

**CITY OF MERCED**  
**Planning & Permitting Division**

**STAFF REPORT:** #12-12

**AGENDA ITEM:** 4.3

**FROM:** Kim Espinosa,  
Planning Manager

**PLANNING COMMISSION**  
**MEETING DATE:** July 18, 2012

**PREPARED BY:** Bill King,  
Principal Planner

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**SUBJECT:** **Local Hazard Mitigation Plan Overview.** Brief the Planning Commission of the effort by City Staff to draft the City of Merced Local Hazard Mitigation Plan and provide the community with an opportunity to comment during development of the plan. Initiated by the City of Merced, the City of Merced Local Hazard Mitigation Plan, once completed, will describe the hazards that threaten Merced such as flooding, earthquakes, and fog, and then lay out the best way to save lives and reduce property damage in the event that one of these types of natural disasters occurs.

**ACTION:** To receive public comments and for information only

**OVERVIEW**

The City's Local Hazard Mitigation Planning effort began on July 1, 2010, after award of a planning grant from Cal EMA, through the Federal Emergency Management Agency (FEMA). The Planning Staff, in conjunction with the City Fire Department, is leading the effort to draft the Merced Hazard Mitigation Plan (MHMP).

**UTILITY OF THE PLAN**

*Project Funding*

According to the Disaster Mitigation Act of 2000, local governments must have a FEMA-approved Local Hazard Mitigation Plan to apply for and/or receive *project* grants under the following hazard mitigation assistance programs: 1) Hazard Mitigation Grant Program (HMGP); 2) Pre-Disaster Mitigation (PDM); 3) Flood Mitigation Assistance (FMA); and 4) Severe Repetitive Loss (SRL). The City was granted approximately \$350,000 in project funds, but the City must complete its LHMP before it can obtain these funds.

*Strategic Plan*

*Hazard Mitigation Planning* is the process through which natural hazards that threaten communities are identified, likely impacts of those hazards are determined, mitigation goals are set, and appropriate strategies to lessen impacts are determined, prioritized, and implemented.

### Development Review

The MHMP serves two development-review related functions, one as a resource document and the second as an “action plan” that could affect City policies and/or ordinances. The MHMP will be a resource for Planning Staff to gather information about how natural hazard events may affect proposed development projects, leading to potential changes in design or operation. For example, the high school north of Bellevue Road is within the floodplain of Fahrens Creek and the Yosemite Lake/Dam inundation area. These characteristics resulted in a site plan where buildings are clustered on a hill and the surrounding parking lots and sports fields are designed to experience future flooding events. Many newer residential subdivisions in Merced are similarly designed. Other development considerations regarding hazard mitigation include provision of emergency access to the area and individual buildings; disallowing construction in floodways; and building construction requirements to reduce impacts from flood, fire, wind, poor soils and earthquakes.

The recommended mitigation actions of the MHMP may lead to changes in City policies and/or ordinances, which in turn could affect how development projects are reviewed and acted on. For example, heat waves are among the most deadly forms of extreme weather in the United States. Children, the elderly, and the poor are most at risk, especially those living in cities where the dense tangle of streets, parking lots, and rooftops retains heat and elevates air temperatures even further. This is known as the “urban heat island effect.” A common strategy to reduce air temperatures is to increase vegetation, planting trees and creating more open green spaces, which typically take the form of development policy and standards.

### **PLAN DEVELOPMENT PROCESS**

Hazard Mitigation Planning (HMP) is a dynamic process built on realistic assessments of past and present information used by the City to anticipate future hazards and provides meaningful strategies to address possible impacts and identified needs. At the core of this process is the Risk Assessment, which identifies Merced’s local hazards, describes these risks in terms of location, extent and occurrence, and the community’s vulnerability to them. Based on this information, along with an assessment of the community’s assets and capabilities, mitigation actions are reviewed and selected.

### Review and Selection of Mitigation Actions

City Staff created catalogs of sample mitigation actions (Attachment A) which list initiatives that could manipulate local hazards, reduce exposure to hazards, reduce vulnerability to hazards, and increase Merced’s capability to respond or be prepared for a hazard. The hazards addressed by the catalogs are those to which the City is most vulnerable based on the risk assessment.

The catalogs are not meant to be exhaustive or site-specific but rather to inspire thought and provide background information for future policies. The sample mitigation actions in the catalogs derived from numerous sources, including: 1) the City’s “Community Risk Assessment; and 2) hazard mitigation plans, notably from Central California communities.

The initiatives included in the catalogs are meant to be new action items, and do not include current mitigation actions, though improvement of a current activity may be listed.

Recognizing that economic characteristics can improve, and external funding sources may become available, selection of actions should not be limited due to lack of funds.

Either during or after the July 18, 2012, meeting, the Planning Commission and public is encouraged to review the catalog and provide written comments, and then return them to the City of Merced Planning Department by **July 31, 2012**. Comments should include:

- A numeric ranking of the ideas in each table (use empty far-left column);
- Comments of each cataloged action, as appropriate; and,
- Describe new actions (use empty cell at bottom of each table). Please feel free to use additional sheets of paper when necessary.

Staff will then compile the rankings, comments and ideas for discussion at the September Disaster Council meeting.

Completed catalogs can be placed in the drop-box at the exit of the City Council chambers on July 18, 2012; scanned and emailed to [kingb@cityofmerced.org](mailto:kingb@cityofmerced.org); or dropped off or mailed to the Planning Department, 678 W. 18<sup>th</sup> street, Merced CA. 95340.

#### Completion of Planning Process

After the mitigation actions are selected, they will be prioritized and placed in an “Action Plan,” which provides implementation guidance addressing such issues as responsible entities and possible funding sources.

Staff anticipates that this work will conclude in September 2012, after which the plan is delivered to the California Emergency Management Agency (Cal-EMA), then to the Federal Emergency Management Agency (FEMA), and if approved by these agencies, back to the City of Merced for final adoption, which may occur in the spring or summer of 2013.

#### General Plan Consistency

Under AB 2140, adopting the FEMA “Approved” LHMP into the Safety Element of the General Plan is optional. However, doing so entitles compliant communities to additional available recovery reimbursements after a major disaster declaration. It also entitles compliant communities to receive priority consideration for hazard mitigation grant funding. Given these benefits, and the fact that the recommended actions of the MHMP are not binding on the community, Staff will present the option of including the MHMP as part of the *Merced Vision 2030 General Plan* to the Planning Commission and City Council sometime in 2013.

## **PUBLIC OUTREACH**

FEMA requires opportunity for public involvement during the crafting of the plan and prior to its adoption. The Merced Hazard Mitigation Plan is being crafted by a City Staff-based “Plan Leadership Team” (no consultants are involved), and is guided by: 1) technical support staff; and 2) the actions of the Disaster Council, with input from the comments of an engaged community.

### *Disaster Council*

The City Manager appointed the Disaster Council members, and on December 5, 2011, the Merced City Council was presented with its roster and overview of its jurisdiction and purpose, which are codified in Title 8 Chapter 20 of the Merced Municipal Code. The Disaster Council is empowered to develop and recommend emergency and mutual-aid plans for adoption by the City Council. The *Merced Hazard Mitigation Plan* is considered to be a type of emergency plan.

### *Project Website*

Information about meeting dates, draft versions of the plan, and links to provide public comments is provided via the City’s website. Some draft sections of the draft Merced Hazard Mitigation Plan, including the “Risk Assessment” are posted on the City’s website at [http://www.cityofmerced.org/depts/cd/planning/draft\\_local\\_hazard\\_mitigation\\_plan/default.asp](http://www.cityofmerced.org/depts/cd/planning/draft_local_hazard_mitigation_plan/default.asp)

### *Public Noticing of July 18, 2012 Planning Commission Meeting*

For the July 18, 2012, Planning Commission meeting, the following public outreach was performed: 1) a June 28, 2012, legal notice in the Merced County Times; 2) a July 5, 2012 article in the Merced County Times; 3) notices to 93 local Neighborhood Watch block captains; 4) notices to 50 stakeholders representing public agencies and community interest groups; 5) article in the City of Merced Employee Newsletter, City Scene; and, 6) a radio interview/advertisement on Capital Public Radio.

### Attachments:

- A) Catalog of Sample Mitigation Actions



Hazard Type: Fog

No.	Action	NFIP	New Bldg/Infra	Existing Bldg/Infra	Prevention	Property Protection	Public Education	Resource Protection	Structural
	Continue to work with weather forecasting and public safety agencies to provide warning and protective information to schools, residents, travelers, and visitors about the severe valley fog conditions.						✘		
	Install Automated Fog Warning System.								✘
	<b>Comments:</b>								

Hazard Type: Storm-Related Hazard

No.	Action	NFIP	New Bldg/Infra	Existing Bldg/Infra	Prevention	Property Protection	Public Education	Resource Protection	Structural
	Conduct a detailed vulnerability assessment in the future in order to accurately identify the extent of damages to vulnerable buildings, infrastructure, and critical facilities.			✘					
	Pursue program of conversion of overhead utilities to underground service that serve critical facilities or other sensitive sites to reduce exposure to hazards.								✘
	<b>Comments:</b>								





### Hazard Type: Flooding (page 1)

No.	Action	NFIP	New Bldg/Infra	Existing Bldg/Infra	Prevention	Property Protection	Public Education	Resource Protection	Structural
	Prepare an Update to the City's Storm-water Drainage Master Plan.	✗			✗				
	Require a master drainage plan as part of the approval process for all specific plans and large development projects. The plan's intent is to ensure that the overall rate of runoff from a project does not exceed predevelopment levels.	✗			✗				
	List Specific Flood Control Projects Needed: _____	✗			✗				
	Acquire, relocate, elevate, and/or flood-proof critical facilities located within the 100-year floodplain.	✗		✗	✗				
	Reinforce City ramps, bridges, and roads from flooding through protection activities which may include elevating the road and installing culverts beneath the road or building a bridge across the area that experiences regular flooding.	✗			✗				
	Increase participation in the NFIP by entering the Community Rating System program which through enhanced floodplain management activities would allow property owners to receive a discount on their flood insurance.	✗							
	Provide storm-water drainage improvements to reduce frequent flooding, such as storm-water drains, basins, trunk lines, auxiliary pipes, and interconnections.	✗			✗				

Hazard Type: Flooding, (page 2)

No.	Action	NFIP	New Bldg/Infra	Existing Bldg/Infra	Prevention	Property Protection	Public Education	Resource Protection	Structural
	Update the EOP to address emergency evacuation routes relative to flood and dam failure hazards.	✘			✘				
	Review public warning procedures and methods to improve the citywide flood surveillance and early warning system.	✘			✘		✘		
	<b>Comments:</b>								

Hazard Type: Public Education

No.	Action	NFIP	New Bldg/Infra	Existing Bldg/Infra	Prevention	Property Protection	Public Education	Resource Protection	Structural
	Develop and implement education and outreach programs to increase public awareness of the risks associated with natural, human-caused, and technological hazards.						X		
	Institute a Disaster Preparedness Education Program for the Public.						X		
	Develop Community Emergency Response Teams (CERT) of residents and businesses to aid first responders and volunteers.						X		
	Identify and develop a series of initiatives, incentives, programs, and procedures to assist residents, property owners, and businesses to prepare for and recover after a natural disaster.						X		
	<b>Comments:</b>								





