

## 11.6 Flood Hazards

Located east of the Sacramento-San Joaquin Delta, Stockton is located in a low-lying region of sloughs and channels connecting rivers with Suisan Bay and San Francisco Bay. The flood risk in the City is largely influenced by water surface elevations in the San Joaquin River and in Delta channels. This risk is managed by a complex system of flood protection facilities, including levees and channels. California Government Code Section 65302.9(a)(1)(A) requires cities and counties in the California Central Valley to incorporate locations of the facilities of the State Plan of Flood Control (SPFC) and the locations of the real property protected by those facilities. These are identified in the 2012 Central Valley Flood Protection Plan (CVFPP) developed by the California Department of Water Resources, specifically in Attachments 3a ("SPFC Descriptive Document") and 7 ("Plan Formulation Report"), respectively. The CVFPP is incorporated herein by reference.

Goal HS-6 seeks to minimize the risk of flooding to the City through mitigation measures including the siting of new development and retrofitting of exiting development. ~~New to the General Plan,~~ Also included is a policy ~~is added to include~~ addressing the use of designated and designed evacuation routes in the event of a levee failure.

Also, as required by California Government Code Section 65302.9(a)(1)(B), the latest version of the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency for the City, are incorporated herein by reference.

**HS-6** To minimize the risk to the community of life loss and property damage from flooding.

### HS-6.1 New Urban Development

The City shall ~~approve-regulate~~ new urban development ~~only when the project is shown to be protected from a 100-year flood~~ within floodplains in accordance with State and Federal requirements. Specifically, the City shall comply with Federal requirements pertaining to 100-year level of flood protection and State requirements for 200-year level of flood protection, where applicable.

### HS-6.2 Existing Urban Development

The City shall investigate, and implement when feasible, mitigation measures that offer protection from flooding for existing urban development ~~with a 100-year flood zone in flood prone area.~~ Also, the City shall strive to achieve 200-year level of flood protection for developed areas, where feasible.

### HS-6.3 Preservation of Floodway and Floodplains

The City shall preserve floodways and floodplains for non-urban uses in an effort to maintain existing flood carrying capacities, except that development may be allowed in a floodplain with mitigation measures that are in conformance with the City's floodplain management program.

#### **HS-6.4 Emergency Evacuation Plans**

The City shall formulate emergency management plans for the safe evacuation of people from areas subject to inundation from levee and dam failure. Plans shall be reviewed and, periodically updated, and made available to the public, as appropriate.

#### **HS-6.5 Levee Maintenance**

The City shall encourage reclamation districts and other levee maintaining agencies to institute a levee maintenance program to reduce levee failures. The City shall also require setbacks and easements for access to levees and channels, where feasible, from new urban development. On City-owned land, the City shall also provide unobstructed access, whenever feasible, to levees for maintenance and flood fighting purposes.

#### **HS-6.6 Flood Insurance Program**

The City shall continue to participate in the National Flood Insurance Program, and encourage residents living in levee protected areas to purchase and maintain flood insurance.

#### **HS-6.7 Roadway System**

The City shall require that roadway systems for areas protected from flooding by levees be designed to provide multiple escape routes for residents in the event of a levee failure.

#### **HS-6.8 ~~Prohibited Uses~~ Regulate Critical Facilities within a ~~100-Year Floodplains~~**

~~The City's floodplain management program shall prohibit development of residential land uses, critical emergency response facilities, and the streets that provide access to such properties within a floodway or floodplain which is subject to a 100-year flood. Areas designated for such land uses and adjacent streets shall be removed from the 100-year floodplain prior to approval of any related final map, final parcel map, or building permit, as applicable.~~ The City shall strive to ensure that new critical facilities, including hospitals, emergency operations centers, communications facilities, fire stations and police stations, are constructed outside of 100-year and 200-year floodplains, or where such location is not feasible incorporate design measures to mitigate potential flood risk to ensure functional operation during a flood event.

#### **HS-6.9 Cooperate with Flood Control Agencies and Support Regional Programs**

The City shall cooperate with appropriate local, State, and Federal agencies to address local and regional flood issues. The City shall also support the efforts of levee owners and local, regional, State and Federal agencies to design and reconstruct levees that do not meet adopted State and/or Federal flood protection standards to bring them into compliance.

#### **HS-6.10 Develop Flood Protection Plan for Levee Systems**

The City shall coordinate with appropriate State, Federal, and local flood control

agencies to develop a flood protection plan for the levee systems protecting the city. The plan shall identify the levees protecting the City and the entities responsible for operation and maintenance of the levees. The plan will determine the flood levels in the waterways and the level of protection offered by the existing levees along the waterways. A long-term plan will be developed to upgrade the system as necessary to provide at least a 100-year level of flood protection to the city, and 200-year level of flood protection, where feasible. The City also commits to considering and revising the plan to reflect future appropriate State or federally mandated levels of flood protection in an effort to meet these applicable levels of flood protection. Also, the plan should encourage multi-purpose flood management projects that, where feasible, incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the City's streams, creeks and lakes.

#### **HS-6.11 Funding Mechanisms for Flood Management Responsibilities**

The City shall collaborate with State and local flood management agencies and other interested parties to develop funding mechanisms to finance the local share of flood management responsibilities.

#### **HS-6.12 Public Outreach**

The City shall inform the public about the specific risks of living in flood prone areas, and provide City residents instructional information on how to take steps to reduce their exposure to flood damages

#### **HS-6.13 Use of Best Available Flood Hazard Information**

The City shall consider the best available flood hazard information and mapping from regional, State, and federal agencies to inform land use and public facilities investment decisions.

#### **HS-6.14 Coordination Efforts**

The City shall strive to establish and maintain cooperative working relationships among local, regional, State and Federal agencies with responsibility for flood management to help minimize flood hazards and improve safety.

### **11.8 Implementation Measures**

	Implementation	Implements What Policy	Who is Responsible	2008- 2009	2010- 2015	2016- 2035	On- going
1	The City shall develop maps and conduct frequent local meetings to keep citizens up-to-date on preparedness conditions in their neighborhoods.	HS-1.8	Community Development Department	■			■
2	The City shall update citizens on progress of implementation of the Safety Element, as well as code enforcement.	HS-1.8	Community Development Department				■

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3	The City will prepare guidelines for developers for reducing potential noise impacts on surrounding land uses.	HS-2.1 HS-2.3	Community Development Department	■
4	The City shall develop guidelines for construction operations relative to noise abatement at the construction site. This shall be used on projects required to mitigate noise in response to a CEQA evaluation.	HS-2.10	Community Development Department	■
5	The City shall ensure that new development meets the current seismic safety standards in accordance with the Uniform Building Code for the appropriate Seismic Hazard Zone.	HS-3.1 HS-3.2 HS-3.3	Community Development Department	■
6	The City shall inventory unreinforced masonry structures, including emergency facilities and other critical facilities constructed prior to 1948, used for human occupancy (excluding single family residential structures), and evaluate the facilities for seismic safety. If found below acceptable standards the City shall implement a program to mitigate potential hazards.	HS-3.4	Community Development Department	■
7	The City shall review the energy efficiency standards mandated by the State Energy Code (Title 24) and shall consult with affected construction industry representatives and other interested parties to establish City energy efficiency and performance standards which exceed minimum standards mandated by the State to the extent feasible.	HS-4.1 HS-4.2 HS-4.4 HS-4.5 HS-4.6 HS-4.20 HS-4.21	Community Development Department	■
8	The City shall coordinate with the San Joaquin Valley Air Pollution Control District on the review of proposed development projects early in project review.	HS-4.2 HS-4.3 HS-4.5 HS-4.6	Community Development Department	■
9	The City shall encourage business owners to schedule deliveries at off-peak traffic periods.	HS-4.4	Community Development Department	■
10	The City shall replace City fleet vehicles with low-emission technology vehicles, wherever possible.	HS-4.4	Public Works Department	■

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11	The City shall encourage lowest emission technology buses in public transit fleets.	HS-434	Community Development Department	■
			SJRTD	
12	The City shall support legislation that promotes cleaner industry, lowest emission technology vehicles, and more efficient-burning engines and fuels.	HS-4.4	Community Development Department	■
			City Council	
13	The City shall adopt an ordinance requiring clean burning fireplaces and wood stoves.	HS-4.4 HS-4.11	Community Development Department	■
14	The City shall preserve and ensure the dedication of rights-of-way and station sites for future light rail extensions and/or Bus Rapid Transit, where necessary.	HS-4.12 HS-4.15 HS-4.17	Public Works Department	■
15	The City shall develop siting and enforcement criteria for businesses that use, produce, or transport hazardous materials and wastes. The criteria shall be adopted as a provision in the City's Development Code.	HS-5.1 HS-5.2 HS-5.3 HS-5.8	Community Development Department  Fire Department	■
16	The City shall maintain an updated list of sites within Stockton that store, use, or dispose of hazardous materials.	HS-5.4 HS-5.5	Community Development Department  SJ County Environmental Health Department	■
17	The City shall investigate the possibility of groundwater contamination in those areas identified in the Woodward-Clyde study and adjacent to the City's Austin Road landfill and support long-term programs by appropriate agencies to prevent future groundwater degradation.	HS-5.4 HS-5.5	Public Works Department	■
18	The City shall adopt a Levee Improvement Plan, <del>in accordance with State Law.</del>	HS-6.2 HS-6.5 HS-6.9	Public Works Department	■
19	<u><a href="#">Amend the Development Code (zoning</a></u>	<u><a href="#">HS-6.1</a></u>	<u><a href="#">Community</a></u>	<u><a href="#">■</a></u>

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	<a href="#">ordinance) pursuant to California Government Code Section 65860.1 to provide consistency with amendments made to the General Plan pursuant to California Government Code Section 65302.9 for flood risk management.</a>		<a href="#">Development Department</a>		
<a href="#">20</a>	<a href="#">Review the Development Code and amend as necessary to require a minimum setback and easements consistent with State Title 23 and United States Army Corps of Engineers standards for levee maintenance corridors.</a>	<a href="#">HS-6.1</a> <a href="#">HS-6.5</a>	<a href="#">Community Development Department</a>		■
<a href="#">21</a>	<a href="#">Collaborate in developing a maintenance and funding plan for levees with State and local flood management agencies.</a>	<a href="#">HS-6.11</a>	<a href="#">Community Development Department</a>		■
<a href="#">22</a>	<a href="#">Prepare and provide informational media educating and public about community safety issues and programs for management and response to flooding hazards.</a>	<a href="#">HS-6.12</a>	<a href="#">Community Development Department</a>		■
<a href="#">19</a> <a href="#">23</a>	The City shall periodically update an emergency management plan for the evacuation of people in areas at risk for flooding.	HS-6.4 HS-6.7	Community Development Department	■	■
<a href="#">20</a> <a href="#">24</a>	The City will pursue funding from any available funding sources (which may include, but not be limited to, the State's Floodway Corridor Program or Proposition 1E) to cover the cost of the plan (including any related studies) and the recommended improvements.	HS-6.10	Public Works Department		■
<a href="#">21</a> <a href="#">25</a>	The City shall conduct real-life exercise and simulations of disasters that will include participation by City residents.	HS-7.1	Fire Department  San Joaquin Office of Emergency Services		■
<a href="#">22</a> <a href="#">26</a>	The City shall periodically review the Insurance Services Office (ISO) Fire Suppression Rating Schedule (FSRS) for Stockton. Findings shall be reported to City Council for support to reduce the risks identified.	HS-7.5	Community Development Department  Fire Department		■