



AGENDA REPORT

TO: Edward D. Reiskin
City Administrator

FROM: Reginald Freeman
Fire Chief

SUBJECT: 2021-2026 Oakland Local Hazard
Mitigation Plan

DATE: May 26, 2021

City Administrator Approval 

Date: May 26, 2021

RECOMMENDATION

Staff Recommends That City Council Receive An Informational Report From the Oakland Fire Department On The Draft Local Hazard Mitigation Plan and Submittal Process To the California Office of Emergency Services (Cal OES) and the Federal Emergency Management Agency (FEMA).

REASON FOR SUPPLEMENTAL

At the May 11, 2021 Public Safety Committee meeting, staff was requested to prepare a supplemental report and identify which items in the Local Hazard Mitigation Plan are currently funded (**Attachment A**).

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends the City Council accept this informational report from the Oakland Fire Department on the draft Oakland Local Hazard Mitigation Plan and submittal process to the California Office of Emergency Services and the Federal Emergency Management Agency.

For questions regarding this report, please contact Michael Hunt, Chief of Staff, at (510) 238-6353.

Respectfully submitted,

Reginald D. Freeman

Reginald D. Freeman (May 26, 2021 08:54 PDT)

Reginald Freeman
Fire Chief
Oakland Fire Department

Attachment A: Action Plan Funding

City Council
June 1, 2021

Attachment A: Action Plan Funding

Local Hazard Mitigation Action Plan						
Applies to New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Funding
<p>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.</p> <p><i>Hazards Mitigated:</i> Earthquake</p>						
Existing	1, 4, 5, 10	DHCD	PBD	High	FEMA HMA Grants, CDBG-DR/CDBG-MIT, City Funds through DHCD/PBD	
<p>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.</p> <p><i>Hazards Mitigated:</i> Earthquake</p>						
Existing	1, 4, 5, 10	DHCD	PBD	High	FEMA HMA Grants, CDBG-DR/CDBG-MIT, City Funds through DHCD/PBD	Unfunded
<p>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.</p> <p><i>Hazards Mitigated:</i> Dam Failure, Drought, Flood, Severe Weather, Sea-Level Rise, and Tsunami</p>						
New & Existing	1, 3, 4, 5, 6, 10, 13	OPW	--	High	FEMA HMA Grants, EPA grants, City Funds through OPW/PBD	Partially funded
<p>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.</p> <p><i>Hazards Mitigated:</i> Flood and Severe Weather</p>						
New & Existing	1, 4, 6, 14	WSM	OPW	High	FEMA HMA, City CIP funding	Funded
<p>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.</p> <p><i>Hazards Mitigated:</i> Wildfire</p>						
New & Existing	1, 4, 5, 14, 16	Oakland Fire	EMSD	Low	General Fund (Oakland Fire Department budget), grants	Funded

Local Hazard Mitigation Action Plan

Applies to New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Funding
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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.

Hazards Mitigated: Dam Failure, Drought, Earthquake, Flood Landside, Severe Weather, Sea-Level Rise, Tsunami, and Wildfire

New & Existing	7, 8, 9, 11, 16	EMSD	CAO	Low	EMPG, HSGP, General Fund (Oakland Fire Department budget)	Funded
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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.

Hazards Mitigated: Dam Failure, Drought, Earthquake, Flood Landside, Severe Weather, Sea-Level Rise, Tsunami, and Wildfire

New & Existing	7, 8, 9, 11, 16	OPW	EMSD	Medium	Cal OES Grants, City funds through OPW and Oakland Fire	Partially Funded
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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.

Hazards Mitigated: Dam Failure, Drought, Earthquake, Flood Landside, Severe Weather, Sea-Level Rise, Tsunami, and Wildfire

Existing	1, 4, 6, 14	OPW	EMSD	High	FEMA HMA grant programs, City Funds through OPW and EMSD	Unfunded
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O-9: Continue to maintain the City’s good standing and compliance under the 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.

Hazards Mitigated: Dam Failure, Flood, Sea-Level Rise, and Tsunami

New & Existing	1, 3, 4, 6, 16	Department of Transportation	OPW	Low	City Funds	Funded
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Local Hazard Mitigation Action Plan

Applies to New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Funding
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O-10: Create a comprehensive master plan for three city facilities to reliably serve as resilience hubs, or places of respite during hazard events.

Hazard Mitigated: Dam Failure, Drought, Earthquake, Flood Landside, Severe Weather, Sea-Level Rise, Tsunami, and Wildfire

New & Existing	1, 6, 7, 9, 13, 14, 16	CAO	OPW	High	FEMA BRIC C&CB, The California Energy Commission’s Energy Conservation Assistance Act, City Funds through the CAO and OPW departments	Partially Funded for study
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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.

Hazard Mitigated: Dam Failure, Drought, Earthquake, Flood Landside, Severe Weather, Sea-Level Rise, Tsunami, and Wildfire

New & Existing	7, 8, 9, 11, 16	EMSD	Oakland Fire	Medium	EMPG, HSGP, City fund through Oakland Fire	Funded
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O-12: To support implementation of and future updates to the City’s local hazard mitigation plan, Safety Element, and Environmental Just 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.

Hazard Mitigated: Dam Failure, Drought, Earthquake, Flood Landside, Severe Weather, Sea-Level Rise, Tsunami, and Wildfire

New & Existing	3, 5, 8, 9, 11, 16	DRE	EMSD	High	FEMA BRIC C&CB, City fund through DRE and EMSD departments	Unfunded
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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.

Hazards Mitigated: Earthquake

Existing	1, 4, 6, 14	Port of Oakland	--	High	FEMA BRIC C&CB, Port of Oakland Funding	Unfunded
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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.

Local Hazard Mitigation Action Plan

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Hazards Mitigated: Flood, Tsunami, and Sea-Level Rise

Existing	1, 4, 6, 14	Port of Oakland	East Bay Regional Park District	Medium	FEMA BRIC C&CB, Port of Oakland Funding	Unfunded
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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.

Hazards Mitigated: Dam Failure, Earthquake, Flood, Sea-Level Rise, and Tsunami

Existing	7, 8, 9, 11, 16	Port of Oakland	Alameda Co. Transportation Commission	Low	Port of Oakland and Alameda Co. Transportation Commission	Funded
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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.

Hazards Mitigated: Earthquake

Existing	7, 8, 9, 11, 16	Port of Oakland	--	High	FEMA BRIC C&CB, Port of Oakland Funding	Unfunded
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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.

Hazards Mitigated: Sea-Level Rise and Tsunami

Existing	1, 4, 6, 14	Port of Oakland	--	High	FEMA BRIC C&CB, Port of Oakland Funding	Unfunded
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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.

Hazards Mitigated: Flood and Severe Weather (Extreme Heat)

New & Existing	3, 4, 6, 14, 15, 16	WSM	TSD	Medium	FEMA HMA grant programs, City Funds through WSM and TSD	Funded
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Local Hazard Mitigation Action Plan						
Applies to New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Funding
<p>O-19: Reestablish Full Compliance and Good Standing Under the NFIP—The City will 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 <i>Hazards Mitigated:</i> Dam Failure, Flood, Sea Level Rise, Tsunami</p>						
New and Existing	1, 3, 4, 6, 16	To Be Determined	To Be Determined	Low	City funds	Funded
<p>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 <i>Hazards Mitigated:</i> Flood, Sea-Level Rise, and Tsunami</p>						
Existing	3, 5, 8, 9, 11, 16	OPW	PBD	Low	City funds	Funded
<p>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. <i>Hazards Mitigated:</i> Dam Failure, Drought, Earthquake, Flood Landside, Severe Weather, Sea-Level Rise, Tsunami, and Wildfire</p>						
Existing	3, 5, 8, 9, 11, 16	PBD	OPW	Medium	Council-appropriated funds	Unfunded