

OAKLAND LOCAL HAZARD MITIGATION PLAN PROGRESS REPORT

2023-2024

Reporting Period: *July 2023-July 2024*

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 on 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 prior to July 2026. As of this reporting period, the performance period for this plan is considered to be 60% complete. The hazard mitigation plan has targeted 21 hazard mitigation actions to be pursued during the 5-year performance period with one being added in 2022 for a total of 22. As of the reporting period, the following overall progress can be reported:

- 17 out of 22 actions (%) reported ongoing action toward completion.
- 2 out of 22 actions (%) reported being complete.
- 3 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 approved this progress report at its annual meeting held on June 4, 2024. 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
Michael Branson	Deputy City Attorney	City Attorney’s Office
Felicia Bryant	Fire Marshall	Fire – Fire Prevention
Jean Casey	Project Management	Housing and Community Development
Veronika Cole	Emergency Planning Coordinator	Fire – Emergency Management Services Division
Desmond DeMoss	Safety and Business Continuity Officer	Port of Oakland
Greg Elliot	Human Resources Manager	Human Resources Management
Terri Fashing	Watershed Program Supervisor	Public Works
Jessica Feil	Emergency Services Manager	Fire – Emergency Management Services Division
Daniel Findley	Planner III	Planning and Building

Felicia Gotthelf	Management Assistant	Parks, Recreation and Youth Development
Daniel Hamilton	Sustainability and Resilience Director	City Administrator's Office – Sustainability and Resilience
Kristin Hathaway	Assistant Director	Public Works
Shayna Hirshfield-Gold	Climate Program Manager	City Administrator's Office – Sustainability and Resilience
Michael Hunt	Chief of Staff	Fire
Laura Kaminski	Planning Manager	Planning and Building
Tess Kavanagh	Capital Improvement Project Coordinator	Public Works
Jacque Larrainzar	Program Analyst III	Race and Equity
Jimmy Mach	Civil Principal Engineer	Public Works
Sean Maher	Project Manager III	City Administrator's Office
Ed Manasse	Deputy Director / City Planner	Planning and Building
Scott Means	Director of Human Services	Human Services
David Moore	Tree Supervisor II	Public Works
Anh Nguyen	Disability Access Coordinator	City Administrator's Office
Matthew Nichelini	Deputy Chief	Fire
Jason Patton	Senior Transportation Planner	Transportation
Micaela Pronio	Spatial Data Analyst III	Planning and Building
Christine Reed	Project & Grant Management Division Manager	Public Works
Julian Ware	Spatial Data Administrator	Information Technology

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

➤ **4th of July**

- In anticipation of high instances of mass congregation, fireworks, demonstrations, “side shows” and street activity the Emergency Operations Center was activated at a Level 3 on July 4, 2023. 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. Grizzly Peak and parts of Skyline Boulevard were closed, patrols of areas of wildland-urban interface (WUI) in the Oakland Hills increased and parking enforcement was enhanced to ensure clear pathways for emergency responders.

➤ **Power Outage Computer Aided Dispatch (CAD) Disruption**

- On July 6, 2023, the area surrounding 7101 Edgewater Drive, Oakland suffered from a power outage. Multiple systems failed preventing back-up power. Once the UPS power was exhausted, the CAD servers crashed due to immediate power loss. Several server files were corrupted preventing CAD relaunch upon power restoration. The Oakland Police Department (OPD) and the Oakland Fire Department (OFD) had to resort to several manual processes due to the loss of functionality. OFD was able to respond to all calls. OPD limited officer dispatch to priority one calls. The City’s Information Technology Department (ITD) department restored the server and future mitigation needs were identified and addressed.

➤ **2023 Winter Storm**

- On January 31 to February 1, 2024, the City of Oakland responded to a weather report predicting moderate to heavy rain (2-3”) and gusty winds of 35-45 mph. Multiple City departments coordinated efforts to maintain situational awareness and the health and safety of Oakland residents and City staff. The City opened Emergency Respite Centers at Jack London Aquatic Center and the East Oakland Sports Center to provide overnight shelter. Three individuals were provided with overnight shelter and a fourth was provided with a meal.

➤ **Water quality impacts from Unhoused Community / Public Health Risk**

- Displaced individuals were supported with traditional encampment resources and/or offered other housing options. Inoperable vehicles were removed by residents. The City cleaned 600 linear feet with follow-on contract support of micro cleaning. Post operation, the area that was cleaned scored category A – not littered per the California State Water Resources Control Board methodology. Impacted storm drains were thoroughly cleaned.

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

Mitigation Success Stories:

Vegetation Management Plan (VMP) Adoption and Related Activities to Prevent Wildfires: In May 2024, the City of Oakland formally adopted a 10-year vegetation management plan. Adoption of the VMP will set in motion an actionable timeline to reduce fire hazards.

The VMP covers more than 1,900 acres of City property plus treatment areas along approximately 300 miles of roadside. Proposed vegetation management activities conducted on these lands will include goat grazing on nine sites covering approximately 1,300 acres, vegetation clearing along 16 roadways (58 miles), monitoring for vegetation clearance along approximately 300 miles of road within the High and Very High Fire Hazard Severity Zones (16.5 square miles), and brush clearance on critical City-owned properties (approximately 332 acres). The Plan and Environmental Impact Report (EIR) evaluate these and additional vegetation management practices to reduce fire hazards.

The VMP, which includes a robust environmental impact analysis, meets OFD's stated goals of reducing wildfire hazard on city-owned land and along critical access/egress routes, thereby reducing the likelihood of ignitions and extreme fire behavior. This will enhance public and firefighter safety, avoid or minimize impacts to natural resources, and contribute to regional efforts to reduce wildfire hazard in the Oakland hills and beyond. The legislative item is scheduled for a hearing at a May 14, 2024 Public Safety Committee and will go before the full City Council on May 21, 2024.

Completing the VMP process stands to improve the City's approach to wildfire prevention, and thus mitigates the financial risk of the City should another major fire occur. The economic loss from the 1991 Oakland Hills fire was estimated at \$1.5 billion (\$2.99 billion in 2023 dollars)

Poorly managed vegetation can have negative impacts on the environment whether that is wildfires, soil erosion, or water quality issues. These impacts not only affect humans but also wildlife habitats. By taking the right approach, cities can help to create natural, diverse, and sustaining ecosystems, helping to reduce wildlife habitat fragmentation and allow species to be geographically diverse.

OFD has one of the most comprehensive fire prevention programs in California. The Department directly inspects 20,000 private and city owned parcels. OFD conducts year-round fuel mitigation on thousands of acres in the hills, executes many miles of roadside clearing projects, and deploys one of the largest herd of goats in the state to mitigate and remove hard to reach combustible fuels.

Continued Management of Wildfire Risk as a Citywide Priority: The potential risk of wildfires impacting communities in, and adjacent to, forested areas is at an all-time high. In the last few years, California has experienced the deadliest and most destructive wildfires in its history. Oakland's history of wildfires is no secret in California; the Oakland firestorm of 1991 was one of the largest urban wildfires.

On November 19, 2019, the City Council adopted Resolution No. 87940 C.M.S., declaring Wildfire Prevention a top priority for the City of Oakland. The City established a Wildfire Prevention Working Group that has been meeting regularly since 2020 to both address short term needs and to continue various long-term strategy planning and implementation activities. The Wildfire Prevention Working Group consists of the following Departments: OFD, OPW, Department of Transportation (OakDOT), Bureau of Planning and Building (P&B), OPD and the City Administrator's Office (as convener). Additionally, City Council staff serving constituents in the High Fire Hazard Zones in the hill areas were invited to attend. Under the guidance of the City Administrator's Office, this interdepartmental group has successfully completed community-driven safety projects and launched new initiatives requiring an enhanced level of collaboration between various departments and, in some cases, neighboring jurisdictions.

During the 2023-2024 reporting period, successful inter-departmental coordination included:

- Collaboration with the California Department of Forestry and Fire Protection (CAL FIRE) through a Memorandum of Understanding. Through this collaboration, CalFire is clearing vegetation with a focus on protecting paved roads, buildings, fences, active recreation areas and other infrastructure. The crews have removed ladder fuels and reduced overall vegetative fuel loads in these areas.
- The closure of Grizzley Peak Boulevard during the 4th of July Holiday. The 24 to 48-hour closure is a collaborative safety effort by staff from the cities of Oakland and Berkeley and the East Bay Regional Park District. The closure is done so to prevent large crowds from gathering along that several mile corridor during the holiday period. Historically, large crowds gathering to watch or set off fireworks has caused fires, medical incidents and the congestion has prevented emergency responders from being able to navigate the hillside corridor.
- The maintenance of barriers and chained logs along Grizzley Peak and Skyline Blvd that were installed in 2020 to prevent people from gathering in large groups, blocking emergency access, and potentially sparking fires in the Oakland and Berkeley hills.
- Enhanced coordination with Department of Transportation and Oakland Police to enforce parking restrictions on Red Flag Days.

Each of these efforts have broad public support, and has led to greater levels of partnership, including strong community support for the adoption of the VMP described above.

Municipal Resilience Hub at Lincoln Community Center: The City progressed significantly in the establishment of a Municipal Resilience Hub at Lincoln Community Center. This project was awarded a grant from the California Department of Food and Agriculture in the amount of \$9.25 million during the reporting period. The project is also funded through local Measure KK and Measure U, California Proposition 68 and a Federal earmark from Housing and Urban Development. Currently, the project is in the building permit review process and will be out for bid and award as early as Summer of 2024. The earliest anticipated date for the groundbreaking of the new Lincoln Recreation Center will be Fall of 2024.

Resilience features will mitigate future hazards and serve the estimated 1,000 participants who use the facility daily. The facility will be an asset that could be used as an Emergency Respite Center or as a place for the community to access resources and supplies. Features will include:

- Cooling, heating and cleaner air (mitigating extreme heat, winter weather and poor air quality days)
- Backup power from solar panels for charging phones and medical devices during power outages
- Commercial kitchen, showers and broadband
- Low-water landscaping, bio-filtration systems and permeable paving
- Partnerships with community-based organizations invested in building community resilience and emergency preparedness.

The project is the successful result of a partnership between multiple City agencies and Community Based Organizations. The day-to-day resilience building activities at the Municipal Resilience Hub will be developed and guided in partnership with community members and community-based organizations.

Stormwater Bioretention Conceptual Project: The OPW Watershed and Stormwater Management Division (WSMD) developed a conceptual project to construct bioretention facilities around Raimondi Park in West Oakland. If this project can be prioritized, funded, and constructed it will treat 4 acres of impervious roadway with Green Stormwater Infrastructure (bioretention). This project would also remove PCBs from stormwater from a 43-acre drainage area using high-flow biofilters.

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 to 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 (2024-2027)	Medium	The Safer Housing for Oakland Program has been on hold since 2022, awaiting new funding to be awarded by FEMA and CalOES. The next award is expected to be provided in the second half of 2024, which would 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.	✓

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	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 and is requesting that this item be completed from the Action Plan.	✓

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	Public (City) project managers review their projects to determine if GSI can be added. During the reporting period: <ul style="list-style-type: none"> • Eight City projects are being evaluated for GSI feasibility • One project currently in Design Phase is adding pervious pavement • One project in Design Phase is adding bioretention facilities to treat on-site stormwater 	O

			<ul style="list-style-type: none"> One additional project currently in construction includes on-site bioretention as well <p>The WSMD developed a conceptual project to construct bioretention facilities around Raimondi Park in West Oakland. (See success story for more details.)</p> <p>The City must construct projects not already required to add GSI that treat a total of five acres of impervious area with GSI by June 30, 2027, to comply with City Municipal Regional Stormwater Permit. On April 25, 2024 WSMD applied for funding for the Raimondi Park Green Stormwater Infrastructure Project.</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>WSMD developed and prioritized a list of 43 multi-benefit GSI projects. Preliminary conceptual designs were developed for five GSI/flood control projects. These projects will be prioritized and added to the City's Capital Improvement Program's unfunded list of projects and WSMD will pursue funding for the highest priority projects.</p> <p>The City must construct projects not already required to add GSI that treat a total of 5 acres of impervious area with GSI by June 30, 2027, to comply with City Municipal Regional Stormwater Permit.</p> <p>WSMD developed a preliminary conceptual project that would construct bioretention facilities around Raimondi Park in West Oakland. (This project would also remove PCBs from stormwater from a 43-acre drainage area using high-flow biofilters. If this project can be prioritized, funded and constructed it will treat 4 acres of impervious roadway with Green</p>	O

			<p>Stormwater Infrastructure (bioretention). On April 25, 2024 WSMD applied for funding for the Raimondi Park Green Stormwater Infrastructure Project. This project was developed as part of a larger WSMD effort to identify feasible and cost-effective stormwater infrastructure project.</p> <p>All OPW Capital Improvement Projects (CIP) 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>	
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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>During the 2023 vegetation inspection year, OFD completed 25,952 inspections with 90% compliancy. This is the third year in a row in which 90% compliancy has been achieved.</p> <p>The City entered into an agreement with CAL FIRE to perform vegetation clearing in Joaquin Miller Park. CAL FIRE began work providing defensible space protecting paved roads, buildings, fences, active recreation areas and other infrastructure. The crews have removed ladder fuels and reduced overall vegetative fuel loads in these areas.</p> <p>In May 2024, the City of Oakland is scheduled to formally adopt a 10-year vegetation management plan. Adoption of the VMP will set in motion an actionable timeline to reduce fire hazard.</p>	O

Action #O-6: Continuity of Operations Emergency Planning—The Oakland Fire Department will continue to develop a continuity of operations plan that includes backup storage of vital records, such as

plans and backup procedures to pay employees and vendors if normal finance department operations are disrupted, as well as other essential electronic files.

Action Taken? (Yes or No)	Timeline	Priority	Status ^a	Status (X, O, ✓) ^b
Yes	June 2025	Low	<p>The Oakland Fire Department Emergency Services Division (EMSD) is requesting for each City department to complete a Continuity of Operations Plan (COOP). To help clarify the responsibility for City departments to create and maintain their plans, the Action Plan will be amended to the following language:</p> <p>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.</p>	O

Action #O-7: Implement the City’s Energy Assurance Plan that 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	Ongoing	Medium	<p>Contracting with Ava Community Energy is underway to provide solar PV and backup energy storage at up to 18 critical City facilities. Expected construction in 2024 and 2025. Some critical facilities will remain, such as the Police Administration Building, to be addressed via other means.</p> <p>OPW CIP Project Managers coordinate with the City Administrator’s Office of Sustainability Team to implement scopes of work including emergency power within CIP projects as feasible.</p>	O

Action #0-8: 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	The OPW Project and Grant Management Team is currently implementing a Task Order with an on-call architectural consultant to perform Facility Condition Assessments for all City facilities. The budget is currently \$1M and the first phase will include evaluation of the most critical facilities.	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
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Yes	2025	High	Oakland staff have prepared a draft Floodplain Ordinance that updates the existing Ordinance and identifies the City's designated Floodplain Administrator. Staff intends to bring the Ordinance to City Council for adoption in 2025.	O
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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	Ongoing	Medium	Grant funding has been obtained to construct Lincoln Resilience Hub (Chinatown) and construction is expected to start in late 2024. Selection process for East Oakland resilience hub site is underway with community partners. During this period a grant was submitted for a West Oakland hub, but it was unsuccessful. There are significant outstanding financial and design needs. The ADA Programs staff has provided technical assistance and review of CIP plans as well as design guidelines for resilience hubs. The Office of Sustainability and Resilience, ADA Programs Division, Oakland Fire -Emergency Management Services Division and OPW Project and Grant Managers collaborated to develop visioning for draft Municipal Resilience Hub design guidelines.	O

Action #O-11: Develop an “integrated preparedness plan” 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	May 2024	Medium	EMSD convened an Integrated Preparedness Plan (IPP) Working Group (WG) in September 2023 to discuss priorities of the City of Oakland, ascertain points of contact, and disseminate information about	O

			<p>the Emergency Operations Plan (EOP), Hazard Annexes and the LHMP. This working group conducted an analysis of departmental responsibilities in planning documents and agreed on the following municipal priorities moving into the 2024-2026 cycle:</p> <ul style="list-style-type: none"> • Operational Coordination • Communication & Information Sharing • Mass Care & Shelter • Cybersecurity <p>A Draft IPP has circulated between IPPWG members with a proposed schedule of trainings and exercises through the actionable period of 2024-2026. A finalized IPP is to be presented at the May 2024 Disaster Council Meeting, emphasizing trainings and exercises improving the identified priorities.</p>	
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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 Department of Race and Equity (DRE) is working on the update of the 2018 Equity Indicators Report that provides baseline data related to racial disparities in the City of Oakland. The updated report will be done by the 3rd quarter of 2024.</p> <p>In the next year, EMSD will be issuing a Request for Proposals to engage a consult to support the LHMP 2026 revision. EMSD will look for ways to continue and improve upon the LHMP’s use of equity measures including data analysis of local racial disparities, access and functional needs and other equity concerns in the City of Oakland. The 2021 – 2026 LHMP was developed with support from DRE and ADA Programs Division, both of which advised on the</p>	O

			<p>application of an equity framework and tools throughout the public outreach process, risk evaluation and mitigation action development.</p> <p>The City of Oakland adopted the Safety Element and Environmental Justice Element and their accompanying Racial Equity Impact Assessments (REIAs) on September 26, 2023. DRE Provided technical assistance to staff as needed on inclusive engagement and racial equity analysis using the best available Census Data.</p> <p>In addition to work with the LHMP, the Safety Element and Environmental Justice Element, DRE provided technical assistance related to the General Plan and OPW CIP program. DRE worked with the OPW CIP workgroup and the Department of Transportation on items related to prioritizing mitigation strategies that incorporate a racial equity lens in the General Plan and Capital Improvements Program. In the last reporting period DRE added a program analyst to support equity-related efforts conducted by OPW and Housing and Community Development. DRE Provided technical assistance for the REIAs on the Mass Care and Shelter, Pandemic, and Emergency Transportation Annexes of the Emergency Operations Plan in 2023.</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	Add to Port long range 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 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	Add to Port long range 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	Construction completed. Performing integration with Port systems.	O

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	Add to Port long range 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	Ongoing	High	A Sea Level Rise Assessment was performed July 1, 2019 and the Port of Oakland is seeking a consultant to perform Sea Level Rise modeling. The City Administrator’s Office and the Planning and Building Department are coordinating on an updated application to the State Adaptation Planning Grant Program to fund a comprehensive vulnerability assessment. This grant application will be submitted in May 2024.	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 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 City Council in early 2026. On April 15, 2024, the City’s SDMP Consultant reported that they have been fine tuning the City’s hydrologic/hydraulic model parameters with additional field data. This effort is needed to start work in 2024 on SDMP Task 5.4 - Incorporate Tree Canopy Modeling. This task will quantify the tree species suitable for different areas in Oakland (consistent with the City’s Urban Forest	O

			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	
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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	February 2025	High	Staff will continue to coordinate with FEMA Region IX and 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. Staff will ensure that new construction and major improvements to existing structures within flood zones are in compliance with federal requirements and, thus, remain a participant in the NFIP.	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
Yes	2024	High	Final edits and image updates are in process for a Sea Level Rise Road Map, with the associated map anticipated to be completed in 2024.	O

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	Ongoing	High	<p>The City Administrator’s Office of Sustainability and Resilience team has received a grant to complete a Climate Adaptation Plan by 2025. This will complement the work done on the Climate Vulnerability Assessment that was adopted with the update of the Safety Element in September 2023. The priority is to complete the Climate Adaptation Plan and conduct stakeholder engagement and groundwater rise studies in frontline communities by 2025.</p> <p>The City is incorporating recent studies on climate risk and vulnerability into the General Plan Safety Element. Additional new data and strategy is being developed via additional programs, including a 2024 Resilience Fellowship focused on Fire Insurance Risk and the work of the Oakland-Alameda Adaptation Committee.</p>	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>REIA work is being incorporated into all future planning projects.</p> <p>In the next year, EMSD will be issuing a Request for Proposals to secure a consult to support the LHMP 2026 revision. EMSD is meeting with the DRE and ADA Programs Division to collaboratively define a scope of</p>	O

			work this consultant and will look for ways to continue and improve upon using data analysis of local racial disparities in the City of Oakland and other equity measures to inform the revised LHMP. The consultant will be asked to collect and incorporate the best available local data identifying racial disparities in the City of Oakland. The 2026 revision will use this data to rank risk and prioritize mitigation strategies that incorporate a racial equity lens.	
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- 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:

- **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