



SUBJECT

Review the 2016 Hayward Local Hazard Mitigation Plan (LHMP) and Recommend to City Council Adoption of the LHMP as an Amendment to the Hazards Element of the [2040 Hayward General Plan](#).

BACKGROUND

The Disaster Mitigation Act of 2000 calls for localities to produce and adopt Local Hazard Mitigation Plans (LHMP) in order to receive hazard mitigation grants and fully federally funded post-disaster Public Assistance. Previously, the City of Hayward was included in the Association of Bay Area Governments (ABAG's) 2010 Regional Hazard Mitigation Plan, which was adopted as an Appendix to the previous General Plan. The 2010 Regional Hazard Mitigation Plan expired in March 2016. From July 2015 through February 2016, an interdepartmental team participated in a regional effort to update Local Hazard Mitigation Plans led by ABAG.

Per the Federal Emergency Management Agency (FEMA), hazard mitigation is “sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.” Mitigation is action taken now that reduces risk to life and property, including existing structures and future construction, before, during, and after a disaster. The outcome of successful mitigation is a safer community that is less vulnerable to natural hazards.

In addition to increasing community safety, local governments that develop and adopt Local Hazard Mitigation Plans are eligible for the following programs and benefits:

- Eligibility for waiver of the 6.25% matching requirement for FEMA Public Assistance: Following a Presidential disaster declaration, FEMA provides Public Assistance (PA) grants for the repair, replacement, and restoration of public assets. Localities with an approved and adopted hazard mitigation plan can be exempt from the 6.25% cost-sharing that is usually required of PA recipients.
- Eligibility for hazard mitigation grants: The Pre-Disaster Mitigation, Flood Mitigation Assistance, and Hazard Mitigation grant programs all require recipients to have an approved and adopted LHMP. Furthermore, grant funding for mitigation will only be awarded for projects that are consistent with the plan.
- Points for the National Flood Insurance Program Community Rating System (NFIP CRS): Jurisdictions with approved and adopted LHMPs are eligible for flood insurance discounts through participation in the NFIP CRS. (Hayward does not participate in the Community Rating System)

Local Hazard Mitigation Plans are valid for five years, at which point they must be updated in order for local governments to maintain eligibility for the benefits listed above. Plans must be reviewed and approved by the Governor's Office of Emergency Services (CalOES) and the Federal Emergency Management Agency (FEMA). After being approved by CalOES, the City's LHMP received final approval from FEMA on September 14, 2016 (Attachment III). Additionally, the City must adopt the LHMP as an amendment to its General Plan in order to be eligible for the benefits listed above. As with other amendments to the General Plan, such action requires public hearings before the Planning Commission and City Council.

Applicable General Plan Policies and Programs

Updating the City's Local Hazard Mitigation Plan fulfills several General Plan policies. In the Hazards Element, Goal 1: Regional Coordination, addresses the 2010 Multi-Jurisdictional Hazard Mitigation Plan and the regional plan update process. The 2016 LHMP was developed in coordination with other East Bay jurisdictions and ABAG staff, and replaces the Multi-Jurisdictional Hazard Mitigation Plan, which has expired and will not be updated.

Additionally, the mitigation strategies outlined in the LHMP align with and address a number of policies and goals included in the General Plan. These policies are highlighted in the mitigation strategy analyses on pages 66-94 of the LHMP (Attachment II). A list of all applicable General Policies and Programs is detailed below.

Community Safety Element

CS-1.1 Community Partnerships
CS-1.16 Immigrant Outreach Programs
CS-3.1 Fire Prevention Education
CS-3.2 Fire and Building Codes
CS-3.6 Fire Safety Inspections
CS-3.7 Removal of Fire Hazards
CS-4.10 Investment in Technology
CS-5.1 Public Education
CS-5.2 Neighborhood Preparedness Tools and Resources
CS-5.3 Emergency Preparedness Kits
CS-5.4 Community Emergency Response Training
CS-5.5 Emergency and Disaster Drills
CS-5.6 Comprehensive Emergency Management Plan
CS-5.7 Energy Assurance Plan
CS-5.10 Mutual Aid Agreements
CS-5.11 Mass Communications Device

Hazards Element

HAZ-2.9 Seismic Retrofits
HAZ-2.10 City Facilities
HAZ-3.3 Floodplain Management Ordinance
HAZ-4.1 Monitor Rising Sea Level
HAZ-4.2 Adapting to Rising Tides
HAZ-4.3 Shore Realignment Master Plan
HAZ-4.4 FIRM Maps
HAZ-4.5 Rising Sea Level Disclosures

Public Facilities & Services Element

PFS-4.8 Seismic Safety
PFS-4.12 Renewable Energy
PFS-6.1 Interagency Levee Management

Natural Resources Element

NR-1.4 Shoreline Protection and Enhancement
NR-2 Recycled Water Program
NR-6.6 Stormwater Management

DISCUSSION AND STAFF ANALYSIS

The purpose of this Local Hazard Mitigation Plan update is to assess hazard risk and asset vulnerability in the City of Hayward, and use that information to identify strategies to reduce future losses from natural hazards. The LHMP serves as a guiding document for the City's hazard mitigation activities, and was developed in fulfillment of and alignment with the City Council's "Safe" priority and informed by General Plan Safety Element and Hazards Element goals.

To prepare the LHMP, update team members completed the following tasks:

- *Reviewed the previous LHMP:* team members reviewed the 2010 Hayward Annex to the Multi-Jurisdictional Hazard Mitigation Plan and reported on the City's progress on implementing the plan's mitigation strategies.
- *Engaged community members and stakeholders:* the team reached out to the community through a website, social media, an online survey, tabling at events, and attending community meetings. Representatives from the Hayward planning team attended ABAG's LHMP update workshops and worked with ABAG staff and the East Bay Corridors Initiative group.
- *Evaluated the city's risk by mapping hazard exposure and vulnerable assets:* using GIS data, the team mapped the city's exposure to hazards and identified vulnerable assets in the affected areas.
- *Select and prioritize mitigation strategies:* based on the risk and vulnerability analysis and careful consideration of each strategy, the team developed a prioritized list of mitigation strategies for the City of Hayward to implement over the next 5 years.

For further information about the plan update process, please see Section 2 of the Local Hazard Mitigation Plan (LHMP, Attachment 2).

Risk Assessment & Asset Exposure

The basis of hazard mitigation planning is reliable, relevant data about the probability and location of potential hazards in the City of Hayward.

Using data from state and federal agencies provided by ABAG, staff created maps of the City's exposure to earthquake, fire, landslide, flooding, tsunami, sea level rise, drought, and hazardous materials hazards. These maps and a detailed discussion of Hayward's exposure to risk and specific vulnerabilities are included in Section 5 of the LHMP (Attachment 2). A brief summary of the City's exposure to each hazard is available below.

Earthquake

Hayward is exposed to ground shaking, liquefaction, surface rupture, and landslides from seismic activity along the Hayward Fault, San Andreas Fault, San Gregorio Fault, and other Bay

Area faults. The hills are susceptible to earthquake-induced landslides, while the flatlands are at risk of liquefaction. Tsunami and fire following an earthquake also threaten the city. A major earthquake along the Hayward Fault, predicted to have a greater than 70% probability of occurrence in the next 30 years, would be particularly catastrophic.

Fire

The Hayward hills are at risk of wildland-urban interface fire. Dry grassland adjacent to residential properties and the seasonal Diablo winds can result in large, rapidly-spreading fires that cause widespread damage to hillside properties.

Landslide

Rain-induced and earthquake-induced landslides may occur on Hayward's hillsides. Extreme wet-dry cycles expected as a result of climate change may exacerbate the risk of these landslides.

Flood, Tsunami, and Sea Level Rise

Hayward's shoreline, while protected by extensive wetlands, is at risk of inundation from tsunamis, rare floods, and rising sea levels. Infrastructure along the shoreline will be more frequently, and eventually permanently, inundated as the sea level rises. In especially severe floods and at sea levels above 5 feet, residential and industrial parts of South Hayward adjacent to Don Edwards National Wildlife Preserve and Ward Creek are also at risk of flooding.

Drought

While Hayward is not directly at risk of drought, regional and statewide droughts affect the entire city and are likely to become much more common as climate change progresses.

Hazardous Materials

Hayward is home to nearly 1,000 businesses throughout the city that house various hazardous materials. Hazardous materials have the potential to become a crucial complicating factor in emergency situations. Flooding, earthquakes, and fires can all cause or be exacerbated by hazardous materials release.

Mitigation Strategies

The ultimate goal of hazard mitigation planning is to identify and implement policies, projects, and programs that prevent or lower the risk of damage and loss of life when a disaster strikes. Using the Hayward Annex from the 2010 Multi-Jurisdictional Hazard Mitigation Plan, the General Plan, the Climate Adaptation Plan, and a FEMA Mitigation Strategies publication, staff compiled a list of mitigation strategies to address the City's vulnerability to various hazards.

Working in teams, update team members evaluated each strategy based on feasibility, social benefits, economic benefits, environmental impacts, and community objectives. The mitigation strategies were then ranked by priority level. The results of this analysis are available in Section 6 of the Plan, and summarized in Table 1 below.

Overall, the planning team prioritized organizational preparedness, which would mitigate the effects and improve the City's preparedness and response for all of the disasters discussed in this Plan. Seismically retrofitting fragile housing, working with partner organizations to address sea level rise along the shoreline, and public programs to empower residents and community members to prepare for and respond to hazards also rated highly.

Table 1: Mitigation Strategies by Priority Level

Priority Level	Strategy Group	Strategies
Very High	Organizational Preparedness	Employee Education Emergency Management Plan Update Tabletop & Field Exercises
High	Fragile Housing Retrofits	Single-Family Home Retrofits Soft Story Retrofits
	Public Programs	Public Education Community Emergency Response Teams Defensible Space Programs
	Organizational Preparedness	Communications redundancy Diversify partnerships & MOUs Acquire Equipment Participate in the ABAG Regional Lifelines Council
	Collaboration to Mitigate Sea Level Rise	Implement Adapting to Rising Tides Multiagency Support SR-92 Study
	Planning	Recovery Plan Shoreline Realignment Plan Hayward Executive Airport Seismic Evaluation
	Drought	Recycled Water Project
Moderate	Hazardous Materials Programs	Hazardous Materials Response Team Hazardous Materials Fee Study
	Fragile Housing Retrofits	Mobile Home Retrofits
	Environmental Programs	Expand Hayward Area Shoreline Protection Agency (HASPA) Renewable Emergency Energy Sources Watershed Analysis Hillside Landslide Mitigation
Low	Administrative Programs	Building Occupancy Resumption Program 911 Registry

	Priority Inspection List
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Several of these mitigation strategies are already in the process of implementation. As staff works to implement mitigation measures over the next five years leading up to the next LHMP update, the mitigation strategies identified in the table above may be eligible for FEMA Hazard Mitigation Grant Program funding as applicable and as it becomes available.

ENVIRONMENTAL REVIEW

The Local Hazard Mitigation Plan (LHMP) identifies, analyzes, and addresses natural hazards in the City of Hayward as well as identifying strategies to mitigate, prepare for, and respond to those hazards. The LHMP identified strategies that include collaboration and cooperation with other entities where Hayward may not be the Lead Agency as defined by CEQA. Some of the strategies entail projects or actions that may require CEQA review as a part of their future implementation.

Adopting the Local Hazard Mitigation Plan as an appendix to the Hazards Element of the General Plan is exempt from CEQA pursuant to the following sections of the CEQA guidelines:

- 15183 – Projects Consistent with a Community Plan or Zoning
- 15262 – Feasibility and Planning Studies
- 15306 – Information Collection
- 15061(b)(3) – General Rule/No Significant Environmental Effect

SUSTAINABILITY FEATURES

The following mitigation strategies included in the Local Hazard Mitigation Plan increase sustainability in addition to mitigating the effects of a natural disaster:

- Recycled Water Project - In addition to mitigating the impact of droughts, the recycled water project generally reduces the consumption of potable water for non-potable uses.
- Renewable Emergency Energy Sources – Relying on renewable energy sources in the event of an emergency not only prepares the City for a potential loss of power in an emergency, but ensures that long-term operation of generators does not result in excessive emissions and consumption of fossil fuels.

PUBLIC OUTREACH

Throughout the planning process, the planning team has worked to engage the community in the update, primarily through the internet and social media. Engagement activities included:

- Distributing bilingual Local Hazard Mitigation Planning flyers and starting conversations with attendees at community events including Off the Grid and the Farmer's Market

- Creating a bilingual Local Hazard Mitigation Planning website (see <http://hayward-ca.wix.com/lhmp>) explaining the update process and providing a contact form for residents to ask questions and voice their concerns
- Running a bilingual hazard mitigation priority survey that garnered 279 responses
- Engaging community leaders in conversation during community meetings throughout the planning period
- Conducting a social media campaign through the City of Hayward Twitter, Facebook, and Nextdoor platforms, and through existing City mailing lists

Flyers were also made available at various locations in City Hall, at the Hayward Library, and in local schools.

In their responses to the survey and follow up comments, residents and community members indicated the following:

- Earthquakes, drought, and wildfire are the hazards that concern our residents most.
- When choosing mitigation strategies, they want the City to prioritize improving emergency services and educating the public about emergency preparedness.
- They prefer mitigation policies that benefit the largest number of people possible over those that benefit people most likely to be impacted or most likely to have difficulty recovering from a disaster.

Additionally, the Local Hazard Mitigation Plan was posted on the dedicated LHMP update website for public review (see <http://hayward-ca.wix.com/lhmp>). The public review period was advertised through social media, City mailing lists, and an existing list of survey respondents who had requested to be further involved in the process. During the public comment period, staff received six comments, including several positive comments and questions about asbestos abatement incentives and automatic gas shutoff valves. More information about LHMP public outreach is available in Appendices D through I of the attached LHMP (Attachment II).

NEXT STEPS

Should the Planning Commission recommend adoption of the LHMP as an amendment to the General Plan to the City Council, the City Council will consider adoption, along with the Planning Commission's recommendation, at a noticed public hearing.

In the long-term, should the LHMP be adopted as part of the General Plan, staff will work to implement the mitigation strategies identified in the LHMP. Additionally, in the year before the adopted LHMP would expire, staff would execute the LHMP update and approval process per CalOES and FEMA guidelines.

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