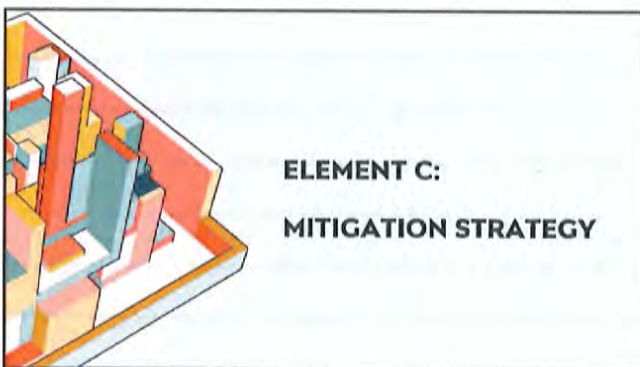
CITY OF EMERYVILLE LOCAL HAZARD MITIGATION PLAN UPDATE PRIORITY RANKING OF HAZARDS

| | | |
|--|--|---|
| A. EARTHQUAKE a. Ground Shaking b. Liquefaction c. Fire d. Earth Displacement e. City-owned Buildings f. Privately-owned Buildings g. Soft-story Building h. Landslide and Mudflow i. Utilities j. Water k. Gas l. Electricity m. Telecommunications n. Solid Fuel Pipeline o. Natural Gas System p. Storm Drains q. Transportation r. City Road s. Interstates t. Railroad Tracks u. Airfield v. Entry On Road | B. CLIMATE CHANGE A. Drought B. Sea Level Rise C. Extreme Weather i. Heat ii. Frost iii. High Winds iv. Storm Surge v. Storm 3. HAZARDOUS MATERIALS A. Gasoline B. Jet Fuel C. Oil on the Highway D. Train Derailment E. Overhaulment Tank 4. INFRASTRUCTURE/UTILITY FAILURE A. Energy Storage B. Public Safety Event C. Utility 5. FLOODS A. Seasonal B. Permanent C. Dam Failure | 6. FIRES A. Wildfires B. Urban Fires C. Poor Air Quality 7. BIOLOGICAL THREATS A. Pandemic B. Bioterrorism C. MERS D. Monkeypox E. Botulinum Toxin 8. CIVIL DISTURBANCE 9. TERRORISM A. Cybersecurity B. Radiation C. Bombing D. Bio-terrorism E. Airframe F. Smallpox |
|--|--|---|

15

| CHANGES IN IDENTIFIED HAZARDS | | | |
|--------------------------------|------------------------------|---------------------------|---|
| HAZARD | NUMBER OF IDENTIFIED HAZARDS | NUMBER OF HAZARDS REMOVED | REASON FOR REMOVAL |
| Earthquake | 1 | 1 | None |
| Climate Change | 2 | 2 | Add of Atmospheric Rivers Add of analysis on the impacts of a future greenhouse gas scenario of sea level rise |
| Hazardous Materials Release | 2 | 2 | None |
| Utility/Infrastructure Failure | 4 | 2 | Add of Public Safety Power Shutoffs |
| Floods | 5 | 5 | None |
| Fires | 5 | 4 | Add of Bad Air Quality |
| Biological Threats | 7 | 0 | Add of Covid-19, H5N1 |
| Cyber Disturbance | 8 | 5 | None |
| Terrestrial | 8 | 8 | Removal of all |


16



17

DEVELOPING MITIGATION STRATEGY

- Does the plan have a blueprint for reducing potential losses identified in the risk assessment?
- Does the plan include a description of the mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards?
- Does the plan include an action plan on how each mitigation idea will be prioritized, implemented and administered?



18

MITIGATION STRATEGY

- The team reviewed the mitigation ideas in the previous plan
- The team then identified new mitigation ideas to be included in the current plan
- Each mitigation idea was then evaluated for its feasibility, social benefits, economic benefits, environmental improvements and community objectives
- A survey was then posted on the City's website to obtain community input on the proposed mitigation ideas

19

19

MITIGATION STRATEGY

The team identified 40 mitigation ideas/projects to be included in our current plan and then prioritized them as a High, Medium or Low priority

20

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List of Mitigation Actions

High Priority

1. Review the current
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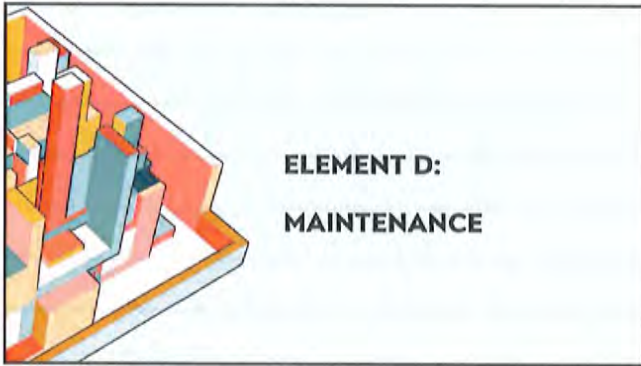
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Low Priority

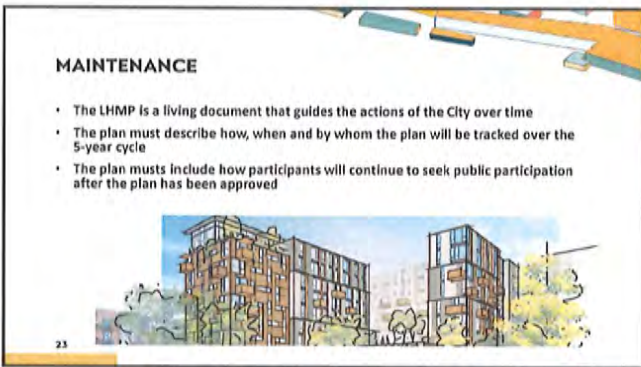
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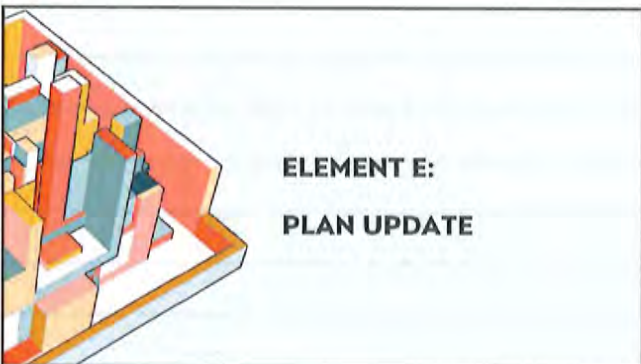
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24

PLAN UPDATE

- The plan update must include and document any changes in development
- The plan update must reflect changes in priorities and progress in local mitigation efforts
- The plan must explain how the City Integrated information from the mitigation plan into other planning mechanisms

25

25

ELEMENT F: PLAN ADOPTION



26

NEXT STEPS

Presentations to
Committees,
Planning
Commission and
City Council for
Public Comment
September 2024



Submit Plan
Update to
CalVOES for
Review and
Approval
October
2024



CalVOES
Submits Plan
Update for their
Review and
Approval
Pending Formal
Adoption
November
2024



Presentation to
Planning
Commission for
their Approval
and
Recommendation
that Council
Adopt the Plan
January 2025



Presentation to
Council for
Formal
Adoption as an
Amendment to
the Safety
Element in the
General Plan
February 2025



27

27

THANK YOU

QUESTIONS/COMMENTS

Lori Elefant, Management Analyst - Annuitant

City of Emeryville

lelefant@emeryville.org

Pedro Jimenez, Assistant City Manager

City of Emeryville

pjimenez@emeryville.org



28



City of Emeryville

INCORPORATED 1896

1333 Park Avenue, Emeryville, CA 94608-3517
t (510) 596-4300 | f (510) 596-4389

PLEASE POST

Chair John Bauters
Member Sukhdeep Kaur

Actions taken by Advisory Bodies are not official actions of the City Council, but must be considered and potentially ratified at a regular City Council meeting.

TRANSPORTATION COMMITTEE

Regular Meeting
Civic Center, Garden Level
1333 Park Avenue, Emeryville, CA 94608
September 9, 2024 – 3:00 PM

AGENDA

All writings that are public records and relate to an agenda item, which are distributed to a majority of the legislative body less than 72 hours prior to the meeting is noticed, will be made available via email by request to the Committee Secretary. In compliance with the Americans with Disabilities Act, a person requiring an accommodation, auxiliary aid, or service to participate in this meeting should contact the Committee Secretary as far in advance as possible, but no later than 72 hours prior to the scheduled event. The best effort to fulfill the request will be made. Assistive listening devices will be made available for anyone with hearing difficulty and must be returned to the Committee Secretary at the end of the meeting. All documents are available in alternative formats upon request. No animals shall be allowed at, or brought in to, a public meeting by any person except (i) as to members of the public or City staff utilizing the assistance of a service animal, which is defined as a guide dog, signal dog, or other animal individually trained to provide assistance to an individual with a disability; or (ii) as to police officers utilizing the assistance of a dog(s) in law enforcement duties.

1. Call to Order
2. Roll Call
3. Public Comment
 - 3.1 *Submit a written comment card at www.emeryville.org/advisorybodies.*
4. Approval of July 8, 2024, Special Meeting Action Minutes
5. Action Items
 - 5.1 White Curb Request for 5521 Doyle Street (Alaoui)
6. Information Items
 - 6.1 Local Hazard Mitigation Plan (Jimenez, Elefant)
 - 6.2 [Capital Improvement Program Tracking Spreadsheet](#) (Alaoui)
7. Future Agenda Items
 - 7.1 Doyle Street (October 2024)
 - 7.2 Bike Share Systems (October 2024)
8. Announcements / Member Comments
 - 8.1 Reminder for Future Rescheduled Meetings:
 - 8.1.1 Monday, October 7 at 3:00pm
 - 8.1.2 Monday, November 18 at 2:30pm
9. Adjournment

Public comment for agenda items can be submitted online via a written comment card at www.emeryville.org/advisorybodies, or submitted by email to the Committee Secretary. If you would like to support, oppose, or otherwise comment on an upcoming agenda item, please send in your comments prior to the meeting.

FURTHER INFORMATION may be obtained by contacting Josie Ahrens, Committee Secretary, at 510-596-4319 or josie.ahrens@emeryville.org. The next special meeting is scheduled for October 7, 2024, at 3:30 PM.

DATED: AUGUST 29, 2024

Post On: SEPTEMBER 6, 2024
Post Until: SEPTEMBER 10, 2024


Lorryne Leong, Deputy City Clerk



PLEASE POST

City of Emeryville

INCORPORATED 1896

1333 Park Avenue, Emeryville, CA 94608-3517
t (510) 596-4300 | f (510) 596-4389

Chair David Mourra
Member Kalimah Priforce

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PUBLIC SAFETY COMMITTEE

Regular Meeting

Civic Center, Garden Level

1333 Park Avenue, Emeryville, CA 94608

September 10, 2024 – 4:00 PM

AGENDA

1. Call to Order
2. Roll Call
3. Public Comment
 - 3.1 *Submit a Written Comment Card at www.emeryville.org/advisorybodies.*
4. Approval of July 9, 2024, Regular Meeting Action Minutes
5. Action Items
6. Information Items
 - 6.1 Alameda County Fire Department Report (Chief West)
 - 6.2 Police Department Crime Statistics and Crime Prevention Efforts (Captain Collins)
 - 6.3 Police Department Overtime Report (Captain Collins)
 - 6.4 Discussion on the Local Hazard Mitigation Plan Update (Pedro Jimenez/Lori Elefant)
7. Future Agenda Items
 - 7.1 Discussion on Crime Prevention, Safety and Best Practices
 - 7.2 Discussion on Fire Prevention, Safety and Best Practices
 - 7.3 Discussion on the Police Volunteers in Policing Program
 - 7.4 Discussion on Drones as First Responders Program
 - 7.5 Discussion on Exploring Placement of a Police Department Substation
 - 7.6 Discussion on Best Practices in Reducing Property Crime in Residential Areas
8. Announcements / Member Comments
9. Adjournment

Public comment for agenda items can be submitted online via our online speaker card at www.emeryville.org/advisorybodies. Written comments can also be submitted by email to the Committee Secretary. If you would like to support, oppose, or otherwise comment on an upcoming agenda item, please send in your comments prior to the meeting.

FURTHER INFORMATION may be obtained by contacting Lt. Fred Dauer, Committee Secretary, at 510-596-3709 or fdauer@emeryville.org. The next regular meeting is scheduled for October 8, 2024, at 4:00 PM.

DATED: SEPTEMBER 5, 2024

Post On: SEPTEMBER 6, 2024

Post Until: SEPTEMBER 11, 2024


Lorrayne Leong, Deputy City Clerk

Lori Elefant

From: Pedro Jimenez
Sent: Thursday, September 12, 2024 10:19 AM
To: *DL_DH
Cc: Lori Elefant
Subject: Local Hazard Mitigation Plan Update (LHMP)

Hi All,

Here's the link to the [Local Hazard Mitigation Plan Update](#) (LHMP) for you to take a look at whenever you have some time before our next DH meeting on September 18th. Lori will be giving a presentation and asking for feedback.

Thanks
Pedro



CITY OF EMERYVILLE

AGENDA

City Council

Emeryville City Hall
1333 Park Avenue
Emeryville, CA 94608
(510) 596-4300 phone
(510) 450-7831 fax
www.emeryville.org

Members:

Mayor Courtney Welch
Vice Mayor David Mourra
Council Member John J. Bauters
Council Member Sukhdeep Kaur
Council Member Kalimah A. Priforce

Special Study Session

Tuesday, September 17, 2024

6:45 PM

Council Chambers

**This meeting is being conducted in-person at
1333 Park Avenue, Emeryville, California**

Please note the following change to the City's public comment procedures: Unless a Councilmember is participating in the meeting remotely pursuant to AB 2449, remote public comment will not be accepted. Public comment may be provided in-person or via email, as set forth below. Members of the public desiring to provide comments as a part of the meeting are encouraged to either submit written comments by 3:00 p.m. prior to the meeting or to attend the meeting in person.

Public comment for Council agenda items can be submitted online via our written comment card at www.emeryville.org/citycouncil. Written comments can also be submitted by email to city_council@emeryville.org or to the City Clerk at city_clerk@emeryville.org. If you would like to support, oppose, or otherwise comment on an upcoming agenda item, please send in your comments prior to the meeting.

The link below allows public viewing of the meeting (no public comment via Zoom):

Please click the link below to join the webinar:

<https://emeryville-org.zoom.us/j/87507816925?pwd=X4naiaZ3J7qa-NdJGet8Y7NaT3hWgQ.xW4tdBF4oiygOk7J>

Passcode: 328350

Telephone: 669-900-6833

Webinar ID: 875 0781 6925

Passcode: 328350

A complete copy of the agenda packet is available for viewing at the Information Center at City Hall, located at 1333 Park Avenue, Emeryville, California, and on the city's website at www.emeryville.org/citycouncil. Before the Council meeting, all writings that are public records and relate to an agenda item below which are distributed to a majority of the legislative body less than 72 hours prior to the meeting noticed above will be made available as "late correspondence" and will be published on the agenda beneath the relevant agenda item. Copies will also be available at the Information Counter at City Hall during normal business hours. The meeting is shown live on the City of Emeryville television channel (ETV), cable channel 27, and will be rebroadcast as part of the regular City Council, Successor Agency, Management of Emeryville Services Authority, and related meetings, according to the published ETV schedule of programs. Council meetings will also be available to view through live media streaming accessible from the City of Emeryville website at

www.emeryville.org/citycouncil.

You can request free copies of the Emeryville City Council, Successor Agency, Management of Emeryville Services Authority, and related agendas, in digital format by going to our website at www.emeryville.org/notifyme. Simply fill out your information, check "City Council Agendas", and click the "Subscribe" button. By doing so, you will automatically receive all of the agendas for the year via email and/or text.

All matters listed under CONSENT CALENDAR are considered to be routine and will all be enacted by one motion in the form listed below. There will be no separate discussion of these items unless good cause is shown prior to the time the Council votes on the motion to adopt. Persons who wish to speak on matters set for PUBLIC HEARINGS will be heard when the Presiding Officer calls for comments from those persons who are in support of or in opposition thereto. After persons have spoken, the Hearing is closed and brought back to Council level for discussion and action. There is no further comment permitted from the audience unless requested by the Council.

No animals shall be allowed at or brought in to a public meeting by any person except (i) as to members of the public or City staff utilizing the assistance of a service animal, which is defined as a guide dog, signal dog, or other animal individually trained to provide assistance to an individual with a disability; or (ii) as to police officers utilizing the assistance of a dog(s) in law enforcement duties.

In compliance with the Americans with Disabilities Act, a person requiring an accommodation, auxiliary aid, or service to participate in this meeting should contact the City Clerk's Office at 510-596-4300, as far in advance as possible, but no later than 72 hours before the scheduled event. The best effort to fulfill the request will be made. Assistive listening devices are available for anyone with hearing difficulty from the City Clerk prior to the meeting and must be returned to the City Clerk at the end of the meeting.

Public Comment: Each speaker is limited to three minutes to present their comments to the City Council at each speaking opportunity. At the discretion of the Presiding Officer, time limits may be further adjusted.

The City Council welcomes comments, including criticism, about the policies, procedures, programs, or services of the City, or of the acts or omissions of the City Council. Speakers shall not use threatening, profane, or abusive language which disrupts, disturbs, or otherwise impedes the orderly conduct of a City Council, Successor Agency, Management of Emeryville Services Authority, or related meeting. The City is committed to maintaining a workplace free of unlawful harassment and is mindful that City staff regularly attend Council meetings. Discriminatory statements or conduct that would potentially violate the Fair Employment and Housing Act – i.e., statements or conduct that is hostile, intimidating, oppressive, or abusive – is per se disruptive to a meeting and will not be tolerated.

The AGENDA for this special meeting is as follows:

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF FINAL AGENDA
4. EX PARTE COMMUNICATIONS
5. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA
6. STUDY SESSION

- 6.1. [ID-2024-360](#) Study Session: Draft 2024-2029 Local Hazard Mitigation Plan Update. (Pedro Jimenez / Lori Elefant)

Attachments: [Staff Report](#)

[Local Hazard Mitigation Plan 2024-2029](#)

7. ADJOURNMENT

THE NEXT REGULAR MEETING WILL BE ON TUESDAY, OCTOBER 1, 2024, AT EMERYVILLE CITY HALL, COUNCIL CHAMBERS, LOCATED AT 1333 PARK AVENUE, EMERYVILLE, CA 94608.



AGENDA

Planning Commission

Planning Commissioners:

| | |
|-----------------|--------------|
| Jordan Wax | Chair |
| Rod Henmi | Vice Chair |
| Zoë Chafe | Commissioner |
| Carol Johnson | Commissioner |
| Dianne Martinez | Commissioner |
| Robert Rivera | Commissioner |
| Maia Small | Commissioner |

REGULAR MEETING

Thursday, September 26, 2024

6:30 PM

Council Chambers

**This meeting is being conducted in-person at
1333 Park Avenue, Emeryville, California.**

Please note the following change to the City's public comment procedures: Unless a Planning Commissioner is participating in the meeting remotely pursuant to AB 2449, remote public comment will not be accepted. Public comment may be provided in-person or via email, as set forth below. Members of the public desiring to provide comments as a part of the meeting are encouraged to either submit written comments by 3:00 p.m. prior to the meeting or to attend the meeting in person.

Planning Commission meetings are streamed live on Emeryville TV at www.emeryville.org/104/Planning-Commission. Additionally, public comment for Commission agenda items can be submitted online via our written comment card at www.emeryville.org/104/Planning-Commission. Written comments can also be submitted by email to plancomm@emeryville.org, or to the Community Development Director, Chadrick Smalley, at csmalley@emeryville.org. If you would like to support, oppose, or otherwise comment on an upcoming agenda item, please send in your comments prior to the meeting.

The link below allows public viewing of the meeting (there will be no public comment via Zoom).

Please click the link below to join:

<https://emeryville-org.zoom.us/j/87196514377>

Or Telephone: +1 669 900 6833

Webinar ID: 871 9651 4377

International numbers available: <https://emeryville-org.zoom.us/j/87196514377>

A complete copy of the agenda packet is available for viewing at the Information Center at City Hall, located at 1333 Park Avenue, Emeryville, California, and on the City's website at www.emeryville.org/104/Planning-Commission before the Planning Commission meeting. All writings that are public records and relate to an agenda item, which are distributed to a majority of the legislative body less than 72 hours prior to the meeting is noticed, will be made available via email by request to the Commission Secretary. The meeting is broadcast live on the City of Emeryville Television Channel (ETV), Cable Channel 27, and will be rebroadcast as part of the regular City agency bodies' meetings according to the published ETV schedule of programs. Planning Commission meetings will also be available to view through live media streaming accessible from the City of Emeryville website at www.emeryville.org/104/Planning-Commission.

You can request free copies of Planning Commission agendas in digital format for the current calendar year by going to our website at www.emeryville.org/notifyme. Simply fill out your information, check "Planning Commission Agendas", and click the "Subscribe" button. You will then receive an email or text message (or

both) asking you to confirm your subscription. Once completed, you will begin to receive notifications of Planning Commission meeting agendas.

Persons who wish to speak on matters set for PUBLIC HEARINGS will be heard when the Presiding Officer calls for comments from those persons who are in support of or in opposition thereto. After persons have spoken, the Hearing is closed and brought back to Commission level for discussion and action. There is no further comment permitted from the audience unless requested by the Planning Commission.

The speaker's time is limited to 3 minutes and can only be extended upon approval of the Presiding Officer. If you are submitting your comments using the online comment card, please be aware that they will be read aloud into the record and will still be limited to the 3-minute time limit.

No animals shall be allowed at or brought in to a public meeting by any person except (i) as to members of the public or City staff utilizing the assistance of a service animal, which is defined as a guide dog, signal dog, or other animal individually trained to provide assistance to an individual with a disability, or (ii) as to police officers utilizing the assistance of a dog(s) in law enforcement duties.

In compliance with the Americans with Disabilities Act, a person requiring an accommodation, auxiliary aid, or service to participate in this meeting should contact the City Clerk's Office at 510-450-7800, as far in advance as possible, but no later than 72 hours before the scheduled event. The best effort to fulfill the request will be made. Assistive listening devices will be made available for anyone with hearing difficulty and must be returned to the Commission Secretary at the end of the meeting.

The AGENDA for this regular meeting is as follows:

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **COMMISSION MATTERS**
 - 3.1 **Swearing In of New Planning Commissioners Robert Rivera and Maia Small**
4. **PUBLIC COMMENT**
5. [APPROVAL OF ACTION MINUTES OF JUNE 27, 2024](#)
6. [APPROVAL OF ACTION MINUTES OF AUGUST 22, 2024](#)
7. **COMMUNITY DEVELOPMENT DIRECTOR'S REPORT**
8. **DISCLOSURE OF EX PARTE COMMUNICATIONS AND IDENTIFICATION OF CONFLICTS OF INTEREST**
9. **PUBLIC HEARINGS**
 - 9.1 [Tesla Collision Center \(UP24-002\)](#) – Consideration of a Major Conditional Use Permit to allow an electric vehicle collision center ("Motor Vehicle Sales and Services - Repair and Service") in an existing building at 1295 67th Street. The 47,383 square-foot facility will repair collision damage to Tesla electric vehicles with ancillary storage and office uses. This project is exempt from environmental review under State CEQA Guidelines Section 15332, which applies to infill development projects, and the "common sense exemption" at Section 15061(b)(3) because it can be seen with certainty that there is no possibility that the proposal may have a significant effect on the environment. General Plan Land Use Classification: Industrial; Zoning District: Light Industrial (INL). (Applicant: WT Group/Leslie Freeman)(Owner: HCP Emeryville Partners II, LLC c/o Hackman Capital Partners, LLC/Hong Ho) (APN 04-1508-010-02)

10. STUDY SESSIONS

- 10.1** [Local Hazard Mitigation Plan \(GPA24-001\)](#) – A study session to solicit comments on the update of the Local Hazard Mitigation Plan (LHMP) that was adopted in 2019 and incorporated as an appendix to the Safety Element of the General Plan. The Disaster Mitigation Act of 2000 is a federal law that requires communities to adopt and update LHMP every five years.

11. PLANNING COMMISSIONERS' COMMENTS**12. ADJOURNMENT**

THE NEXT REGULAR MEETING WILL BE ON THURSDAY, OCTOBER 24, 2024, AT 6:30 P.M. AT EMERYVILLE CITY HALL, COUNCIL CHAMBERS, 1333 PARK AVENUE, EMERYVILLE, CA 94608

LOCAL, STATE AND FEDERAL PROCLAMATIONS

RESOLUTION NO. 20-23

Resolution Of The City Council Of The City Of Emeryville Confirming the Director of Emergency Services' Proclamation of Existence of A Local Emergency

WHEREAS, section 4-2.08(a)(1) of the Emeryville Municipal Code empowers the Director of Emergency Services to proclaim the existence or threatened existence of a local emergency when said City is affected or likely to be affected by a public calamity and the City Council is not in session; and

WHEREAS, Conditions of extreme peril to the safety of persons and property have arisen within the City of Emeryville, caused by the rapid spread of COVID-19 at which time the City Council was not in session; and

WHEREAS, the Director of Emergency Services of the City of Emeryville did proclaim the existence of a local emergency within the City on the 17th day of March, 2020; and

WHEREAS, said City Council does hereby find that the aforesaid conditions of extreme peril did warrant and necessitate the proclamation of the existence of a local emergency; therefore, be

RESOLVED, that the Proclamation of Existence of a Local Emergency, as issued by said Director of Emergency Services, is hereby ratified and confirmed by the City Council of the City of Emeryville; and be it, further



RESOLVED, that said local emergency shall be deemed to continue to exist until its termination is proclaimed by the City Council of the City of Emeryville, State of California.

ADOPTED, by the City Council of the City of Emeryville at a special meeting held Thursday, March 19, 2020, by the following vote:

| | | |
|----------|----------|---|
| AYES: | <u>5</u> | Mayor Patz, Vice Mayor Martinez, and Council Members Bauters, Donahue, and Medina |
| NOES: | <u>0</u> | |
| ABSTAIN: | <u>0</u> | |
| ABSENT: | <u>0</u> | |

ATTEST:


CITY CLERK


MAYOR
APPROVED AS TO FORM:

CITY ATTORNEY



City of Emeryville

CALIFORNIA

Proclamation

EMERGENCY PROCLAMATION OF EXISTENCE OF A LOCAL EMERGENCY BY DIRECTOR OF EMERGENCY SERVICES

WHEREAS, Emeryville Municipal Code section 4-2.01 and California Government Code section 8558 define "emergency" and "local emergency" (respectively) as "existence of conditions of disaster or of extreme peril to the safety of persons and property" within specified territorial limits, including those cause by epidemic, which "are or are likely to be beyond the control of the services, personnel, equipment, and facilities" of a particular political subdivision such as the City of Emeryville, and which require "the combined forces of other political subdivisions to combat..." Such conditions are referred to herein as a "Local Emergency"; and

WHEREAS, section 4-2.08(a)(1) of the Emeryville Municipal Code empowers the Director of Emergency Services to proclaim the existence or threatened existence of an Local Emergency when the City is affected or likely to be affected by a public calamity and the City Council is not in session; and

WHEREAS, the City Manager as the Director of Emergency Services ("Director") hereby finds:

1. The United States of America has confirmed cases of individuals who have a severe acute respiratory illness caused by a novel (new) corona virus ("COVID-19" or "the virus") first detected in Wuhan, Hubei Province, People's Republic of China ("China"). The virus was first reported in China on December 31, 2019. As of March 2, 2020, the World Health Organization ("WHO") has reported more than 3,000 deaths stemming from over 100,000 confirmed cases of COVID-19 and the virus is present in 100 countries. The number of confirmed cases has continued to escalate dramatically over a short period of time; and
2. WHO officials now report that sustained human-to-human transmission of the virus is occurring. Transmission from asymptomatic individuals has been documented. Suspected community transmission of the virus is occurring in the United States. Although the majority of individuals infected with COVID-19 recover from the disease without special treatment, there is significant potential for serious infection and death; and
3. On January 30, 2020, WHO declared the COVID-19 outbreak a public health emergency of international concern, and on January 31, 2020, the U.S.

4. Department of Health and Human Services declared a Public Health Emergency for the United States of America; and
5. The United States Centers for Disease Control and Prevention (CDC) has determined that the virus presents a serious public health threat, requiring coordination among state and local health departments to ensure readiness for potential health threats associated with the virus; and
6. On March 4, 2020, the Governor of California proclaimed a state of emergency to exist in California as a result of the threat of COVID-19; and
7. On March 7, 2020, the California Department of Public Health issued its "Mass Gatherings Guidance on Novel Coronavirus or COVID-19" followed by a March 12, 2020 recommendation that certain gatherings in California be postponed or canceled for the remainder of March; and
8. On March 12, 2020, the Governor of the State of California issued Executive Order N-25-20 which, among other things, orders that all California residents are to "... heed any orders and guidance of state and local public health officials, including but not limited to the imposition of social distancing measures, to control the spread of COVID-19; and
9. On March 16, 2020 based on evidence of increasing occurrence of COVID-19 within Alameda County and throughout the Bay Area, the Alameda County Health Officer, along with Health Officers in five other Bay Area counties, issued an order "directing all individuals living in the County to shelter at their place of residence...directing all businesses and governmental agencies to cease non-essential operations at physical locations in the County; prohibiting all non-essential gatherings of any number of individuals; and ordering cessation of all non-essential travel"; and
10. On March 16, 2020 the Alameda County Director of Emergency Services declared a local emergency based on conditions of extreme peril to the safety of persons and property within the County from the introduction of a novel coronavirus (named COVID-19) in the County; and
11. On March 17, 2020 following the directive of the Alameda County Health Officer, the City of Emeryville closed all City facilities and assigned many employees to work remotely if possible, while maintaining public safety and some public works operations as "Essential Governmental Functions"; and
12. Actual or threatened conditions of disaster or extreme peril to the safety of persons and property have arisen within the City of Emeryville caused by the introduction COVID-19, as to which there is no known natural immunity and for

which there is currently no vaccine, which has become a pandemic, and which is contributing to a shortage of essential health care supplies; and

13. The locally available resources are inadequate to cope with the actual or threatened conditions of disaster or extreme peril because, by reason of its magnitude, it is or is likely to be beyond the control of the services, personnel, equipment, and facilities of the City of Emeryville, and will require the combined forces of a mutual aid region or regions to combat; these conditions satisfy the circumstances described in Government Code section 8558 and Emeryville Municipal Code section 4-2.01; and
14. These actual or threatened conditions of disaster or extreme peril necessitate the proclamation of an emergency to enable the City of Emeryville and other government entities to adequately plan, prepare and preposition resources to be able to effectively respond to the threat posed by COVID-19, and to warn City of Emeryville residents and visitors of the threat posed by COVID-19 and to enable them sufficient time to plan and prepare; and
15. At the time of issuance of the Proclamation, the Emeryville City Council is not in session and cannot immediately be called into session.


NOW, THEREFORE, IT IS HEREBY PROCLAIMED:

1. A Local Emergency now exists throughout the City of Emeryville; and
2. During the existence of the Local Emergency, the powers, functions, and duties of the Director and City of Emeryville's emergency organization shall be those prescribed by state law, by City of Emeryville ordinances and resolutions; and
3. The Director is hereby empowered to take those actions authorized by Emeryville Municipal Code section 4-2.08 upon proclamation of a state of a Local Emergency

IT IS FURTHER PROCLAIMED AND ORDERED that during the existence of said Local Emergency, the powers, function, and duties of the Emergency Organization of this City shall be those prescribed by state law, by ordinances, and resolutions of this City, and, that this emergency proclamation shall expire in **7 days** after issuance unless confirmed and ratified by the governing body of the City of Emeryville.

Dated: March 17, 2020

By: 
Director of Emergency Services

ATTEST: 
City Clerk and Public Information Officer



City of Emeryville

CALIFORNIA

Proclamation

EMERGENCY PROCLAMATION OF EXISTENCE OF A LOCAL EMERGENCY BY DIRECTOR OF EMERGENCY SERVICES

WHEREAS, Emeryville Municipal Code section 4-1.01 and California Government Code section 8558 define "emergency" and "local emergency" respectively as the "existence of conditions of disaster or of extreme peril to the safety of persons and property" within specified territorial limits, which are or are likely to be beyond the control of the services, personnel, equipment, and facilities" of a particular subdivision such as the City of Emeryville, and which require "the combined forces of other political subdivisions to combat..." Such conditions are referred to herein as a "Local Emergency"; and

WHEREAS, section 4-2.08 (a)(1) of the Emeryville Municipal Code empowers the Director of Emergency Services to proclaim the existence or threatened existence of a Local Emergency when the City is affected or likely to be affected by a public calamity and the City Council is not in session; and

WHEREAS, the City Manager as the Director of Emergency Services ("Director") hereby finds:

1. That conditions of extreme peril were presented by a series of severe winter storms that began on December 31, 2022, and continued into January 2023, causing damage and expense to the City; and
2. On January 4, 2023, the Governor of California proclaimed that a state of emergency exists in California as a result of these storms and the ongoing response which, among other things, authorizes the mobilization of the California National Guard to support disaster response in order to keep the public safe; and
3. On January 6, 2023, the Director of Emergency Services for Alameda County proclaimed a local emergency in Alameda County; and
4. Locally available resources are inadequate to cope with the actual or threatened conditions, disaster, or extreme peril that may result from this emergency because, by reason of its magnitude, it is beyond the control of the services, personnel, equipment, and facilities of the City of Emeryville, and will require the combined forces for mutual aid regions to combat and these conditions satisfy the circumstances described in Government Code section 8558 and Emeryville Municipal Code section 4-2.01; and
5. These actual or threatened conditions of disaster or extreme peril necessitate the proclamation of an emergency to enable the City of Emeryville and other government entities to adequately plan, prepare and respond to the threat; and

6. At the time of issuance of the Proclamation, the Emeryville City Council is not in session and cannot immediately be called into session.

NOW, THEREFORE, IT IS HEREBY PROCLAIMED:

1. A Local Emergency now exists throughout the City of Emeryville; and
2. During the existence of the Local Emergency, the powers, functions, and duties of the Director and City of Emeryville's emergency organization shall be those prescribed by state law, and the City of Emeryville's ordinances and resolutions; and
3. The Director is hereby empowered to take any actions authorized by Emeryville Municipal Code section 4-2.08 upon proclamation of this state of Local Emergency.

IT IS FURTHER PROCLAIMED AND ORDERED that during the existence of said Local Emergency, the powers, function of duties of the Emergency Organization of this City shall be those prescribed by state law, by ordinances, and resolutions of this City, and that this emergency proclamation shall expire seven (7) days after issuance unless confirmed and ratified by the governing body of the City of Emeryville.

Dated: 01/09/2023

By: DocuSigned by:
Adam W. Politzer
00013EP3400P412...
Director of Emergency Services

ATTEST:

DocuSigned by:
April Richardson
9AE9E67CE0284DB
City Clerk

**PROCLAMATION OF A LOCAL EMERGENCY
BY THE DIRECTOR OF EMERGENCY SERVICES**

WHEREAS Title 2, Section 2.118.110, of the Administrative Code of the County of Alameda empowers the Director of Emergency Services to proclaim the existence or threatened existence of a local emergency when said County is affected or likely to be affected by a public calamity and the County Board of Supervisors is not in session, and;

WHEREAS, said Director of Emergency Services does hereby find:

That conditions of extreme peril were presented by winter storms that began on December 31, 2022, and continued into January 2023 causing extensive damage and local expenses throughout the Alameda County Operational Area; and

That the 2022-2023 Early Winter Storms have caused significant damage throughout the Alameda County Operational Area, and the magnitude of ongoing forecasted storms are predicted to cause further damages countywide.

Due to the damage caused, and the extraordinary costs involved in the response and area recovery, the Sheriff of the County of Alameda, Yesenia Sanchez, serving as the Director of Emergency Services, does recognize that the above conditions constitute a local emergency for the Alameda County Operational Area;

That the Board of Supervisors of the County of Alameda is not in session;

NOW, THEREFORE, BE IT HEREBY PROCLAIMED that a local emergency now exists in the Alameda County Operational Area; and

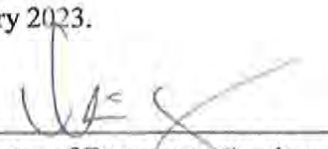
IT IS FURTHER PROCLAIMED AND ORDERED that during the existence of said local emergency, the powers, functions and duties of the Director of Emergency Services and the emergency organization of this County shall be those prescribed by state law, by ordinances, and resolutions of this County, and that this emergency proclamation shall expire in seven days after issuance unless reviewed and ratified by the Board of Supervisors of the County of Alameda; and

IT IS FURTHER ORDERED that a copy of this proclamation be immediately forwarded to the Director of the California Governor's Office of Emergency Services. The Governor of California, Gavin Newsom has issued a State of Emergency on January 4, 2023, which includes the County of Alameda. We request that the Governor forward to the President for consideration as a Declaration of a Federal Emergency, and that the Governor make available any State, Federal, or other disaster assistance funds that would cover extraordinary costs incurred by affected jurisdictions of the County of Alameda in the response to and recovery from this emergency event.

SIGNED AND SUBSCRIBED on this 6th day of January 2023.

Approved as to form:
DONNA R. ZIEGLER, County Counsel

DocuSigned by:
By: Clay Christianson
C730522674C0404
Clay J. Christianson
Deputy County Counsel



Director of Emergency Services
Sheriff Yesenia Sanchez

DR-4482-CA Initial Notice



▪ English

Notice Date

March 21, 2020

Billing Code 9111-23-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Internal Agency Docket No. FEMA-4482-DR]

[Docket ID FEMA-2020-0001]

California; Major Disaster and Related Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This is a notice of the Presidential declaration of a major disaster for the State of California (FEMA-4482-DR), dated March 22, 2020, and related determinations.

DATE: The declaration was issued March 22, 2020.

FOR FURTHER INFORMATION CONTACT: Dean Webster, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, (202) 646-2833.

SUPPLEMENTARY INFORMATION: Notice is hereby given that, in a letter dated March 22, 2020, the President issued a major disaster declaration under the authority of the

The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance - Disaster Housing Operations for Individuals and Households; 97.050, Presidentially Declared Disaster Assistance to Individuals and Households - Other Needs; 97.036, Disaster Grants - Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.

/s/

Pete Gaynor,

Administrator,

Federal Emergency Management Agency.

Last updated February 13, 2021



FEMA

Applying for assistance

DR-4683-CA Public Notice 005



English

Notice Date

September 11, 2023

PUBLIC NOTICE: MAJOR DISASTER DECLARATION | FEMA-4683-DR-CA

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) hereby gives notice to the public of its intent to provide financial assistance to the State of California, local and Indian tribal governments, and private nonprofit organizations under major disaster declaration FEMA-4683-DR-CA. This notice applies to the Individual Assistance (IA), Public Assistance (PA), and Hazard Mitigation Grant (HMGP) programs implemented under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207. This public notice concerns activities that may affect historic properties, activities that are located in or affect wetland areas and the 100-year floodplain, and may involve critical actions within the 500-year floodplain. Such activities may adversely affect the historic property, floodplain or wetland, or may result in continuing vulnerability to flood damage.

I. Public Notice – Major Disaster Declaration FEMA-4683-DR-CA and Overview of Authorized Assistance

Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 et seq. (the “Stafford Act”), as follows:

I have determined that the emergency conditions in the State of California resulting from the Coronavirus Disease 2019 (COVID-19) pandemic beginning on January 20, 2020, and continuing, are of sufficient severity and magnitude to warrant a major disaster declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 et seq. (the “Stafford Act”). Therefore, I declare that such a major disaster exists in the State of California.

In order to provide Federal assistance, you are hereby authorized to allocate from funds available for these purposes such amounts as you find necessary for Federal disaster assistance and administrative expenses.

You are authorized to provide Individual Assistance limited to the Crisis Counseling Program and assistance for emergency protective measures (Category B), including direct Federal assistance, under the Public Assistance program throughout the State. Consistent with the requirement that Federal assistance be supplemental, any Federal funds provided under the Stafford Act for Public Assistance will be limited to 75 percent of the total eligible costs.

Further, you are authorized to make changes to this declaration for the approved assistance to the extent allowable under the Stafford Act.

The Federal Emergency Management Agency (FEMA) hereby gives notice that pursuant to the authority vested in the Administrator, under Executive Order 12148, as amended, Robert J. Fenton, of FEMA is appointed to act as the Federal Coordinating Officer for this major disaster.

The following areas of the State of California have been designated as adversely affected by this major disaster:

Individual Assistance limited to the Crisis Counseling Program in all areas in the State of California.

Emergency protective measures (Category B) not authorized under other Federal statutes, including direct federal assistance, under the Public Assistance program at 75 percent federal funding for all areas in the State of California.

The President declared a major disaster for the State of California on January 14, 2023, and amended January 17, 2023, as a result of the severe winter storms, flooding, landslides, and mudslides that began on December 27, 2022 and are continuing, pursuant to his authority under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. § 5121 et seq.) (Stafford Act).

This declaration, numbered FEMA-4683-DR-CA, has authorized Individual Assistance for Alameda, Amador, Calaveras, Contra Costa, Mendocino, Merced, Monterey, Sacramento, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Cruz, and Ventura Counties; and reimbursement through the Public Assistance Program, including direct federal assistance, for emergency work (Categories A-B) for Merced, Monterey, Sacramento, San Luis Obispo, Santa Barbara, and Santa Cruz Counties.

The following counties have been designated as eligible for Public Assistance, Category C through G for permanent work: Merced, Monterey, Sacramento, San Luis Obispo, Santa Barbara, and Santa Cruz Counties.

The following counties have been designated as eligible for Public Assistance: Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Inyo, Los Angeles, Madera, Marin, Mariposa, Mendocino, Napa, Nevada, Placer, San Benito, San Diego, San Francisco, San Joaquin, San Mateo, Santa Clara, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Ventura, and Yolo Counties.

The Hazard Mitigation Grant Program is available statewide. Additional counties may be designated at a later date.

Amendment No. 1, issued January 17, 2023, to the notice of major disaster declaration for the State of California (FEMA DR-4683-CA), dated January 14, 2023, identified the following counties as eligible for Individual Assistance: Monterey, San Luis Obispo, and Santa Barbara Counties, and identified the following counties as eligible for debris removal and emergency protective measures (Categories A and B), including direct federal assistance, under the Public Assistance program: Monterey, San Luis Obispo, and Santa Barbara Counties.

Amendment No. 2 issued January 18, 2023, to the notice of major disaster declaration for the State of California (FEMA DR-4683-CA), dated January 14, 2023, identified the following county as eligible for Individual Assistance: San Joaquin County.

Amendment No. 3 issued January 23, 2023, to the notice of major disaster declaration for the State of California (FEMA DR-4683-CA), dated January 14, 2023, identified the following county as eligible for Individual Assistance: Calaveras County.

Amendment No. 4 issued January 18, 2023, authorizes Federal funds for debris removal and emergency protective measures, including direct Federal assistance, at 100 percent of the total eligible costs for 60 days from the start of the incident period.

Amendment No. 5 issued January 26, 2023, to the notice of major disaster declaration for the State of California (FEMA DR-4683-CA), dated January 14, 2023, identified the following county as eligible for Individual Assistance: San Mateo County. The following counties have also been identified as eligible for Public Assistance, Category C through G for permanent work: Merced, Monterey, Sacramento, Santa Barbara, and Santa Cruz Counties (already designated for Individual Assistance and assistance for debris removal and emergency protective measures [Categories A and B] including direct federal assistance, under the Public Assistance program). Additionally, the following counties have been identified as eligible for Public Assistance: San Benito, Tulare, and Ventura Counties.

Amendment No. 6 issued February 1, 2023, to the notice of major disaster declaration for the State of California (FEMA DR-4683-CA), dated January 14, 2023, identified the following counties as eligible for Individual Assistance: Alameda, Contra Costa, and Mendocino Counties. The following county has been identified as eligible for Individual Assistance (already designated for Public Assistance): Ventura County. The following counties have been identified as eligible for Public Assistance: Alameda, Butte, Colusa, Fresno, Glenn, Humboldt, Los Angeles, Marin, Mendocino, Placer, Santa Clara, Siskiyou, Sonoma, Trinity, and Yolo Counties. The following counties have been identified as eligible for Public Assistance (already designated for Individual Assistance): Calaveras and San Joaquin Counties. The following county has been identified as eligible for permanent work [Categories C-G] (already designated for Individual Assistance and assistance for debris removal and emergency protective measures [Categories A and B], including direct federal assistance, under the Public Assistance program): San Luis Obispo County.

Amendment No. 7 issued February 6, 2023, provided notice that the incident period for this disaster is closed effective January 31, 2023.

Amendment No. 8 issued February 16, 2023 to the notice of major disaster declaration for the State of California (FEMA DR-4683-CA), dated January 14, 2023, identified the

following counties as eligible for Public Assistance: Amador, Del Norte, El Dorado, Inyo, Madera, Mariposa, Napa, Nevada, San Diego, San Francisco, Solano, Stanislaus, Sutter, Tehama, and Tuolumne Counties. The following counties have been identified as eligible for Public Assistance (already designated for Individual Assistance): Contra Costa and San Mateo Counties.

Amendment No. 9 issued February 22, 2023 to the notice of major disaster declaration for the State of California (FEMA DR-4683-CA), dated January 14, 2023, identified the following county as eligible for Individual Assistance (already designated for Public Assistance): Amador County. The following county has been identified as eligible for Public Assistance: Alpine County.

Amendment No. 10 issued May 25, 2023 to the notice of major disaster declaration for the State of California (FEMA DR-4683-CA), dated January 14, 2023, identified Santa Clara County for Individual Assistance (already designated for Public Assistance).

Individual Assistance is authorized by Section 408 of the Stafford Act. FEMA may provide IA program funding for disaster-related emergency housing. These actions may adversely affect a floodplain/wetland, or may result in continuing vulnerability to floods. These actions may include repair, restoration or construction of housing or private bridges, purchase and placement of travel trailers or manufactured housing units, or repair of structures as minimum protective measures. This will be the only public notice concerning these actions.

The Public Assistance Program is authorized by Sections 403, 406, and 407 of the Stafford Act. FEMA may provide financial assistance under the Public Assistance Program for the State of California, local and Indian tribal governments, and private nonprofit organizations to perform debris removal and emergency protective measures.

The Hazard Mitigation Grant Program is authorized by Section 404 of the Stafford Act. Under the Hazard Mitigation Grant Program, FEMA may provide financial assistance for the State of California, local and Indian tribal governments, and private nonprofit organizations to implement mitigation measures to reduce the risk of life and property from future disasters during the recovery from the major disaster. In the course of developing project proposals, subsequent public notices will be published if necessary, as more specific information becomes available.

II. Public Notice – Financial Assistance for Activities that Affect Historic Properties or Located in or that Affect Wetlands Areas or Floodplains

Some of the activities for which FEMA provides financial assistance under the Individual Assistance, Public Assistance, and Hazard Mitigation Grant Programs may affect historic properties, may be located in or affect wetland areas or the 100-year floodplain, and may involve critical actions within the 500-year floodplain. In accordance with all requirements of the National Environmental Policy Act (NEPA), all federal actions must be reviewed and evaluated for feasible alternatives. FEMA must also comply with Executive Order 11988, Floodplain Management; Executive Order 11990, Protection of Wetlands; the National Historic Preservation Act of 1966, Pub. L. No. 89-655 (1966) (codified as amended at 16 U.S.C. § 470 et seq.) (NHPA); and the implementing regulations at 44 C.F.R. pt. 9 and 36 C.F.R. pt. 800. The executive orders, NHPA, and regulations require FEMA to provide public notice for certain activities as part of approving the award of financial assistance for specific projects.

A. Federal Actions in or Affecting Floodplains and Wetlands

FEMA has determined for certain types of facilities there are normally no alternatives to restoration in the floodplain or wetland. These are facilities meeting all of the following criteria:

1) FEMA's estimate of the cost of repairs is less than 50% of the cost to replace the entire facility and is less than \$100,000; 2) the facility is not located in a floodway or Coastal High Hazard Zone; 3) the facility has not sustained major structural damage in a previous Presidentially declared flooding disaster or emergency; and 4) the facility is not critical (e.g., the facility is not a hospital, generating plant, emergency operations center, or a facility containing dangerous materials). FEMA intends to provide assistance for the restoration of these facilities to their pre-disaster condition, except certain measures to mitigate the effect of future flooding or other hazards may be included in the work. For example, a bridge or culvert restoration may include a larger waterway opening to decrease the risk of future washouts.

For routine activities, this will be the only public notice provided. Other activities and those involving facilities not meeting the four criteria are required to undergo more detailed review, including the study of alternate locations. Subsequent public notices regarding such projects will be published, if necessary, as more specific information becomes available.

In many cases, an applicant may have started facility restoration before federal involvement. Even if the facility must undergo detailed review and analysis of alternate locations, FEMA will fund eligible restoration at the original location if the facility is functionally dependent on its floodplain location (e.g., bridges and flood control facilities), or the project facilitates an open space use, or the facility is an integral part of a larger network which is impractical or uneconomical to relocate, such as a road. In such cases, FEMA must also examine the possible effects of not restoring the facility, minimizing floodplain or wetland impacts, and determining both an overriding public need for the facility clearly outweighs the Executive Order requirements to avoid the floodplain or wetland, and the site selected is the only practicable alternative. The State and local officials will confirm to FEMA the proposed actions comply with all applicable federal, state, and local floodplain management and wetland protection requirements.

The Public Assistance (PA) Federal Flood Risk Management Standard (FFRMS) partial implementation policy, effective for all major disasters declared on or after June 3, 2022, applies to PA projects in the 1% annual chance floodplain (1% and 0.2% annual chance floodplains for critical actions) involving new construction of structures, structures that have a substantial damage determination, or structures that require substantial improvement. The policy applies regardless of the cause of damage.

The Hazard Mitigation Assistance (HMA) FFRMS partial implementation policy applies to non-critical actions involving structure elevation, dry floodproofing, and mitigation reconstruction in the 1% annual chance floodplain. For all FEMA programs and project types, if a state, local, tribal, or territorial government has its own higher elevation standard, FEMA requires use of the higher standard. FEMA program policies also reference additional consensus codes and standards, such as ASCE-24-14, that incorporate additional elevation requirements beyond the base flood elevation.

B. Federal Actions Affecting Historic Properties

Section 106 of the NHPA requires FEMA to consider the effects of its activities (known as undertakings) on any historic property and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on such projects before the expenditure of any federal funds. An Individual Assistance, Public Assistance, or Hazard Mitigation Grant Program activity is an “undertaking” for the purposes of the NHPA, and a historic property is any property which is included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). For historic properties which will not be adversely affected by FEMA’s undertaking, this will be the only public notice. FEMA may provide

additional public notices if a proposed FEMA undertaking would adversely affect a historic property.

III. Further Information or Comment

The Rehabilitation Act of 1973 protects the civil rights of persons with disabilities. It prohibits discrimination on the basis of disability by the federal government, federal contractors, and by recipients of federal financial assistance. Any recipient or sub-recipient of federal funds is required to make their programs accessible to individuals with disabilities. Its protections apply to all programs and businesses receiving any federal funds. This applies to all elements of physical/architectural, programmatic and communication accessibility in all services and activities conducted by or funded by FEMA. FEMA intends to comply with the Rehabilitation Act in all federally conducted and assisted programs in alignment with the principals of whole community inclusion and universal accessibility.

Executive Orders 13985 and 14008 further address the need to achieve environmental justice and equity across the federal government. The issuance of the new executive orders more than 20 years after Executive Order 12898 was signed indicates the administration's directive to federal agencies to renew their energy, effort, resources, and attention to environmental justice. FEMA is working with applicants/sub-applicants to identify communities with Environmental Justice concerns and provide an avenue for local groups and non-profits with an Environmental Justice mission to self-identify so FEMA Programs can start to work with them on specific projects from the beginning of the application process.

FEMA also intends to provide HMGP funding to the State of California to mitigate future disaster damages. These projects may include construction of new facilities, modification of existing, undamaged facilities, relocation of facilities out of floodplains, demolition of structures, or other types of projects to mitigate future disaster damages. In the course of developing project proposals, subsequent public notices will be published if necessary, as more specific information becomes available.

This will be the only public notice regarding the actions described above for which FEMA may provide financial assistance under the Individual Assistance, Public Assistance, and Hazard Mitigation Grant Programs. Interested persons may obtain information about these actions or a specific project by writing to the Federal Emergency Management

Agency Region RIX Office, Regional Environmental Officer, Kenneth Sessa, 1111 Broadway, Suite 1200, Oakland, CA 94607. All comments concerning this public notice must be submitted in writing to the Region RIX Office within 30 days of its publication.

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