

OAKLAND LOCAL HAZARD MITIGATION PLAN PROGRESS REPORT

2024-2025

Reporting Period: *July 2024-July 2025*

Background: The City of Oakland developed its Local Hazard Mitigation Plan (LHMP) to reduce risk from hazards by identifying resources, information, and strategies for risk reduction. The federal Disaster Mitigation Act requires state and local governments to develop hazard mitigation plans as a condition for federal disaster grant assistance. To prepare the plan, the City organized resources, assessed risks from hazards, developed planning goals and objectives, reviewed mitigation alternatives, and developed an action plan to address probable impacts from hazards. By completing this process, the City maintained compliance with the Disaster Mitigation Act, achieving eligibility for mitigation grant funding opportunities afforded under the Robert T. Stafford Act. The plan can be viewed on-line at:

https://cao-94612.s3.amazonaws.com/documents/2021-07-01_OaklandHMP_AdoptedFinal-1.pdf

Summary Overview of the Plan's Progress: The performance period for the hazard mitigation plan became effective in July 2021 with the final approval of the plan by FEMA. The performance period for this plan will be five years. At the end of the five years, an updated plan will be issued, anticipated before July 2026. As of this reporting period, the performance period for this plan is considered to be 80% complete. The hazard mitigation plan has targeted 21 hazard mitigation actions to be pursued during the 5-year performance period, and one (1) was added in 2022 for a total of 22. As of the reporting period, the following overall progress can be reported:

- 14 out of 22 actions (%) reported ongoing action toward completion.
- 4 out of 22 actions (%) reported being complete.
- 4 out of 22 actions (%) reported no action taken.

Purpose: The purpose of this report is to provide an annual update on the implementation of the action plan identified in the hazard mitigation plan. The objective is to ensure that there is a continuing and responsive planning process that will keep the hazard mitigation plan dynamic and responsive to the needs and capabilities of the City of *Oakland*. This report discusses the following:

- Hazard events that have occurred within the last year.
- Changes in risk exposure within the planning area.
- Mitigation success stories.
- Review of the action plan.
- Changes in capabilities that could impact plan implementation.
- Recommendations for changes/enhancement.

The Plan Maintenance Oversight Committee: It was determined through the plan’s development process that a designated committee, made up of City staff, would oversee maintenance of the plan. At a minimum, the plan maintenance oversight committee is to provide technical review and oversight on the development of the annual progress report. The committee will review and approve this progress report at its annual meeting held on July 1, 2025. For this reporting period, the plan maintenance oversight committee membership is as indicated in Table 1.

Table 1. Plan Maintenance Oversight Committee Members		
Name	Title	Department/Agency
Joe DeVries	Deputy City Administrator	City Administrator’s Office
Brentt Blaser	Emergency Manager	Alameda County Office of Emergency Services
Eduardo Alvarez	Spatial Analyst III	Information Technology
Heidi Benenson	Emergency Preparedness and Business Continuity Administrator	East Bay Municipal Utilities District
David Brannigan	Fire Chief	City of Piedmont
Michael Branson	Deputy City Attorney	City Attorney’s Office
Jean Casey	Project Manager	Department of Housing and Community Development
Veronika Cole	Emergency Planning Coordinator	Fire
Desmond DeMoss	Safety and Business Continuity Officer	Port of Oakland
Greg Elliot	Human Resources Manager	Human Resources Management – Risk Management
Terri Fashing	Watershed Management	Oakland Public Works
Jessica Feil	Emergency Services Manager	Fire

Daniel Findley	Planner III	Planning and Building
Melissa Francisco	Executive Assistance to the Director	Human Services
Daniel Hamilton	Sustainability Manager	City Administrator's Office – Sustainability and Resilience
Kristin Hathaway	Assistant Director	Public Works
Michael Hunt	Chief of Staff	Fire
Tess Kavanagh	Project Manager	Public Works
Laura Kaminski	Planning Manager	Planning and Building Department
Jacque Larrainzar	Program Analyst III	Race and Equity
Sean Maher	Citywide Communications and Engagement Director	City Administrator's Office
Anh Nguyen	Disability Access Coordinator	City Administrator's Office
Matthew Nichelini	Deputy Chief of Fire	Fire
Jason Patton	Senior Transportation Planner	Transportation
Jason Porter	Health and Safety Officer	East Bay Regional Parks District
Mark Romoser	Program Analyst I	City Administrator's Office
Javan Smith	Fire Marshall Assistant	Fire
Alethia Walker	Recreation Supervisor	Oakland Park, Recreation and Youth Development

Hazard Events within the Planning Area: During the reporting period, multiple hazard events in the planning area had a measurable impact on people or property. A summary of these events is as follows:

➤ **Tsunami Warning (12/5/2024)**

- On December 5, 2024, at 10:51 AM, the National Weather Service issued a Tsunami Warning covering California from Davenport, CA, North to Douglas/Lane Line, OR. The warning included the entire San Francisco Bay coastline. The warning was issued due to an earthquake with a preliminary magnitude of 7.3 located 45 miles southwest of Eureka, California. The incident prompted the activation of the Emergency Operations Center. However, at 11:54 AM, the Tsunami Warning was cancelled by the National Weather Service due to no tsunami observations.

➤ **Keller Fire (10/18 – 10/20/2024)**

- On Thursday, October 17, 2024, at 11 PM, the National Weather Service issued a Red Flag Warning for much of the Bay Area, including all of Alameda County. Based on the Red Flag Warning, the City of Oakland implemented the Red Flag Concept of Operations, implementing parking restrictions and closing parks. Additionally, CalFire prepositioned resources in Alameda County for increased response capabilities.

On Friday, October 18, at 1:28 PM, the first fire units were dispatched to the hills area near Keller Ave and Highway 580. By 1:45 PM, the Incident Commander requested mutual aid support from CalFire with air assets. Evacuation of 254 structures was ordered and stayed in place through October 20, 2024. The City and the Red Cross opened an overnight shelter, which was operated through October 20, 2024, and sheltered 8 residents.

The Oakland Fire Department was supported by OPD, Cal Fire, Alameda County Fire, Hayward, East Bay Regional Park District, Fremont, City of Alameda, Contra Costa Fire, San Francisco Fire Department, Berkeley Fire Department, ALCO Fire, San Ramon Valley, Falck Ambulance, Alameda County Sheriff's Office and the California Highway Patrol (CHP). The 5-Alarm fire burned approximately 15 acres and 1 home.

➤ **4th of July (7/4/24)**

- In consideration of Red Flag warning conditions and anticipation of high instances of mass congregation, fireworks, demonstrations, “sideshows” and street activity, the Emergency Operations Center was activated at a Level 3 on July 4, 2024. The activation was to create multi-agency coordination and support to address safety, security, and fire concerns, and the potential for a surge on the emergency medical system. This activation involved collaboration between Oakland Police, Fire, Public Works, & Parks, Recreation, and Youth Development. External partners included the California Highway Patrol and Falck Ambulance. Amateur radio operators and CERT (Community Emergency Response Team) members volunteered to support fire patrols in the hills. Areas of the City were closed to prevent illegal fireworks activity and address fire concerns. Parking enforcement was enhanced to promote clear roadways for first responders. The Oakland Fire Department provided safe collection points for residents to surrender unused fireworks.

➤ **9th Street Apartment Building Fire (8/14/24)**

- On August 14, 2024, at 5:30 AM, a 2-Alarm residential fire occurred at 9th and Madison Streets in Chinatown in a 31-unit building. Approximately 82 individuals were displaced. The Red Cross, Tzu Chi Foundation, Saint Vincent de Paul, and other community and government partners provided resources for the fire victims and supported overnight sheltering for 8 people through August 21, 2024. The Local Assistance Center (LAC) was opened on Friday, August 16th, at the Downtown Senior Center.

Changes in Risk Exposure in the Planning Area: *No changes in risk exposure within the planning area.*

Mitigation Success Stories:

Vegetation Removal Along Evacuation Routes

There are thousands of mature trees, many of which are hazardous, within striking distance of the roadways along a cumulative 17-mile project area that includes Skyline Boulevard between Shepherd Canyon Road and Keller Avenue, and sections of Shepherd Canyon Road, Joaquin Miller Road, Redwood Road, Keller Avenue, Grass Valley Road, and Golf Links Road between Skyline Boulevard and State Highway 13 or Interstate 580. In a major high-wind event, it is common for numerous large trees to fall and block roadways, requiring several hours to clear the debris. High wind events in this area are often linked to low humidity and red flag warnings, which set conditions for potential fire hazards. Fallen trees and limbs have the potential to block both evacuation and fire response.

In the summer of 2024, the City was awarded a \$1 million grant by the Department of Forestry and Fire Protection (Cal Fire) to fund its “Shepherd Canyon to Grass Valley Evacuation Route” project. ***The Cal Fire California Climate Investments (CCI) Wildfire Prevention Grant*** application was developed jointly by the City’s Public Works Department and the Oakland Fire Department to fund ongoing vegetation management and emergency planning work along key evacuation routes in the city’s high fire hazard severity zone. This project is supported by community groups, including Friends of Sausal Creek and Friends of Joaquin Miller Park. The anticipated timeline for the project’s completion is March 2030.

Expected outcomes for the project include:

- A substantial reduction in the number of dead and hazardous trees within striking distance of the public right-of-way within the project area.
- A substantial reduction in the chances of a wildfire crossing the evacuation route roadways by removing dead, hazardous trees in the undeveloped right of way.
- A substantial reduction in the ability of tree branches over the evacuating route roadways to carry fire.
- A substantial reduction in the fuel load along the evacuation routes, reducing fire intensity in the event of a wildfire evacuation.
- Woody biomass created by operations will be disposed of in ways to minimize greenhouse gas emissions. Logs will go to a green waste facility or be used as traffic barriers on nearby roads. Branches and brush will be chipped. No woody biomass will be burned or landfilled.

To date, the grant has supported the following accomplishments:

- 27 trees removed, 4 raised and miscellaneous clearing conducted on Skyline Boulevard between Joaquin Miller Road and Chabot Space and Science Center.
- 37 trees removed, 52 trees raised on Shepherd Canyon Road between Skyline Boulevard and Escher Drive.

This grant follows a 2021 Cal Fire grant of \$825,000, which funded the Skyline Boulevard Evacuation Corridor Project. The 2024 grant allows the City to continue and expand important work along arterial roads off of Skyline Boulevard, including hazardous tree removals on Shepard Canyon Road, Joaquin Miller Road and out to Grass Valley Road in the East Oakland Hills.

In November 2019, the City Council adopted a Council Resolution (No. 87940 C.M.S.) declaring Wildfire Prevention a top priority for the City of Oakland, and the City Administrator established a Wildfire Prevention Working Group. The group consists of multiple City Departments and has been successful in its mission to identify opportunities to reduce wildfire risk in areas of Oakland that the State of California identifies to be in a Very High Fire Hazard Zone.

Oakland Regains Compliance with the National Flood Insurance Program (NFIP)

Communities across the country build their flood management capabilities by participating in the National Flood Insurance Program (NFIP). The NFIP supports flood risk reduction before and after disasters. It helps reduce the socioeconomic impact of floods. It allows property owners and renters in participating communities to purchase federal flood insurance policies to recover financial losses after a flood. To participate in the NFIP, communities adopt and enforce floodplain management policies to reduce the effects of flooding. The NFIP works with communities required to adopt and enforce floodplain management regulations that help mitigate flooding effects.

The City of Oakland is now in full compliance with the National Flood Insurance Program (NFIP). In 2017, a Community Assistance Visit (CAV) audit conducted by FEMA identified five (5) property addresses in the City of Oakland that had floodplain violations, interfering with the City's ability to be in good standing with the program. After property owners addressed these issues, the City received communication from FEMA acknowledging that the City sufficiently resolved all deficiencies and violations identified during the CAV.

The City plans to update FEMA's Flood Insurance Rate Map for the Arroyo Viejo Creek Watershed. This is a joint project between the Planning and Building (PBD) and the Oakland Public Works (OPW) Departments. In addition, the City will pursue funding opportunities to revise FEMA's Flood Insurance Rate Maps for an additional eight watersheds in Oakland in the future.

Storm Drainage Master Plan - Mitigation of Flooding in East Oakland

The City of Oakland is developing the Storm Drainage Master Plan (SDMP), a comprehensive plan on how to best manage, improve, and extend the life of the City's storm drainage system. This SDMP will assess the condition and capacity of the existing system and then recommend a capital improvement program designed to improve future resiliency and water quality protection and to prevent flooding and creekbank erosion.

In 2022, the City completed a Drainage Study of the Empire Road and Bernhardt Drive Drainage Areas, an early SDMP deliverable. This study identified two storm drainage improvement projects in East Oakland designed to reduce neighborhood flooding: Empire Road Storm Drain Improvement and Bernhardt Drive Storm Drain Improvement. Both projects received approval for funding for engineering design from Oakland City Council as a part of the Fiscal Year (FY) 23-25 Capital Improvement Program (CIP), but the projects were not funded as the City did not sell bonds as planned. City staff are requesting additional Measure U funding for both projects through the FY 25-27 budget process.

The Oakland Alameda Adaptation Committee (OAAC) is a coalition of shoreline communities and stakeholders working to accelerate sea level rise adaptation, protect and restore water quality, habitat and recreation and promote community resilience. The Committee submitted a FEMA Building Resilient Infrastructure and Communities (BRIC) grant to support the Empire Road project. FEMA and California

Office of Emergency Services stated that they “recommended the project for further review”. The OAAC is waiting for an update which may be provided by mid-2025. Changes in federal administration may impact this funding source.

The City’s SDMP identified other flood risk reduction projects as part of a study to develop and prioritize multi-benefit green stormwater infrastructure (GSI) projects throughout Oakland. The plan identified a potential flood risk reduction priority project that would add a flood detention basin in Coliseum Gardens Park and improve storm drainpipe capacity to reduce flood risk in a drainage area bound by 66th Avenue, Foothill Boulevard, 73rd Avenue, and San Leandro Street. This potential project requires further technical study to determine feasibility and will be scored and assigned a priority rating as part of the SDMP project using the City’s equity-focused project prioritization system. If prioritized and if required matching funds are secured, WSMD will pursue a FEMA Hazard Mitigation Assistance (HMA) grant to fund a portion of the project.

As noted last year, a project was identified in Raimondi Park in West Oakland that would add bioretention GSI facilities and other water quality improvement systems around the park to clean stormwater runoff and meet the City’s stormwater permit compliance requirements. This proposed project includes a flood control component estimated to cost approximately \$24 million.

Review of the Action Plan: Table 2 reviews the action plan, reporting the status of each action. Reviewers of this report should refer to the hazard mitigation plan for more detailed descriptions of each action and the prioritization process.

Table 2. Action Plan Matrix

Action #O-1: Safer Housing for Oakland: Soft Story Apartment Retrofit Program—Under this action, the City will invest in and seek grant funding to support the seismic structural retrofit of the over 22,000 identified soft-story structures within the city.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
No	New 3-year award pending	Medium	The Safer Housing for Oakland Program has been on hold since 2022, awaiting new funding to be awarded by FEMA and Cal OES. The two pending Hazard Mitigation Grant Program (HMGP) applications could provide approximately \$13M to reimburse an estimated 60-80 soft-story building owners with up to 100% of the cost of retrofitting their building for earthquake safety over a 3-year period. Funding expected in 2024 has been paused and the anticipated release date is unknown.	✓

Action #O-2: Continue the Earthquake Safe Homes Program—The Earthquake-Safe Homes

Program will have three primary components: (1) re-establishing a single-family seismic retrofit program previously funded through the City's Redevelopment Agency; (2) leveraging the City's existing community outreach network, current pipeline of homes in need of retrofit, and existing housing rehab intake process to solicit and process applications expeditiously; (3) deploying financial assistance to homeowners to complete code-compliant seismic retrofits. This action will be conducted in coordination with O-1.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
No	Completed	Medium	This item has been completed. The Earthquake Safe Homes Program was a one to four-unit seismic program that was completed in 2022. Housing and Community Development does not plan to apply for additional funds for that program during the Action Plan period.	✓

Action #O-3: Green Stormwater Infrastructure Program—The City will implement its Green Stormwater Infrastructure (GSI) Plan to include GSI where feasible in public capital projects such as streetscape renovations, park projects, and parking lot retrofits, among others. GSI is a term for engineered stormwater detention systems that are designed to capture specific runoff volumes of various design storms and remove stormwater pollutants. Examples include bioretention areas (rain gardens), engineered tree well filters, green roofs, flow-through planters, and permeable pavement.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	Ongoing	High	The City will implement its Green Stormwater Infrastructure (GSI) Plan to include GSI where feasible in public capital projects such as streetscape renovations, park projects, and parking lot retrofits, among others. GSI refers to engineered stormwater detention systems designed to capture stormwater runoff and remove stormwater pollutants. Examples include bioretention areas (rain gardens), engineered tree well filters, green roofs, flow-through planters, and permeable pavement. Public (City) project managers review their projects to determine if GSI can be added. In fiscal year 2023-2024, the most recent period for which information is available, eight City projects are being evaluated for GSI feasibility:	O

			<ul style="list-style-type: none"> • One project currently in Design Phase is adding pervious pavement. • One project in Design Phase is adding bioretention facilities to treat on-site stormwater. • One additional project currently in construction includes on-site bioretention as well. <p>The Watershed and Stormwater Management Division (WSMD) continues to work on a conceptual project to construct bioretention facilities around Raimondi Park in West Oakland (see O-4 below and the success story above).</p> <p>The City Municipal Regional Stormwater Permit (MRP) requires stormwater treatment for certain projects. The MRP also requires the City to construct additional GSI to treat a total of five impervious acres by June 30, 2027. A 2024 funding request for the Raimondi Park Green Stormwater Infrastructure Project was not successful, however, staff are continuing to look for funding opportunities for the project.</p> <p>The City's Public Works Capital Improvement Project team coordinates with the Watershed and Stormwater Management team to implement green infrastructure within CIP projects as required.</p> <p>The City will complete a Sanitary Sewer Masterplan in the Summer of 2025.</p>	
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Action #O-4: Identify feasible and cost-effective stormwater infrastructure projects that have been identified in the City’s capital improvement program and/or Storm Drain Master Plan, that would be good target projects for which to pursue funding under FEMA’s Hazard Mitigation Assistance (HMA) grant programs.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	Ongoing	High	<p>The City’s Storm Drainage Master Plan (SDMP) project identified flood risk reduction projects as part of a study to develop and prioritize multi-benefit green stormwater infrastructure (GSI) projects throughout Oakland. In the reporting period, this included:</p> <ul style="list-style-type: none"> Two projects (Empire Road Storm Drain Improvement and Bernhardt Drive Storm Drain Improvement) have been approved by City Council during the 23-24 Capital Improvement Program. WSMD will seek Measure U funding during the FY 25-27. Additional funding for the Empire Road project is being sought by the Oakland Alameda Adaptation Committee (OAAC) through the BRIC program. Identification of a priority flood risk reduction project, adding a flood detention basin in Coliseum Gardens Park and improving storm drainpipe capacity. (This project requires further technical study to determine feasibility.) <p>For additional details, please see the Mitigation Success Story in this 2025 Annual LHMP Update.</p> <p>All Public Works capital improvement projects are evaluated for Stormwater code compliance as part of the Planning and Building permit approval process. The 23-25FY CIP was completed last year and a new selection process will be opened next year.</p>	O

Action #O-5: Defensible Space Vegetation Program to manage wildfire hazards; preparation of a Vegetation Management Plan— This is an ongoing program to implement the defensible space vegetation program that includes the clearing or thinning of non-fire resistive vegetation within 10 feet of access and evacuation roads and routes to critical facilities, or all non-native species (such as eucalyptus and pine, but not necessarily oaks) within 10 feet of access and evacuation roads and routes to critical facilities. Clearing a 30-foot fuel reduction zone around all buildings/structures. Additional space may be required based on site conditions and/or topography.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	Ongoing	High	<p>In the summer of 2024, the City was awarded a \$1 Million grant by the Department of Forestry and Fire Protection (Cal Fire) to fund its “Shepherd Canyon to Grass Valley Evacuation Route” project. The application was developed jointly Cal Fire California Climate Investments (CCI) Wildfire Prevention Grant by the City’s Public Works Department and the Oakland Fire Department to fund ongoing vegetation management and emergency planning work along key evacuation routes in the city’s high fire hazard severity zone. This project is supported by community groups including Friends of Sausal Creek and Friends of Joaquin Miller Park. The anticipated timeline for the project's completion is March 2030. For additional details, please see the mitigation success story above.</p> <p>Oakland is one of few local jurisdictions in California which conducts large scale fire inspections of public and private property. During the 2024 vegetation inspection year, the Oakland Fire Department completed 23,860 with 90% compliancy. This is the fourth year in a row in which 90% compliancy has been achieved. The City deploys one of the largest herds of goats in the state which graze over 1,300 acres including hazardous combustible fuels that are difficult to reach due to steep terrain or other factors. The City has a 10-year vegetation mitigation plan funded through a wildfire prevention tax generating nearly \$3 million annually for the next 20 years. The tax funds critical fuel mitigation work in the most high-risk areas of the Oakland hills.</p>	O

Action #O-6: Continuity of Operations Emergency Planning—The Oakland Fire Department Emergency Management Services Division will continue to collect Continuity of Operations Plans (COOPs) from each department. Each department will develop a Continuity of Operations Plan that includes backup and storage of vital records and other essential electronic files, such as plans, and backup procedures to pay employees and vendors if normal finance department operations are disrupted.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	June 2025	Low	Two departments have completed their COOPs. The Oakland Fire Department Emergency Management Services Division will continue to collect COOPS from each department.	O

Action #O-7: Implement the City’s Energy Assurance Plan, which is a key part of the City’s emergency and recovery planning efforts. Components of the plan to be implemented under this strategy are:

- Energy Assessment of Key Facilities (i.e., pre-wire for rapid connection and provision of supplemental backup generators for sustained re-occupation and continuing use of City Hall, Police Administration Building, etc.)
- Community Charging Stations
- Energy Backup at Emergency Shelters and Communication Hubs: (1) Identify methods to connect portable generators of unknown sizes (the City will not know which size is available in advance) to existing building infrastructure at shelter sites such as recreation centers and at communication hubs such as libraries that are near shelter sites; (2) Create electric load management strategies that disaster recovery teams can implement to operate equipment in a clear order of priority to power their sites with portable generator of various sizes; (3) Practice the load management strategies. The City will develop the Energy Backup plan in coordination with PG&E.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	2030	Medium	<p>Oakland continued its ongoing inventory of energy assessments for key City facilities, largely through consultation and involvement in the Ava Critical Municipal Facilities program. This provided analysis and energy assessment (solar and energy storage) for 12 city facilities. No improvements were constructed during the period as the program lost its construction partner and is being restructured by Ava for re-launch later in 2025.</p> <p>Public Works Project Managers coordinate with the City's Sustainability Team to implement emergency power features within the Capital Improvement Program. PGM is seeking funding for FY 27 (in the proposed FY25-27 CIP Budget) to conduct Facilities conditions assessments. projects when it is feasible.</p>	O

Action #O-8: Assessment and retrofits of critical facilities & infrastructure—Assessment and retrofit plans of critical facilities are complete, but funding is needed to retrofit or replace critical lifeline facilities and/or their backup facilities that are shown to be vulnerable to damage in natural disasters.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	Ongoing	Medium	<p>Oakland Public Works Project and Grant Management Division is seeking funding for FY 27 (in the proposed FY25-27 CIP Budget) to conduct Facilities conditions assessments. Funding that had been allocated in the current fiscal year for Facility Condition Assessments for all City Facilities was reallocated to cover the City's general fund budget shortfalls.</p>	O

Action #0-9: Continue to maintain the City's good standing and compliance under the National Flood Insurance Program (NFIP) through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:

- Enforce the flood damage prevention ordinance.
- Participate in floodplain identification and mapping updates.
- Provide public assistance/information on floodplain requirements and impacts.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	Ongoing	High	<p>The City has resolved concerns raised by a Community Assistance Visit (CAV) conducted by FEMA. The purpose of the CAV audit was to ensure communities are in full compliance with the National Flood Insurance Program (NFIP) regulations, mitigating future flood risks. The CAV audit identified five (5) property addresses in the City of Oakland that had floodplain violations. The City received confirmation from FEMA that their audit concerns had been addressed. For additional information, see the success story above.</p> <p>The City plans to update FEMA's Flood Insurance Rate Map for the Arroyo Viejo Creek Watershed. This is a joint project between the Planning and Building (PBD) and the Oakland Public Works (OPW) Departments. In addition, the City will pursue funding opportunities to revise FEMA's Flood Insurance Rate Maps for an additional eight watersheds in Oakland in the future.</p>	O

Action #O-10: Create a comprehensive master plan for three city facilities to reliably serve as resilience hubs, or places of respite during hazard events.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	2030	Medium	Oakland made additional progress on resilience improvements to multiple facilities as part of its effort to establish Resilience Hubs. Resilience improvements have been funded or completed in multiple buildings, including the Arroyo Viejo Recreation Center, Elmhurst Library, Temescal Library, Main Library, and Downtown Oakland Senior Center. City staff have created draft Resilience Hub guidelines as a part of an interdepartmental process. Lincoln Community Center is slated to begin construction as the Lincoln Resilience Hub in Q2 2025. The Americans with Disabilities Act (ADA) Programs Division has provided technical assistance and review of the CIP plans. A community Resilience Hub design process will occur in April 2025 to further Resilience Hub site selection in Deep East Oakland.	O

Action #O-11: Develop an “integrated preparedness plan” (IPP) that will consider the range of preparedness activities within the Integrated Preparedness Cycle, and, along with the guidance provided by senior leaders, identify and set preparedness priorities, and schedule preparedness activities for the multi-year integrated preparedness plan.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	Spring 2025	Medium	ESMD staff have completed a draft 2025-2027 IPP. This draft includes reduced activities and goals based on expected political, economic, and logistical conditions. The plan will be published to internal stakeholders in the Spring of 2025.	✓

Action #O-12: To support implementation of and future updates to the City’s local hazard mitigation plan, Safety Element, and Environmental Justice Element, utilize the best available local data to identify racial disparities in the City of Oakland that can be used by the City to rank risk and prioritize mitigation strategies that incorporate a racial equity lens.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	2026	High	<p>The City benefits from two efforts by City departments to maintain datasets related to racial disparities: the Oakland Department of Transportation (OakDOT) Geographic Equity Toolbox and the Department of Race and Equity (DRE) Equity Indicators Report.</p> <p>The OakDOT Geographic Equity Toolbox contains five topic areas, visualized via a multi-tab online interactive map: Priority Neighborhoods, Race and Ethnicity, Language, Displacement and Gentrification, and Pollution.</p> <p>The Priority Neighborhoods dataset was updated in October 2024. This GIS dataset assigns each census tract in Oakland a numerical priority value and a quantile from lowest and highest, as determined by the following seven weighted demographic factors (with weights in brackets "[XX%]"): People of Color [25%]; Low-income Households (<50% of Area Median Income for a 4-person household) [25%]; People with Disability [10%]; Seniors 65 Years and Over [10%];</p>	O

			<p>Single Parent Families [10%]; Severely Rent-Burdened Households [10%]; Low Educational Attainment (less than a bachelor's degree) [10%].</p> <p>DRE staff supported Planning to complete a racial equity analysis and an Environmental Justice Map that has been helpful to other City departments to analyze the impacts of hazards.</p> <p>DRE staff are currently updating the 2018 Equity Indicators Report, which provides baseline data related to racial disparities in the City of Oakland. DRE staff are supporting the development of Citywide equity-based data collection standards and performance metrics for plans, policies and procedures that impact Oakland communities for at least 5 years.</p>	
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Action #O-13: Maritime Terminal Study on Liquefaction Potential—The Port of Oakland is located in a geographic area highly prone to liquefaction and, as a result, infrastructure damage from seismic activity. The Port has determined that in order to mitigate risk and prepare for imminent seismic events, it is necessary to conduct a liquefaction study at the marine terminals. This study will evaluate the liquefaction potential throughout the marine terminals at the Port of Oakland and its effects on Port infrastructure. The study will identify areas and facilities most at risk for liquefaction and outline a plan for mitigation, retrofit, and emergency response.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
No	>5 Years	Low	Currently this is not included in the Port of Oakland 5-year plan.	X

Action #O-14: Middle Harbor Shoreline Park dike repair—The Middle Harbor Shoreline Park is owned by the Port of Oakland and maintained by the East Bay Regional Parks District. The park is located adjacent to the southwest corner of the Port of Oakland, next to the Oakland International Container Terminal. Over the past years, the existing dike facing the Oakland Inner Harbor channel at the park has been slowly sliding into the channel and is now significantly lower than before. Initial site investigation and assumptions indicate that this could be a result of channel dredging undercutting the dike or seismic activity from the recent earthquake in the Sonoma Valley. Before construction activities can occur to repair the seawall, a geotechnical study will need to be conducted to determine the source of slipping. The study will identify a design option that can be implemented to fix/repair the dike. The park provides an open space and Bay viewing access for the public.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
No	>5 Years	Low	Currently, this is not included in the Port of Oakland 5-year plan.	X

Action #O-15: Maritime Intelligent Transportation System—The Intelligent Transportation System project is meant to improve Port of Oakland operation efficiencies, provide congestion relief, and support hazard mitigation. The project would allow Port staff to view real-time traffic through CCTV video cameras and provide advanced traffic information to travelers to the Port at specific gateways and outside the Port. The project would also establish improved transportation communication with the City of Oakland and Caltrans District 4 as well as collect data for future improvements.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	2024	High	IT systems are currently being tested.	✓

Action #O-16: Maritime Area Seismic Monitors—The Port of Oakland’s Seaport terminals are generally constructed of a pile-supported wharf structure with a riprap bulkhead retaining the soil at the back of the terminals. The Port proposes to implement additional seismic monitoring equipment at Berths 23-26 and Berths 57-58, as well as repair existing equipment at Berths 35-37. Port personnel have identified that there is likely to be difficulty in assessing potential damage to its terminals after a major earthquake, which is an essential step before a terminal can resume operations, due to the limited amount of functioning seismic monitoring equipment at the Port of Oakland’s Seaport terminals. The proposed installations will fill gaps in the current monitoring system by providing a more complete picture at Inner Harbor, Middle Harbor and Outer Harbor locations. The proposed installations will also allow Port engineers to focus on areas that are most susceptible to damage during inspection and proceed with any needed repair to resume operations in the timeliest manner.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
No	>5 Years	Low	Currently this is not included in the Port of Oakland 5-year plan.	X

Action #O-17: Sea-Level Rise Vulnerability and Assessment Improvement Plan—The Port of Oakland’s Sea-Level Rise Vulnerability and Assessment Improvement Plan will assess the potential effects of sea-level rise on maritime facilities. The study will assess facilities Port-wide for sea-level rise vulnerability and develop an implementation plan for near-term and long-term strategies to address the potential impacts. The study will analyze the need for infrastructure such as sea walls, wharf improvements, and changes in port operations. In addition, the study will help to establish design standards.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	2029	High	<p>Oakland has completed two sea level rise vulnerability assessments: 1) the General Plan Safety Element Climate Vulnerability Assessment, completed in 2023, and 2) the Oakland Alameda Adaptation Committee's Estuary Sea Level Rise Vulnerability Assessment, completed in draft form in April 2025.</p> <p>A comprehensive plan to provide improvement to assets associated with Flood Protection is due to be part of the City's Stormwater Management Plan (estimated completion in 2027) and its Regional Shoreline Adaptation Plan, set to be complete in 2030.</p>	O

Action #O-18: Tree Planning—Implement the component of the City’s Storm Drain Master Plan that looks to quantify the stormwater capture and pollutant benefit removal of tree planting and modeling where in the city stormwater runoff reduction could be achieved through increased tree canopy. Coordinate with the Tree Services Division to make sure it corresponds to the Urban Forestry Master Plan.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	Ongoing	High	The final Storm Drainage Master Plan (SDMP) will go to the City Council in 2027. As of March 2025, SDMP Task 5.4 -Incorporate Tree Canopy Modeling – is ~50% complete. This task will quantify the tree species suitable for different areas in Oakland (consistent with the City’s Urban Forest Plan and street trees requirements) and will estimate the respective tree canopy widths. This information will be used to assign appropriate impervious area reduction factors based on mature tree canopy assumptions. A tree canopy layer will be modeled and will have the effect of reducing the impervious areas in the City’s hydrologic model. The resultant watershed runoff will be quantified in the hydraulic model. The reduced runoff will be compared to the runoff without tree canopies. The purpose of this task is to determine the extent to which a healthy and mature tree canopy in Oakland can reduce effective impervious surfaces in the City and reduce the volume and velocity of stormwater that must be serviced by the City’s storm drainage system.	O

Action #O-19: Reestablish Full Compliance and Good Standing Under the NFIP—The City will coordinate with FEMA Region IX and Department of Water Resources (DWR) to address all identified issues from the open September 2017 Community Assistance Visit (CAV) to reestablish the City’s full compliance and good standing under the NFIP

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	November 2025	High	A draft compliant floodplain ordinance was submitted to FEMA for review and approval.	O

Action #O-20: Update Sea Level Rise Road Map—Update the City’s 2017 Sea Level Rise Road Map to reflect the best and most up-to-date climate science with relevant policies and regulations, and vulnerability and risk assessments conducted to date.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
No	TBD	High	Based on new requirements under State law (SB 272), the City will no longer prepare and update the Sea Level Rise Road Map. This planning effort will be replaced by the Regional Shoreline Adaptation Plan (RSAP), to be reviewed and approved by the Bay Conservation and Development Commission.	X

Action #O-21: Vulnerability Assessment and Adaptation Plan—In conjunction with the update or adoption of the local hazard mitigation plan, complete a citywide vulnerability assessment and comprehensive adaptation plan, addressing climate risks using forward-looking projections and including community stakeholder engagement. Implement key recommendations of these plans by 2025 to address major climate risks in frontline communities first and update these documents every 5 years with evolving climate and risk projections and adaptation best practices.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	2030	High	As discussed in Items O-17 and O-20, the City's vulnerability has been thoroughly analyzed in two reports as part of the General Plan Safety Element and the Oakland Alameda Adaptation Committee projects. Plans for mitigation and adaptation projects are part of the Regional Shoreline Adaptation Planning process now required under SB 272.	O

Action #O-22: Equity Analysis – All aspects of the plan will be revisited when the City possesses more data about barriers to access to services that need to be addressed.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	2026	High	<p>The 2021 – 2026 LHMP included a focus on equity and was developed with support from the Department of Race and Equity (DRE) and the Americans with Disabilities Act (ADA) Programs Division. DRE provided technical assistance as Oakland has engaged in other planning that overlaps with the LHMP, including the General Plan, General Plan Safety Element, General Plan Environmental Justice Element, annexes of the Emergency Operations Plan, and Public Works Capital Improvement Program. DRE has supported accompanying Racial Equity Impact Assessments (REIAs), inclusive engagement and racial equity analysis using the best available Census data.</p> <p>This year the City will develop a renewed 2026 LHMP, which will expand on the equity work of the 2021 LHMP and will include a Whole Communities Team, comprised of DRE and ADA Programs staff, to support the LHMP process and LHMP content. DRE staff have continued to advise on the application of an equity framework and tools throughout the public outreach process, risk evaluation and mitigation action development. The Whole Communities Team will participate in the 2026 LHMP Contractor selection process.</p> <p>ADA Programs Division staff provided EMSD with technical support including connections with other jurisdictions to learn more about best practices in incorporating an AFN working group.</p>	O

- a. Items addressed to determine action status:
 Was any element of the action carried out during the reporting period?
 If no action was completed, why?
 Is the timeline for implementation for the action still appropriate?
 If the action was completed, does it need to be changed or removed from the action plan?
- b. Completion status legend:
 ✓ = Project Completed
 O = Action ongoing toward completion
 X = No progress at this time

New Actions to Include in the Plan: *(List any new actions added to the action plan; see Chapter 21 of the hazard mitigation plan for description of the information to be provided).*

Table 3. New Actions to Add to Action Plan						
Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline	Implementation Priority	Grant Pursuit Priority

Action #: No new actions suggested this year.

Hazards Mitigated:

_____	_____	_____	_____	_____	_____	_____
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Changes That May Impact Implementation of the Plan:

No changes to report.

Recommendations for Changes or Enhancements: Based on the review of this report by the plan maintenance oversight committee, the following recommendations will be noted for future updates or revisions to the plan:

Regarding Action #O-20: Update Sea Level Rise Map:

As based on new requirements under State law (SB 272), the City will no longer prepare and update the Sea Level Rise Road Map, it is recommended that this action item be removed or revised as a part of the development of the 2026 LHMP. This planning effort will be replaced by the Regional Shoreline Adaptation Plan (RSAP), to be reviewed and approved by the Bay Conservation and Development Commission.

The following changes were made based on feedback received as a part of the 2024 Annual LHMP Update.

- **Requested Change in Wording of Action Item #O-6 Continuity of Operations Emergency Planning:**

To help clarify responsibilities related to the implementation of Action Item #O-6, Emergency Management Services Division staff is requesting a revision of the wording.

Revised Wording for Action Item #O-6:

Action #O-6: Continuity of Operations Emergency Planning—The Oakland Fire Department Emergency Management Services Division will continue to collect Continuity of Operations Plans from each department. Each department will develop a Continuity of Operations Plan that includes backup and storage of vital records and other essential electronic files, such as plans, and backup procedures to pay employees and vendors if normal finance department operations are disrupted.

- **Changes in funding availability for seismic retrofits for earthquake safety:** The Earthquake Safe Homes Program was a 1–4-unit seismic program that was completed in 2022. Housing and Community Development staff does not plan to apply for additional funds for that program during the Action Plan period and is requesting that Action Item #O-2 be completed from the Action Plan.

Public review notice: *The contents of this report are considered to be public knowledge and have been prepared for total public disclosure. Copies of the report have been provided to the City of Oakland City Council and to local media outlets. The report is posted on the City of Oakland Hazard Mitigation Plan website. Any questions or comments regarding the contents of this report should be directed to:*

Local Hazard Mitigation Planners

emergencyplanning@oaklandca.gov