

Annex to 2010 Association of Bay Area Governments Local Hazard Mitigation Plan Taming Natural Disasters

City of San Pablo



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Introduction

The City of San Pablo is situated within the western portion of Contra Costa County, inland from the east side of San Pablo Bay, in California. The City encompasses an area of 2.6 square miles, and a population of 29,139 people, based on the 2010 census¹. With 127 full-time and 30-70 part time employees, and an annual operating budget for the fiscal year 2010-2011 of \$24 million, the City provides local police services, while fire and Building Division services are supplied by contract with the Contra Costa County Fire District and Contra Costa County Building Department respectively; most other utilities (water, sewer, gas, electricity, cable, etc.) are provided by other agencies and companies under franchise agreements. The City currently owns and maintains a City Hall, building facilities, parks, stormdrain system, bridges, and other infrastructure. A map of the City's jurisdictional boundary is provided in Exhibit A.

The Regional Planning Process

The City of San Pablo participated in various ABAG Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) update workshops, conferences, and meetings, including:

- MJHMP General Workshop May 8, 2009
- MJHMP Flooding Workshop July 7, 2009

At these meetings, some of the hazard mitigation strategies were modified or deleted and participants made recommendations on strategies that should be added to the list. In addition, the City of San Pablo has provided written and oral comments on the multi-jurisdictional plan and provided information on facilities that are defined as "critical" to ABAG. The City also held a public meeting for community input on August 22, 2009 and solicited feedback on the City of San Pablo website in August 2009.

For more information on these meetings and for rosters of attendees, please see Appendices A and H in the ABAG Multi-Jurisdictional Local Hazard Mitigation Plan 2010 (MJ-LHMP).

The Local Planning Process

In 2010, the City has recently updated its General Plan including its Safety and Noise Elements, which includes a discussion of fire, earthquake, flooding and landslide hazards.

Key City staff contributed to identify and prioritize mitigation strategies appropriate for the City. Staff involved included the City Manager, Planning Division Manager, Public Works Director, Chief Building Official, and the Disaster Preparedness Coordinator (Police Department). The City Manager oversaw Department/Division heads in the process. The Planning representative addressed issues related to land use, structures and environmental resources; the Engineering (Public Works) representative addressed public utilities, infrastructure, drainage, public right-ofway, streets and roads; the Building representative addressed construction and building code requirements; and the Police Department representative addressed public safety and

¹ For complete Census information on this city, see http://www.dof.ca.gov/research/demographic/state_census_data_center/census_2010/view.php



emergency response. Representatives from the Finance Department, Information Technology Division and Maintenance Division were invited for input in their areas of expertise, as appropriate. Through this coordination, general priorities, infrastructure, services, and potential funding sources for both existing and future hazard mitigation strategies were discussed. Representatives involved reviewed the mitigation strategy spreadsheet finalized in the subregional workshops and designated priorities for mitigation. The comments received from each representative were incorporated into the spreadsheet.

The strategy spreadsheet was submitted to ABAG to post on its website. Beforehand, a list of facilities deemed critical to response and recovery operations of the City was also submitted. The Local Hazard Mitigation Strategy Spreadsheet can be found in Exhibit C to the City of San Pablo 2010 Annex.

No formal meeting agendas, minutes, or sign-in sheets were prepared during this part of the process. City staff used a collaborative approach to identify and review the various elements of the Local Planning process.

Review and Incorporation of Existing Information

The following documents were reviewed and incorporated into this annex in addition to those documents referenced in Appendix A of the regional plan.

Existing plans, studies, reports, and technical information	Method of incorporation into the jurisdiction annex
General Plan Safety & Noise Element	Hazard Assessment and Mitigation Actions
Capital Improvements Program	Hazard Assessment and Mitigation Actions
Flood Plain Study	Hazard Assessment and Mitigation Actions
Emergency Response Plan	Hazard Assessment and Mitigation Actions
Geologic (landslide area) Map	Hazard Assessment

Process for Updating Plan Sections

The update process began by reviewing the 2005 Plan. City staff researched City records to acquire new information on hazards within the City, such as data on recent occurrences of natural hazards, and updated information on risk assessment provided by ABAG, etc. Staff coordinated updating the 2005 hazard mitigation plan sections with each City department to reflect completed/current/future projects, code revisions, amendments and other pertinent actions occurring after the 2005 Annex.

Public Meetings

The public had the opportunity to comment on the draft mitigation strategies at the San Pablo Hazard Mitigation Plan Pancake Breakfast Meeting on August 22, 2009 at 9:00 a.m. at the City Hall Maple hall building at 13831 San Pablo Ave., San Pablo CA. The event was advertised on



the City website (http://www.ci.san-pablo.ca.us/main/publicworks.htm) and the West County Times newspaper dated August 18, 2009; flyers were also distributed at the City Hall Building 3 permitting counter and Recreation Division information desk, and were handed out at Recreation events and at some commercial establishments. Attendance at the meeting was sparse. For additional public comments and viewing, the draft mitigation strategies were also published on the City of San Pablo website. The City did not receive any public comments from either the meeting or internet web posting. The City is continuously finding more ways to reach and seek participation from the public, and working together with local community groups and organizations. The City's goal is to educate and involve our communities in forming hazard mitigation actions and gain more feedback from the participating public to further improve our strategies. Copies of the notice published in the West County Times newspaper on August 18, 2009, the City's website page posting of the mitigation strategies, as well as the distributed flyers is attached as Exhibit "B".

San Pablo City Council comments have been incorporated into the draft.

The San Pablo City Council will adopt the plan in a public meeting via an official Resolution upon approval of the plan by FEMA. The ABAG multi-jurisdictional Local Hazard Mitigation Plan is included in the Safety and Noise Element of the City of San Pablo General Plan with an implementing policy number SN-I-34.

Hazards Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). All these hazards, including operational gas, water and other utility pipelines, impact the City of San Pablo. No new hazards have been identified by the City of San Pablo since the original development of this plan in 2005.

The City of San Pablo has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (particularly shaking, earthquake induced landslides and liquefaction), flooding (also including dam failure), wildfire, and landslides (including unstable earth) pose a significant risk for potential loss.

There are approximately 30 known faults in the region that are considered capable of generating earthquakes. The principal faults near San Pablo are the San Andreas Fault and the North Hayward Fault. The San Andreas Fault Zone is the predominant fault system in California and has generated some of the largest and most destructive earthquakes in history. The nearest location of the fault is about 15 miles west of San Pablo. The North Hayward Fault Zone passes directly underneath the eastern portion of the City and is considered a high earthquake hazard as any large movements would cause ground shaking and surface rupture in the area.

100-year floodplains in the City, identified by the Federal Emergency Management Agency (FEMA), are mainly along San Pablo and Wildcat Creeks, mostly at the west side of the City; 500-year floodplains extend further out from the 100-year floodplain edge. 500-year floodplains are along Rheem Creek at the west side of the City.



San Pablo Creek is a year-round watercourse and is regulated upstream by two dams: Briones Reservoir and the San Pablo Dam/Reservoir. According to a flood study conducted by ABAG in 2007, 1383 acres of land in the City of San Pablo are subject to flooding should both dams experience a catastrophic failure. The scenario may be triggered by a rupture of the Hayward fault, which lies partially under the City. If a magnitude 7.5 earthquake occurred on this fault, the study predicts that the San Pablo Dam would slump and decrease in height, allowing water to flow over the top, resulting in flooding downstream. If such disaster occurs, 51 miles of roadway and almost all schools and government buildings in the city will be inundated, per East Bay Municipal Utility District (EBMUD) and EBMUD Summit Reservoir Replacement Project reports.

Landslides in San Pablo are primarily located near the upland areas, along the creeks, and in the hillier northern part of the City. Sloping areas with greater than 30 degree gradient on both sides of San Pablo Dam Road east of the I-80 freeway are especially prone to land sliding. The areas north of Hillcrest Road are an active landslide area.

Detailed descriptions of earthquake, flooding and landslide hazards are adapted from San Pablo General Plan 2030, Safety & Noise Element.

While the City has undertaken a number of general hazard mapping activities since the first Safety Element was prepared by the City, generated maps are generally less detailed and are not as current as those shown on the ABAG website at http://quake.abag.ca.gov/mitigation/, thus the reader is referred to the ABAG maps.

Past Occurrences Of Disasters (natural and human-induced)

The Bay Area has experienced a number of different disasters over the last 50 years, including numerous earthquakes, floods, droughts, wildfires, energy shortages, civil disturbances, landslides, and severe storms. The Oakland Hills Firestorm of 1991, for example, ranks as one of the worst wildland-urban firestorm disasters to ever strike the United States with 25 deaths, 150 injuries, and the displacement of over 10,000 persons. With destruction and damage to over 3,400 residential units, losses were in excess of \$1.5 Billion.

The Loma Prieta Earthquake of 1989 is another example of the kind of large scale disaster which can strike the Bay Area. It killed 63 persons, injured 3,757, and displaced over 12,000 persons. With over 20,000 homes and businesses damaged and over 1,100 destroyed, this quake caused approximately \$6 Billion of damage. Reconstruction continues some two decades later as the replacement for Oakland-Bay Bridge is still several years from completion.

State and Federally declared disasters which have involved the City of San Pablo can be found at http://guake.abag.ca.gov/wp-content/documents/ThePlan-D-2011.pdf

In addition to the declared disasters, locally significant incidents that have also impacted the City of San Pablo in the last several years include:

 March 2011 – Wyman St. / Hillcrest Road landslide area. Landslide caused by natural disaster. Four families were displaced from their homes with no deaths or injuries. The San Pablo City Council declared it to be a local emergency.



 December 2005 – Wildcat Creek and San Pablo Creek area. A 50-year storm flooded many parts of the City backing up drainage to flat neighborhood areas. The San Pablo City Council declared it to be a local emergency and received grant money for creek bank repair, from FEMA and NRCS (Natural Resources Conservation Service).



Risk Assessment

Urban Land Exposure

The City of San Pablo examined the hazard exposure of San Pablo urban land based on information in ABAG's website at http://quake.abag.ca.gov/mitigation/landuse/. The "2005" Existing Land Use with 2009 Mapping" file was used for this evaluation (in the previous plan, the file used was "Existing Land Use in 2000").

In general, the hazard exposure of the City of San Pablo is increasing over time as the amount of urban land increases. There have been variations of urban land in the 100-year flood zone over the last 5 years due to changes in the new FEMA flood maps. The following table described the exposure of urban land within City of San Pablo to the various hazards.

Exposure (acres of urban land)							
Hazard	2005	2010	Change				
Total Acres of Urban Land	1633	1648	15				
Earthquake Faulting (within CGS zone) ²	204	257	53				
Earthquake Shaking (within highest two shaking categories)	334	337	3				
Earthquake-Induced Landslides (within CGS study zone)	204	257	53				
Liquefaction (within moderate, high, or very high liquefaction susceptibility	1138	1173	35				
Flooding (within 100 year floodplain)	130	163	33				
Flooding (within 500 year floodplain) 3	381	141	(240)				
Landslides (within areas of existing landslides)	231	234	3				
Wildfire (subject to high, very high, or extreme wildfire threat)	5	5	0				
Wildland-Urban Interface Fire Threat	697	703	6				
Dam Inundation (within inundation zone) ⁴	1383	1352	(31)				
Sea Level Rise ⁵	not applicable						
Tsunamis ⁶ (within inundation area)	not applicable						
Drought ⁷	1633	1648	15				

² In large part because the Hayward fault line systems run through the City.

³ The decrease is due to better and more accurate mapping.

⁴ The decrease is due to better and more accurate mapping.

⁵ The sea level rise map is not a hazard map. It is not appropriate to assess infrastructure exposure to

sea level rise. ⁶ Tsunami evacuation planning maps were not available inside the San Francisco Bay in 2005. This map became available in December 2009. Acres of exposed land are not an appropriate analysis for this hazard. It should be noted that this map is not a hazard map and should be used for evacuation planning purposes only. The inundation line represents the highest inundation at any particular location from a suite of tsunami sources. It is not representative of any single tsunami.

The entire City of San Pablo is subject to drought.



Infrastructure Exposure

The City of San Pablo also examined the hazard exposure of infrastructure within the jurisdiction based on the information on ABAG's website at http://quake.abaq.ca.gov/mitigation/landuse/. Of the 69 miles of roadway in the City of San Pablo, the following are exposed to the various hazards analyzed.

Exposure (miles of infrastructure)						
Hanned	Road	dway	Transit		Rail	
Hazard	2005	2010	2005	2010	2005	2010
Total Miles of Infrastructure	59	69	0	0	0	0
Earthquake Shaking (within highest two shaking categories)	59	69	0	0	0	0
Liquefaction Susceptibility (within moderate, high, or very high liquefaction susceptibility	42	49	0	0	0	0
Liquefaction Hazard (within CGS study zone) ¹	0	0	0	0	0	0
Earthquake-Induced Landslides (within CGS study zone)	0	0	0	0	0	0
Earthquake Faulting (within CGS zone)	6	8	0	0	0	0
Flooding (within 100 year floodplain)	4	7	0	0	0	0
Flooding (within 500 year floodplain) ²	15	6	0	0	0	0
Landslides (within areas of existing landslides)	1	2	0	0	0	0
Wildfires (subject to high, very high, or extreme wildfire threat)	0	0	0	0	0	0
Wildland-Urban Interface Fire Threat	25	27	0	0	0	0
Dam Inundation (within inundation zone)	51	56	0	0	0	0
Sea Level Rise ³	not applicable					
Tsunamis ⁴	not applicable					

Note: Transit and infrastructure rail are not identified in the ABAG website for hazard exposure within the City of San Pablo jurisdiction.

¹ 44 miles of local roads, 19 miles of highway and 6 miles of miscellaneous roads/ramps are not yet in the area that has been evaluated by California Geological Survey (CGS) for this hazard.

² The decrease is due to better and more accurate mapping.

³ The sea level rise map is not a hazard map. It is not appropriate to assess infrastructure exposure to

sea level rise. ⁴ Tsunami evacuation planning maps were not available inside the San Francisco Bay in 2005. This map became available in December 2009. Miles of exposed infrastructure is not an appropriate analysis for this hazard. It should be noted that this map is not a hazard map and should be used for evacuation planning purposes only. The inundation line represents the highest inundation at any particular location from a suite of tsunami sources. It is not representative of any single tsunami.



Drought ⁵	not applicable
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⁵ Drought is not a hazard for roadways.

Exposure of City-Owned Buildings, Plus Critical Healthcare Facilities and Schools

Finally, the City of San Pablo examined the hazard exposure of critical health care facilities and schools located within the City of San Pablo, and City-owned buildings based on the information on ABAG's websites at *http://quake.abag.ca.gov/mitigation/cf2005/ and http://guake.abag.ca.gov/mitigation/cf2010/. The City of San Pablo provided a list of the critical facilities it owns to ABAG. ABAG provided a detailed assessment of the hazard exposure of each of its facilities. The following numbers of facilities are exposed to the various hazards analyzed.

Exposure (number of facility types)								
Hazard	Hospitals		Schools		Locally owned critical facilities		Locally owned bridges and interchanges	
	2005	2010	2005	2010	2005	2010	2005	2010
Total Number of Facilities	1	1	9	10	10	11	9	8
Earthquake Shaking (within highest two shaking categories)	1	1	9	10	10	11	9	8
Liquefaction Susceptibility (within moderate, high, or very high liquefaction susceptibility	1	O ¹	9	10	32	6 ³	7 ⁴	8
Liquefaction Hazard (within CGS study zone) ⁵	-	-	ı	-	-	1	ı	ı
Earthquake-Induced Landslides (within CGS study zone) ⁶	-	-	-	-	-	-	-	-
Earthquake Faulting (within CGS zone)	0	0	0	0	0	1	0	0

¹ The hospital is within an area of <u>low</u> (not within moderate, high or very high) liquefaction susceptibility in 2010; per ABAG's website for hazard exposure of critical facilities data (applies to all liquefaction susceptibility footnotes).

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Seven of the locally owned critical facilities are within low liquefaction susceptibility in 2005.

³ Five of the locally owned critical facilities are within <u>low</u> liquefaction susceptibility in 2010.

⁴ Two of the locally owned bridges and interchanges are within <u>low</u> liquefaction susceptibility in 2005.

⁵ The California Geological Survey (CGS) mapping for Contra Costa County has not been completed by CGS Earthquake Induced Landslides study zones.

⁶ The California Geological Survey (CGS) mapping for Contra Costa County has not been completed by CGS Earthquake Induced Landslides study zones.



Flooding (within 100 year floodplain) 7	0	0	1	0	0	4	0	2
Flooding (within 500 year floodplain) 8	0	0	2	0	3	0	5	5
Landslides (within areas of existing landslides)	0	0	0	0	0	1	0	0
Wildfires (subject to high, very high, or extreme wildfire threat)	0	0	0	0	0	0	0	0
Wildland-Urban Interface Fire Threat	0	0	3	2	1	1	3	2
Dam Inundation	1	1	8	9	10	11	9	8
Sea Level Rise (exposed to 16in sea level rise) ⁹	-	0	-	0	1	0	-	0
Sea Level Rise (exposed to 55in sea level rise) ¹⁰	-	0	-	0	-	0	-	0
Tsunamis ¹¹ (within inundation area)	-	0	-	0	-	0	-	0
Drought ¹²	-	-	-	-	-	-	-	-

⁷ The decrease is due to better and more accurate mapping. ⁸ The decrease is due to better and more accurate mapping.

Repetitive Loss Properties

In 2004, there are five repetitive loss properties in the City of San Pablo based on the information at http://quake.abag.ca.gov/mitigation/pickflood.html; these are residential properties within the 100-year and 500-year flood zones. The City of San Pablo had no repetitive loss property that was outside these flood zones. Currently, 15 losses, which was mostly caused by the December 31, 2005 storm (see "Past Occurrences Of Disasters" above). are listed on the FEMA database.

Other Risks

⁹ Sea level rise data was not available in 2005

¹⁰ Sea level rise data was not available in 2005

¹¹ Tsunami evacuation planning maps were not available inside the San Francisco Bay in 2005. This map became available in December 2009. It should be noted that this map is not a hazard map and should be used for evacuation planning purposes only. The inundation line represents the highest inundation at any particular location from a suite of tsunami sources. It is not representative of any single tsunami.

12 Drought will not affect locally owned facilities directly.



The City of San Pablo plans to continue to work with ABAG to improve the risk assessment information being compiled by ABAG, including developing ways to assess how many soft-story buildings are located within the City.

The City of San Pablo plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure, and critical facilities which might result from any of the hazards previously noted.

National Flood Insurance Program

The City of San Pablo has participated in the National Flood Insurance Program since 1994. The City is also applying to participate in the Community Rating System (CRS) this year.

Mitigation Goals and Objectives

The goal of the ABAG MJ-LHMP is to maintain and enhance a disaster-resistant region by reducing the potential for loss of life, property damage, and environmental degradation from natural disasters, while accelerating economic recovery from those disasters. This goal is unchanged from the 2005 plan and continues to be the goal of the City of San Pablo in designing its mitigation program.

Additionally, the City of San Pablo has the specific objective of reducing the number of public and private buildings within the City that are vulnerable to the effects of earthquakes. Also with the goal of joining CRS to provide residents with more affordable flood insurance, the City is making additional efforts to better inform its residents with flooding preparedness and mitigation resources.

Mitigation Activities and Priorities

Evaluation of Progress from 2005 Plan

In 2005, mitigation actions and priorities were identified. The attached list indicates each of the strategies identified, along with responsible party, action taken, and current status of progress. Note that the City contracts the Fire District and Building services and as such many of those related strategy activities are covered through Contra Costa County.

- Infra a-10 The City Capital Improvement Projects (CIP) such as the Broadway Ave. Traffic calming (PW 333) improved the visibility and safety of pedestrian path of travel to serve as an effective evacuation path in an event of an emergency.
- Infra a-17 The City is a participant in the regional San Pablo Ave. SMART corridors and I-80 Integrated Corridor Mobility (ICM) projects, managed by Alameda County Transportation Commission (CMA), would coordinate with the Caltrans staff at Regional Traffic Management Center (TMC) in the event of a disaster.



- Infra a-12 The City El Portal Gateway (PW 455) replaced overhead utilities with underground facilities on portions of El Portal, and another project (PW 384) will complete the underground utilities on the remainder of the El Portal Drive.
- Infra d-1. d-2 & d-4 Studies were completed which include flood hazard mapping and drainage system improvement recommendations. These detailed studies have been completed by the Urban Creeks Council and are documented in the WRAP²⁵.
- Infra d-5, d-6, d-7, d-8 The Capital Improvement Plan for Fiscal Year 11 identifies an annual program to replace failing or damaged storm drains. Maintenance of storm water facilities are on-going.
- Hsng a-1 City staff provides information to real estate agents and property owners regarding questions related flood, fire, earthquake, and landslide hazard zones.
- Hsng h-3: The City requires drainage plan review for property improvements and appropriate fees are collected.
- Hsng h-4: Information on sandbag locations is provided in the City newsletter to residents as well as the City website.
- Hsng k-6: The Police Department sponsors the formation and training of Community Emergency Response Teams and educates the community through the Police Citizens Academy.
- Govt c-14: The City is covered under the Contra Costa County Community Warning System that is fully explained at the following website: http://www.co.contracosta.ca.us/index.aspx?nid=161
- Govt d-5: The City participates in the National Flood Insurance Program and will participate in Community Rating System.
- Envi a-1: Projects within the City of San Pablo are required, through the Planning review process, to analyze potential environmental impacts and mitigate any impacts.
- Envi a-6: The City ensures that erosion and stormwater control measures are in place for construction activities prior to and during wet weather.
- Envi a-7: The City annually inspects and documents construction sites prior to the rainy season. Additionally, site visits are regularly conducted during the rainy season.
- Land a-2, d-1: Due to the geologic formation of the area, geotechnical reports are required for new home construction, most remodels, and new development projects.
- Envi a-11 Circle S Asbestos Abatement and Demolition (PW 572) is the removal of asbestos in a trailer park, which was recently completed.

Future Mitigation Actions and Priorities

As a participant in the 2010 ABAG multi-jurisdictional planning process, the staff of City of San Pablo helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. Decisions on priorities were made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or cultural heritage. Representatives from multiple departments then coordinated to review progress on the City of San Pablo's 2005 strategies, to identify and prioritize additional mitigation strategies to update the list for 2010.

²⁵ Wildcat Creek Restoration Action Plan by the Urban Creeks Council of California, April 2010.



These draft priorities were submitted to the City of San Pablo management. The draft priorities will be provided to the San Pablo City Council for adoption pending approval of this LHMP by FEMA. Strategies can be found at the listed link on Exhibit C.

The City has prioritized specific mitigation tasks for the next 5 years. This list includes implementation process, funding strategy, responsible agency, and approximate time frame. The following proposed projects address mitigation strategies to improve emergency operations communication as well as mitigating flooding, earthquakes, wildfires, and landslides:

- Mitigation Strategy Number: Infra a-11 and a-12
 Hazard Mitigation Strategy: Increase public safety, communication and power back-up.

 Responsible Department/Agency: City of San Pablo Public Works Department
 Potential funding sources & Approximate timeframe: Rule 20A; 2013 and later.
 - El Portal Drive (West) Utility Undergrounding (384) *replace overhead utilities with underground facilities and coordinate with utility agencies for planned future line installations.
 - Church Lane Utility Undergrounding (PW 511)*
 - 23rd Street Revitalization & Utility Undergrounding (PW 512)* add street lights at the west side of the street.
 - Market St. (East) Utility Undergrounding (PW 514)*
 - Dover Ave. Streetscape Improvements & Utility Undergrounding (PW 523)*
 - City various garden locations (Utility undergrounding, PW 571)*
- Mitigation Strategy Number: Infra d-1, d-4, d-5, d-6, d-7, d-8, d-9, d-16 and d-17
 Hazard Mitigation Strategy: Reduce flooding hazard and ensure the safety of potable
 drinking water.

Responsible Department/Agency: City of San Pablo Public Works Department Potential funding sources & Approximate timeframe: Unknown

- o Market St. Storm Drainage (PW 355) ◆Stormdrain system upgrade
- o Alpine Road Storm Drainage Upgrades (PW 536) ◆
- o Wildcat / San Pablo Creeks Flood Control Project (PW464) ★ − Creek improvements and flood mitigation
- o Lake School Detention Pond/Playing Field (PW 515) ◆
- o Old Town Drainage Study (PW 516) ★ Study on flood mitigation
- Stormdrain System Upgrades & Replacements (PW 524) *
- o Culvert Replacements (PW591, PW592 and PW593) ◆
- Wildcat Creek Daylighting at Davis Park (PW 579) ◆
- Mitigation Strategy Number: Heal a-1
 Hazard Mitigation Strategy: Increased public safety during a seismic event.
 Responsible Department/Agency: City of San Pablo Public Works Department
 Potential funding sources & Approximate timeframe: Unknown
 - o City Hall Seismic Retrofit (MB 042) building seismic upgrades to current code.
- Mitigation Strategy Number: Infr b-1
 - Hazard Mitigation Strategy: Maintain a primary emergency response route during a seismic event. Retrofit of seismically-deficient city- and county-owned bridges and road structures.

Responsible Department/Agency: City of San Pablo Public Works Department



Potential funding sources & Approximate timeframe: Gas tax & Redevelopment bond proceeds and federal grant; 2014

- o Rumrill Blvd Bridge Replacement (HBRR, PW 442) − *removing and replacing the bridge with current seismic resistance standards.
- o I-80/San Pablo Dam Rd. Interchange (PW 483) ❖
- Mitigation Strategy Number: Infr a-10
 Hazard Mitigation Strategy: Improved the visibility and safety of pedestrian path of travel to serve as an effective evacuation path in an event of an emergency.

 Responsible Department/Agency: City of San Pablo Public Works Department
 - o Citywide Traffic Calming Measures (PW 507) − Traffic & street improvements.
 - Potential funding sources & Approximate timeframe: Redevelopment bond proceeds, Measure J (local sales tax); unknown
 - 23rd Street Traffic Calming (PW 548)
 - Potential funding sources & Approximate timeframe: Redevelopment bond proceeds and Measure C (local sales tax); 2011
 - Church Lane Bridge Widening at San Pablo Creek (HBRR, PW 341)
 - Potential funding sources & Approximate timeframe: Unknown
 - I-80/San Pablo Dam Rd. Interchange (PW 483)
 - Potential funding sources & Approximate timeframe: Unknown

On-Going Mitigation Strategy Programs

The City of San Pablo has many on-going mitigation programs that help create a more disasterresistant City. The following list highlights those programs identified as Existing Programs in the mitigation strategy spreadsheet. Others are on-going programs that are currently underfunded. It is the City's priority to find additional funding to sustain these on-going programs over time.

- Vulnerability assessments of City facilities and infrastructure (GOVT-a-1):
- Non-structural mitigation for building contents (GOVT-a-4);
- Installation of micro and/or surveillance cameras at critical public assets tied to webbased software (GOVT-a-6);
- Coordination with the State Division of Safety of Dams to ensure that cities and counties are aware of the timeline for the maintenance and inspection of dams whose failure would impact their jurisdiction; (GOVT-a-8);
- Development of interoperable communications for first responders from cities, counties, special districts, state, and federal agencies. (GOVT-c-7);
- Maintain and update the City of San Pablo's Standardized Emergency Management System Plan (GOVT-c-12);
- Participation in general mutual-aid agreements and agreements with adjoining jurisdictions for cooperative response to fires, floods, earthquakes, and other disasters (GOVT-c-13);
- Participation in FEMA's National Flood Insurance Program (NFIP, GOVT-d-5)
- Participation in NFIP's Community Rating System (CRS, INFR-d-16)
- Develop printed materials, utilize existing materials (such as developed by FEMA and the American Red Cross), conduct workshops, and/or provide outreach encouraging



employees of these critical health care facilities to have family disaster plans and conduct mitigation activities in their own homes (HEAL-a-7);

- Sponsor the formation and training of Community Emergency Response Teams (CERT) through partnerships with local businesses (GOVT-c-3, ECON-j-5, HWNG-k-6);
- Incorporate FEMA guidelines and suggested activities into local government plans and procedures for managing flood hazards (LAND-c-2);
- Increase efforts to reduce landslides and erosion in existing and future development through continuing education of design professionals on mitigation strategies (HSNG—i-2, ECON-g-2);
- Conduct an inventory of existing or suspected soft-story residential, commercial and industrial structures (HSNG-c-4, ECON-b-4);
- Continue to repair and make structural improvements to storm drains, pipelines, and/or channels to enable them to perform to their design capacity in handling water flows as part of regular maintenance activities (INFR—d-6, INFR-d-7)

Incorporation into Existing Planning Mechanisms

The City of San Pablo has several planning mechanisms which are:

- General Plan Safety and Noise Element
 - o http://sanpabloca.gov/index.aspx?nid=867
- Capital Improvements Plans
 - o http://sanpabloca.gov/index.aspx?nid=879
- City of San Pablo Climate Action Plan
 - o http://sanpabloca.gov/index.aspx?nid=1121

The City of San Pablo has a Safety and Noise Element in its General Plan that includes a discussion of fire, earthquake, flooding, and landslide hazards and Implementing Policies. In addition, the City of San Pablo enforces the requirements of the California Environmental Quality Act (CEQA), which, since 1988, requires mitigation for identified natural hazards. The City of San Pablo has used these pre-existing programs as a basis for identifying gaps that may lead to disaster vulnerabilities in order to work on ways to address these risks through mitigation.

The City has a Capital Improvement Program (CIP) that includes maintenance of storm drain systems, creek cleaning and continues upgrading of City-owned bridges and critical facilities. The research conducted and information provided in this Annex will be used to review the City's Capital Improvement Plan in order to include strategies to reduce property damage and create a more disaster resistant City.

Plan Update Process

As required Disaster Mitigation Act of 2000, the City of San Pablo will update this plan annex at least once every five years, by participating in a multi-agency effort with ABAG and other agencies to develop a multi-jurisdictional plan.

The Public Works Department Engineering Division will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting



our City, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be a discussion item on the agenda of the meeting of Department leaders at least once a year in April. At that meeting, the department heads will focus on evaluating the Annex in light of technological and political changes during the past year or other significant events. The Department leaders will be responsible for determining if the plan should be updated.

The City is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The Public Works Department Engineering Division will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the City again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The public will continue to be involved whenever the plan is updated and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the City will provide the opportunity for the public to comment on the updates. A public notice will be posted prior to the meeting to announce the comment period and meeting logistics.

Mitigation Plan Point of Contact

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Exhibit A - Jurisdiction Boundary Map



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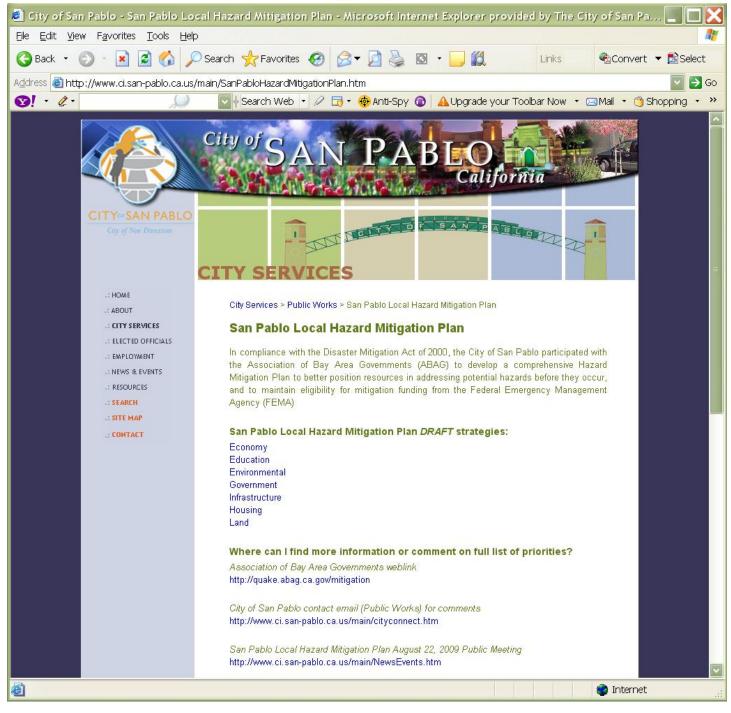


Exhibit B - Public Meeting Announcements

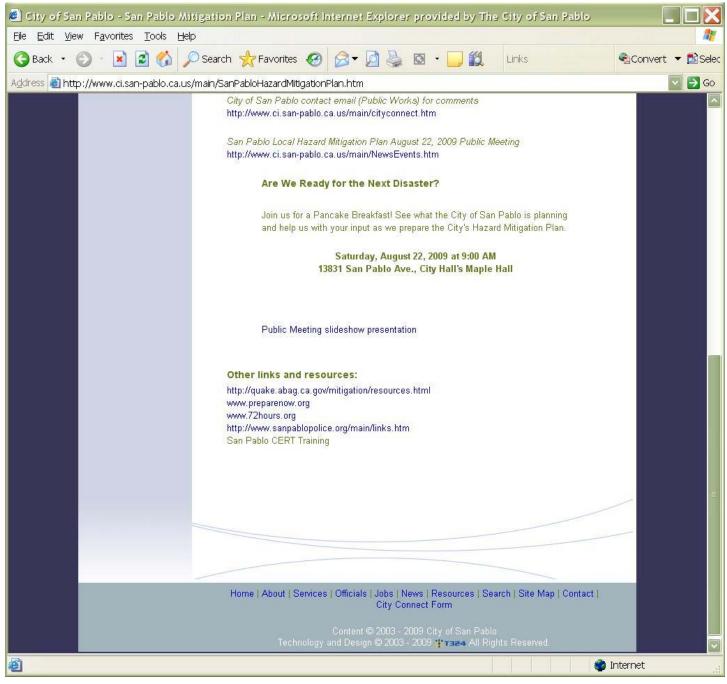
Web postings - LHMP strategies public input page





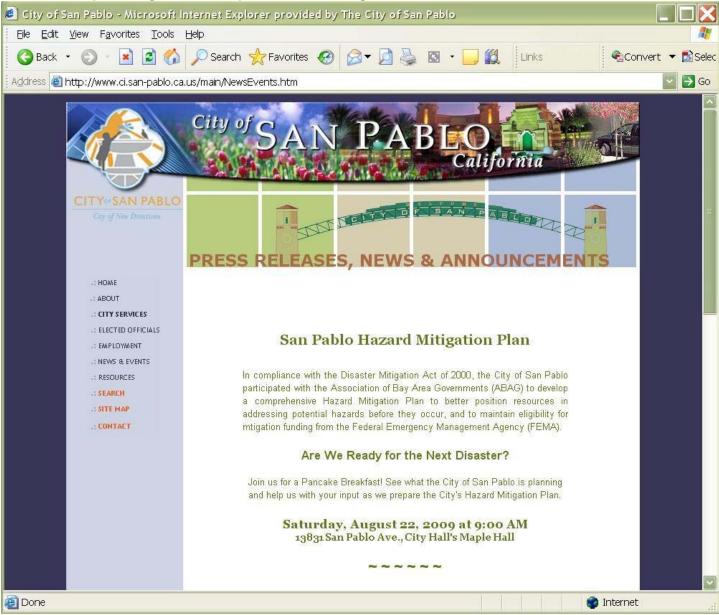








Web postings - LHMP public meeting web announcement





LHMP public meeting newspaper article

TUESDAY, AUGUST 18, 2009

205 BAY AREA NEWS GROUP

A5

EAST BAY ROUNDUP

SAN PABLO

PLAN OVER PANCAKES: San Pablo invites residents to discuss the preparation of a new Hazard Mitigation Plan over pancakes at a breakfast this coming weekend.

The plan will include measures to lessen the effects of natural disasters such as earthquakes, fires and floods on the community.

It is part of the Association of Bay Area Governments' Multijurisdictional Hazard Mitigation Plan. The city must have an approved plan in order to qualify for federal hazard mitigation

grants

The city will host a public hearing to receive input from the public as part of a pancake breakfast at 9 a.m. Saturday at Maple Hall in the San Pablo Civic Center, 13831 San Pablo Ave.

For more information, go to www.ci.san-pablo.ca.us/ main/NewsEvents.htm.

- Tom Lochnet



LHMP event flyer

Are We Ready for the Next Disaster?



Join us for a Pancake Breakfast! See what the City of San Pablo is planning and help us with your input as we prepare the City's Hazard Mitigation Plan.

Where: 13831 San Pablo Ave., City Hall's Maple Hall, San Pablo

When: Saturday, August 22, 2009 at 9:00 a.m. For more information check out our web link:

http://www.ci.san-pablo.ca.us/main/NewsEvents.htm





Exhibit C - City of San Pablo Local Hazard Mitigation Plan Strategies

Available on CD or at:

http://www.abag.ca.gov/bayarea/eqmaps/mitigation/strategy.html