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

CITY OF CONCORD



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## Introduction

The City of Concord is the largest city in Contra Costa County, California. It covers 31.13 square miles and is 29 miles east of San Francisco. Concord has a population of 125,864 people, with a household median income of \$68,109. The City has a diverse ethnicity, with 21.8% being Hispanic and 9.2% Asian based on the 2000 Census.<sup>1</sup> The projected City's budget for Fiscal Year 10-11 is \$70,992,070. The City employs 387 full-time people. While the City provides local police services, sewer infrastructure with sewer treatment provided by Central Sanitation, an independent district that includes 146 square miles of central Contra Costa County. A map of the City's jurisdictional boundary is provided as **Exhibit A**.

Major government facilities include the Pavilion, Centre Concord, Senior Center, City Hall, City of Concord Corporation Yard, City Hall Permit Center, City Owned Golf Course, Engineering Department facility, Navel Weapons Station

## The Regional Planning Process

The City of Concord participated in the ABAG workshops in 2005 which developed the original Regional Plan. The City Council formally approved that plan in July 2005.

During the preparation of this five year update, City staff attended the initial kickoff meeting and participated in numerous ABAG workshops, conferences, and meetings. City staff attended the Flooding Workshop held on July 7, 2009; attended the Building Officials Workshop on July 1, 2009 as well as the Fire Forum. On July 2, 2009 City staff participated in the Wildfire Workshop. Staffs were also present at the City-County Workshop, and the House & Outreach Committee meeting held May 27, 2009. The City provided input to the regional process from the perspective of the City and helped determine what regional mitigation priorities were important for Concord. In addition, the City of Concord has provided written and oral comments on the multi-jurisdictional plan and provided information on facilities that are defined as "critical" to ABAG.

## The Local Planning Process

The City Manager directed staff to form an internal staff team to undertake the review of the City of Concord's 2010 Local Hazard Mitigation Plan. The Director of Public Works and Engineering Services, and the City Engineer, were assigned as lead staff for the 2010 Update. Three team meetings were held (August 25, 2009, August 27, 2009 and September 23, 2009) to organize the City's response. At the first meeting, general priorities and appropriate departments were identified. Subsequent meetings identified mitigation strategies, prioritized the strategies as they

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<sup>1</sup> For complete Census information, see <http://www.bayareacensus.ca.gov/cities/Concord.htm>



apply to the City of Concord, and reviewed preliminary budgets and potential funding sources for strategies designated as “High” priority for City-owned-and-operated facilities.

These meetings included representatives from multiple City of Concord departments. Personnel involved in these meetings included senior management and staff from Public Works, Engineering, Building, Current Development, Police and Office of Emergency Services. The group was made up of building department officials, facility managers, civil engineers, and emergency managers.

Participating senior staff and their roles included:

- Vance Phillips, Chief Building Official, provided input on City critical facilities, building code issues, as well as buildings potentially impacted by hazards. Vance also reviewed and provided comments on the 2010 Strategies.
- Craig Labadie, City Attorney, provided feedback on the 2010 Strategies
- The Director of Community Development commented on the 2010 Strategies
- Frank Kennedy, Interim Current Development Manager, offered his expertise in FEMA flood maps and provided comments on the 2010 Strategies
- Margaret Romiti, EOC Coordinator, Office of the Chief of Police, provided her expertise on Emergency Services and commented on the 2010 Strategies
- Mario Camorongan, Interim Assistant City Engineer, provided comments on the 2010 Strategies
- Danae Gemmell, Acting City Engineer, offered her expertise on CIP projects, sewer maintenance and stormwater. She also provided input on the Strategies.

No formal meeting agendas, minutes, or sign-in sheets were prepared during the staff team process. The City of Concord’s approach involved a collaborative, informal review and discussion of materials.

### ***Process for Updating Plan Sections***

A key element in the above process was review of the 2005 plan. This was done comprehensively as part of the City’s review of the 2010 materials, with material updated as needed to reflect the minor changes to City policies and programs that had occurred since 2005. The updates also incorporated the new ABAG data on hazards susceptibility and the 2010 planning process. The City of Concord included any additional occurrences of natural hazards since the last plan and updated the risk assessment with new data from ABAG. The City of Concord adopted the All Hazard Emergency Operation Plan (AHEOP) in November 2006.



## **Review of Existing Reports, Studies and Plans**

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

<i>Existing plans, studies, reports, and technical information</i>	<i>Method of incorporation into the jurisdiction annex</i>
City of Concord Emergency Operation Plan	Priority mitigation actions and programs
Self Evaluation Transition Plan	Hazards assessment, ADA priority mitigation and program

## **Public Meetings**

Opportunity for public comments on the DRAFT mitigation strategies was provided at a public meeting at the City Council Chambers on Wednesday, September 23, 2009 at 7:00 pm and advertised on the City of Concord website. The meeting was televised and the public informed of opportunities to review and comment on the strategies. The draft mitigation strategies were also published on the City of Concord website for public viewing. No public comments were received from either the meeting or the internet posting. Copies of the internet posting and announcement are included as **Exhibit B** to the City of Concord 2010 Annex.

The City will seek further comments prior to and during the adoption process for the plan in 2011. The City Council will adopt the plan in a public meeting via an official Resolution upon approval by FEMA, which will provide further opportunities for public comment. The mitigation strategies will become an implementation appendix of the Safety Element of the City of Concord General Plan. In addition, the City will publish press releases or work with the Contra Costa Times to further publicize the local Annex document and make the public more aware of the issues and strategies facing the City.

## **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
  - tsunamis
- Four related to weather:
  - Flooding
  - Landslides
  - Wildfires
  - Drought



Maps of these hazards and risks are shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

The City of Concord has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The City of Concord also refers to the FEMA FIRM maps. The conclusion is that earthquake (particularly shaking), flooding (including dam failure), wildfire, and landslides (including unstable earth) pose a significant risk for potential loss.

The City of Concord does not face any natural disasters not listed in the ABAG multi-jurisdictional plan.

The City of Concord has undertaken a number of general hazard mapping activities since the first Safety Element was prepared by the City of Concord. These maps are detailed and are as current as those shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>. For hazard exposure purposes, we used ABAG's maps. The City of Concord maps are attached as **Exhibit E**.

## **Past Occurrences of Disasters (natural and human-induced)**

The City of Concord has experienced a number of large emergencies over the last several decades, including mass injury incidents, numerous earthquakes, flooding, droughts, urban fires, landslides and pandemic.

The Concord Sunvalley Mall plane crash on December 23, 1985: a twin-engine Beechcraft plane on its second inbound approach to the Buchanan Airport plowed into the roof of the Macy's Department Store at the Sunvalley Mall, bursting into a ball of fire rising 40 feet into the air, and tearing a 50 foot long hole in the roof. The mall was packed with thousands of last minute holiday shoppers. Broken glass, flaming droplets of aviation fuel, and burning hot metal debris rained upon parents and children waiting to see Santa Claus, scorching many. All four passengers in the plane lost their lives. Of the 83 people taken to hospitals, 4 succumbed to their injuries.

The Loma Prieta Earthquake of 1989 is an 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.

The Concord Water Park tragedy of June 2, 1997, when the Banzai Pipeline slide at Waterworld USA broke under the weight of reveling students, killed one and dropped dozens of others through the air to the ground. Thirty-two students from a Napa High School were taken to 10 Bay Area hospitals; five of them by helicopter.



Concord winter storms in December 2005 caused area flooding, uprooted trees and damaged property. A few months later, in March 2006, a 1,000-foot segment of one eastbound lane was closed at Ygnacio Valley Road and Cowell Road due to landslide. Over 1.4 million in federal emergency relief funds was awarded to Concord to allow the City to implement a temporary repair.

In April 2009 the declared H1N1 pandemic by the World Health Organization led Contra Costa County Health Services to initiate four mass inoculation clinics. The cities of Concord, Richmond, San Ramon and Pittsburg held separate drive-thru clinics vaccinating over 6000 citizens in the perspective priority groups.

More information on State and Federally declared disasters in Contra Costa County can be found at <http://quake.abag.ca.gov/wp-content/documents/ThePlan-D-2011.pdf>.

In addition to the declared disasters noted in **Exhibit F**, locally significant incidents that have also impacted Contra County in the last several years include:

- January 2009 – Mehserle Shooting. Civil Disturbance. City of Oakland activated their EOC. Contra Costa County EOC monitored situation.
- Weather, Summer Heat and Winter Cold. During weather extremes City of Concord OES monitors situation with cities that are affected.
- February 27, 2010 – Chile Earthquake/Tsunami. State EOC activated. Contra Costa County EOC monitored situation.

## **Risk Assessment**

### ***Urban Land Exposure***

The City of Concord examined the hazard exposure of City of Concord urban land based on information in ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. The "2005 Existing Land Use with 2009 Mapping" file was used for this evaluation (in the existing plan, the file used was "Existing Land Use in 2000").

In general, the hazard exposure of the City of Concord is decreasing over time as the amount of urban land decreases due mostly to changes in the FEMA flood maps. The following table described the exposure of urban land within the City of Concord to the various hazards.



<b>Exposure (acres of urban land)</b>			
<b>Hazard</b>	<b>Plan Year 2005</b>	<b>Plan Year 2010</b>	<b>Change</b>
<i>Total Acres of Urban Land</i>	19,089	18,415	-674
Earthquake Faulting (within CGS zone)	674	669	-5
Earthquake Shaking (within highest two shaking categories) <sup>1</sup>	9168	9065	-103
Earthquake-Induced Landslides (within CGS study zone)	0	0	0
Liquefaction (within moderate, high, or very high liquefaction susceptibility <sup>2</sup> )	3609	4133	524
Flooding (within 100 year floodplain) <sup>3</sup>	697	610	-87
Flooding (within 500 year floodplain)	495	659	164
Landslides (within areas of existing landslides)	3563	3009	-554
Wildfire (subject to high, very high, or extreme wildfire threat) <sup>4</sup>	4419	3411	-1008
Wildland-Urban Interface Fire Threat	7194	7152	-42
Dam Failure Inundation (within inundation zone)	2202	2203	1
Sea Level Rise <sup>5</sup>	not applicable		
Tsunamis (within inundation area) <sup>6</sup>	not applicable		
Drought <sup>7</sup>	19,089	18,415	-674

<sup>1</sup> In large part because the Concord/Green Valley Fault runs through the City.

<sup>2</sup> The decrease is due to better and more accurate mapping.

<sup>3</sup> The decrease is due to better and more accurate mapping and LOMR (Letters of Map Revision).

<sup>4</sup> The decrease is due to better and more accurate mapping.

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

<sup>6</sup> Tsunamis 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.

<sup>7</sup> The entire City of Concord is subject to drought.



## Infrastructure Exposure

The City of Concord examined the hazard exposure of infrastructure within the jurisdiction based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 490 miles of roadway in the City of Concord, the following are exposed to the various hazards analyzed.

Exposure (miles of infrastructure)						
Hazard	Roadway		Transit		Rail	
	Plan Year 2005	Plan Year 2010	Plan Year 2005	Plan Year 2010	Plan Year 2005	Plan Year 2010
<i>Total Miles of Infrastructure</i>	473	490	6	6	36	32
Earthquake Shaking (within highest two shaking categories)	277	310	5	5	0	0
Liquefaction Susceptibility (within moderate, high, or very high liquefaction susceptibility)	90	118	0	1	7	7
Liquefaction Hazard (within CGS study zone) <sup>1</sup>	-	-	-	-	-	-
Earthquake-Induced Landslides (within CGS study zone) <sup>2</sup>	-	-	-	-	-	-
Earthquake Faulting (within CGS zone)	21	23	1	1	0	0
Flooding (within 100 year floodplain)	15	10	0	0	1	0
Flooding (within 500 year floodplain)	11	26	0	0	0	0
Landslides (within areas of existing landslides)	52	39	0	0	3	2
Wildfires (subject to high, very high, or extreme wildfire threat)	60	26	1	0	28	19
Wildland-Urban Interface Fire Threat	188	202	3	3	8	7
Dam Inundation (within inundation zone)	60	67	1	1	0	0
Sea Level Rise <sup>3</sup>	not applicable					
Tsunamis <sup>4</sup>	not applicable					
Drought <sup>5</sup>	not applicable					

<sup>1</sup> The California Geological Survey has not completed mapping for Contra Costa County

<sup>2</sup> The California Geological Survey has not completed mapping for Contra Costa County

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

<sup>4</sup> 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.

<sup>5</sup> Drought is not a hazard for roadways



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

Finally, the City of Concord examined the hazard exposure of critical health care facilities and schools located within the City of Concord, and City-owned buildings based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickcrit2010.html>. The City of Concord 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 number of facilities is exposed to the various hazards analyzed.



Exposure (number of facility types)								
Hazard	Hospitals		Schools		Locally owned critical facilities		Locally owned bridges and interchanges	
	Plan Year 2005	Plan Year 2010	Plan Year 2005	Plan Year 2010	Plan Year 2005	Plan Year 2010	Plan Year 2005	Plan Year 2010
<i>Total Number of Facilities</i>	20	18	34	50	16	14	38	38
Earthquake Shaking (within highest two shaking categories)	17	16	24	36	13	12	33	34
Liquefaction Susceptibility (within moderate, high, or very high liquefaction susceptibility)	3	5	6	10	6	4	14	20
Liquefaction Hazard (within CGS study zone) <sup>1</sup>	-	-	-	-	-	-	-	-
Earthquake-Induced Landslides (within CGS study zone) <sup>2</sup>	-	-	-	-	-	-	-	-
Earthquake Faulting (within CGS zone)	5	3	0	0	0	0	7	8
Flooding (within 100 year floodplain)	0	0	0	0	1	1	6	6
Flooding (within 500 year floodplain)	1	3	0	6	0	0	1	0
Landslides (within areas of existing landslides)	20	18	34	50	16	14	35	38
Wildfires (subject to high, very high, or extreme wildfire threat)	0	0	0	0	0	0	0	0
Wildland-Urban Interface Fire Threat	3	3	15	25	4	5	17	15
Dam Inundation	2	3	4	6	1	0	13	13
Sea Level Rise (exposed to 16in sea level rise) <sup>3</sup>	-	0	-	0	-	0	-	0
Sea Level Rise (exposed to 55in sea level rise) <sup>4</sup>	-	0	-	0	-	0	-	1
Tsunamis <sup>5</sup> (within inundation area)	-	-	-	-	-	-	-	-
Drought <sup>6</sup>	-	-	-	-	-	-	-	-

<sup>1</sup> The California Geological Survey has not completed mapping for Contra Costa County

<sup>2</sup> The California Geological Survey has not completed mapping for Contra Costa County

<sup>3</sup> Sea level rise data was not available in 2005

<sup>4</sup> Sea level rise data was not available in 2005

<sup>5</sup> 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.

<sup>6</sup> Drought will not affect locally owned facilities directly.



### ***Repetitive Loss Properties***

There are three repetitive loss properties in the City based on the information at <http://quake.abag.ca.gov/mitigation/pickflood.html>. In 2004 the City had one repetitive loss property that was outside the flood plain. The properties are residential.

### ***Other risks***

The City 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 in the City limits.

The City 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 Concord has participated in the National Flood Insurance Program since 1984. The City also participates in the Community Rating System and is currently class 8.

### **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 Concord in designing its mitigation program.

Additionally, the City of Concord has the specific objective of reducing the number of public and private buildings within the City of Concord that are vulnerable to the effects of earthquakes.



## Mitigation Activities and Priorities

### ***Evaluation of Progress from 2005 Plan***

In 2005, mitigation actions and priorities were identified. **Status of Mitigation Projects and Strategies - Exhibit C** indicates each of the strategies identified, along with responsible party, action taken, and current status of progress.

### ***Future Mitigation Actions and Priorities***

As a participant in the 2010 ABAG multi-jurisdictional planning process, the City of Concord staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The decision on priority was 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 our heritage. Representatives from multiple departments then met on a regular basis to review progress on the City of Concord's 2005 strategies, to identify and prioritize additional mitigation strategies to update the list.

These draft priorities were submitted to the City Manager and the Executive Team for review. The draft priorities will be provided to the City Council for adoption pending approval of this LHMP by FEMA.

The City planning team also prioritized specific mitigation tasks for the next 5 years. This list is attached as **2010 Mitigation Projects - Exhibit D** and includes implementation process, funding strategy, responsible agency, and approximate time frame.

### ***On-Going Mitigation Strategy Programs***

The City has many on-going mitigation programs that help create a more disaster-resistant region. 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 County facilities and infrastructure (GOVT-a-1) :
- Non-structural mitigation for building contents (GOVT-a-4);
- Development of interoperable communications for first responders from cities, counties, special districts, state, and federal agencies. (GOVT-c-7);
- Maintain and update Concord's All Hazard Emergency Operation 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 (GOVT-d-5)



- 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 Concord and Contra Costa County Operational Area has the following planning mechanisms that this plan can be incorporated into which are;

- General plan safety element
- Capital Improvements Plan
- All Hazard Emergency Operation Plan  
[http://cityofconcord.org/pdf/police/coc\\_emergency\\_plan.pdf](http://cityofconcord.org/pdf/police/coc_emergency_plan.pdf)
- Contra Costa County Operational Area Earthquake Concept of Operation Plan
- Local Emergency Volunteer Management Plan
- Community Climate Action Plan  
<http://acgov.org/cda/planning/landuseprojects/climateaction/index.htm>
- Concord Climate Action Plan
- SETP (Self Evaluation Transition Plan)
- Care and Shelter for People with Disabilities and Function Needs

The City of Concord has a Safety Element in its General Plan that includes a discussion of fire, earthquake, flooding, and landslide hazards. This plan was adopted as an implementation appendix to the Safety Element. In addition, the City enforces the requirements of the California Environmental Quality Act (CEQA), which, since 1988, requires mitigation for identified natural hazards. The City 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.



## Plan Update Process

As required Disaster Mitigation Act of 2000, the City of Concord 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/Engineering Department and the Office of Emergency Services will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting Contra Costa County, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be evaluated by City staff annually to review existing strategies and modify as necessary. As part of the evaluation process, City staff will review the Annex and determine if the plan should be updated.

The City of Concord 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/Engineering Department and the Office of Emergency Services 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 of Concord 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 of Concord 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

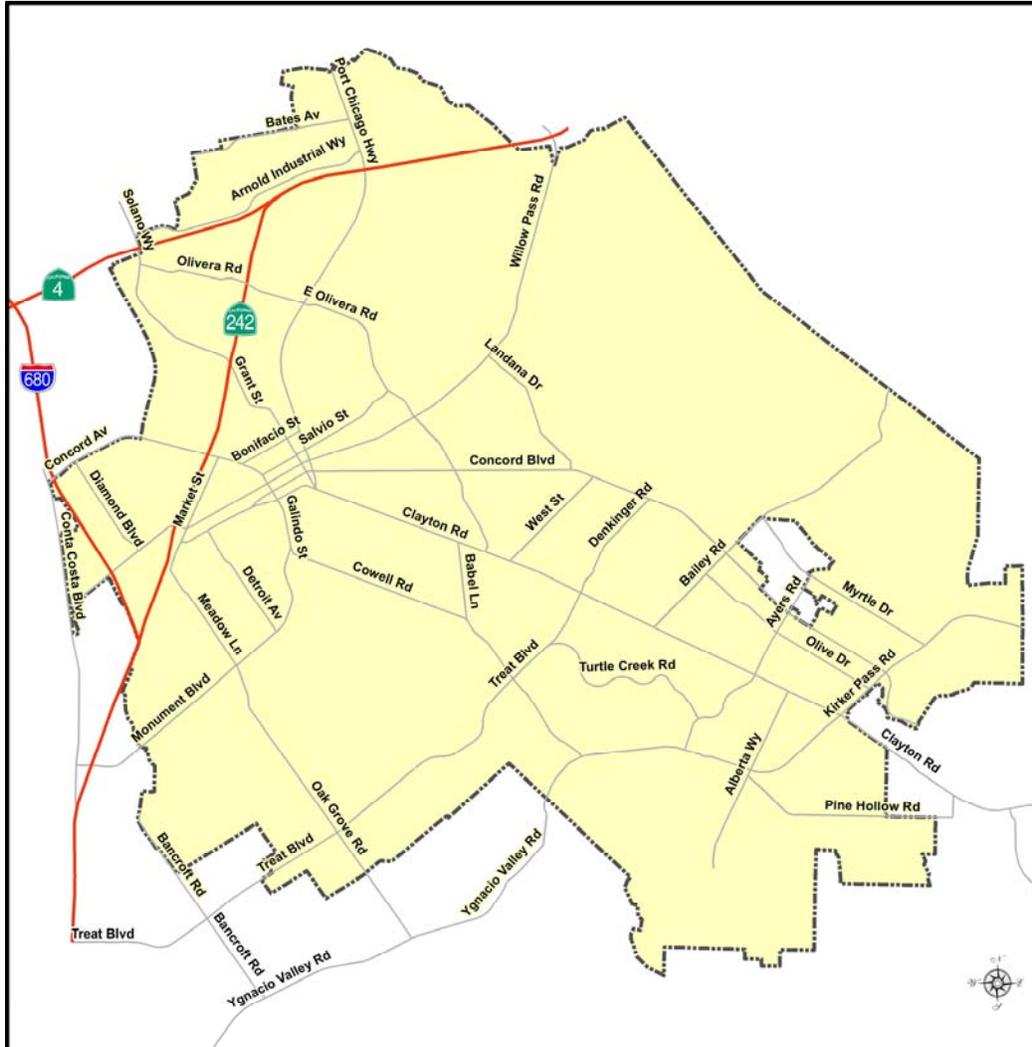
Name: Danae Gemmell  
Title: Acting City Engineer  
Mailing Address: City of Concord, 1950 Parkside Drive, MS40, Concord, CA 94519  
Telephone: 925 671-3470  
Email: [dgemmell@ci.concord.ca.us](mailto:dgemmell@ci.concord.ca.us)

### *Alternate Point of Contact*

Name: Margaret Romiti  
Title: Volunteer & Emergency Services  
Mailing Address: Concord Police Department, 1350 Galindo Street, Concord, CA 94520  
Telephone: (925) 671-3184  
Email: [margaretr@cpd.ci.concord.ca.us](mailto:margaretr@cpd.ci.concord.ca.us)



## Exhibit A – City of Concord Boundary Maps



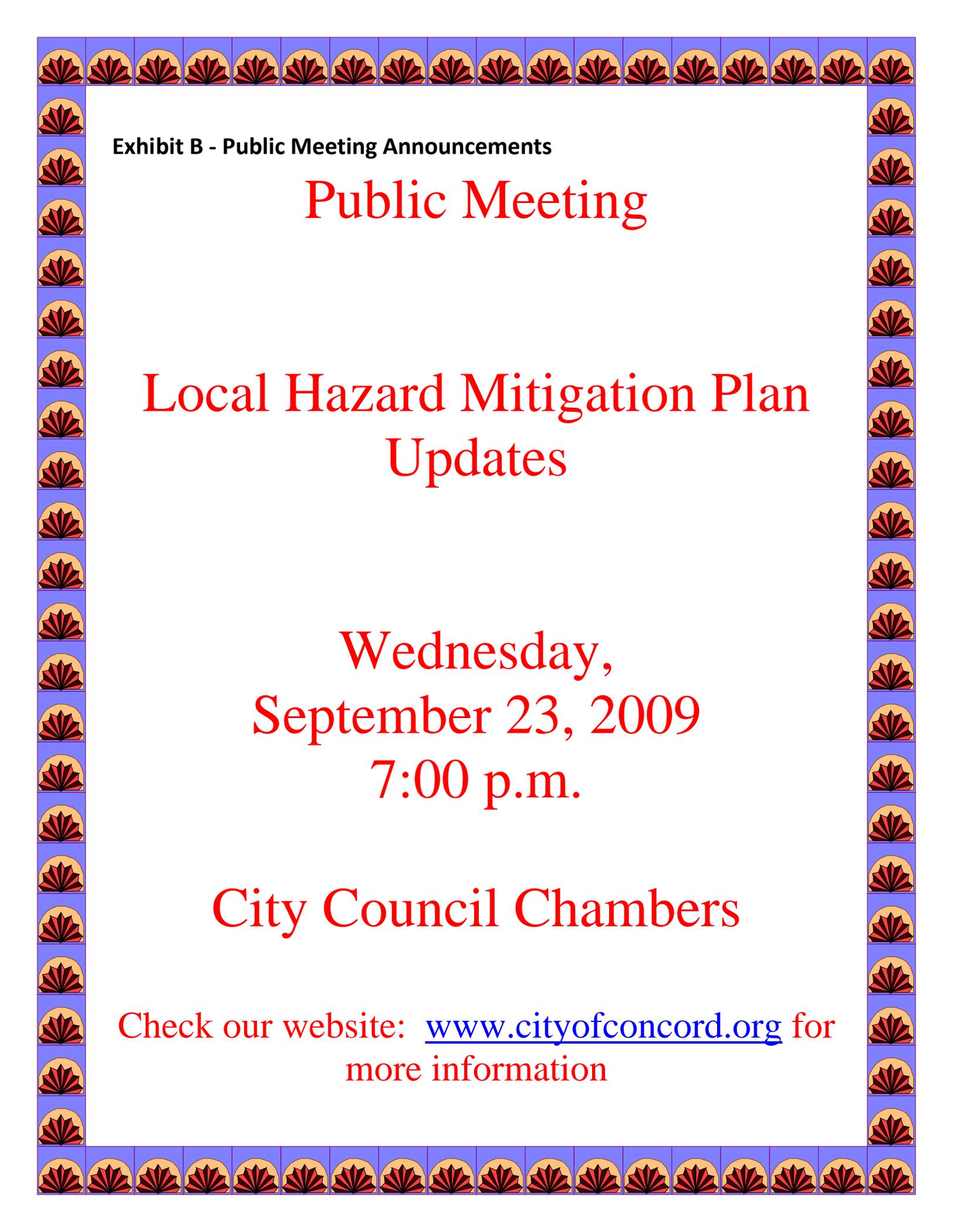


Exhibit B - Public Meeting Announcements

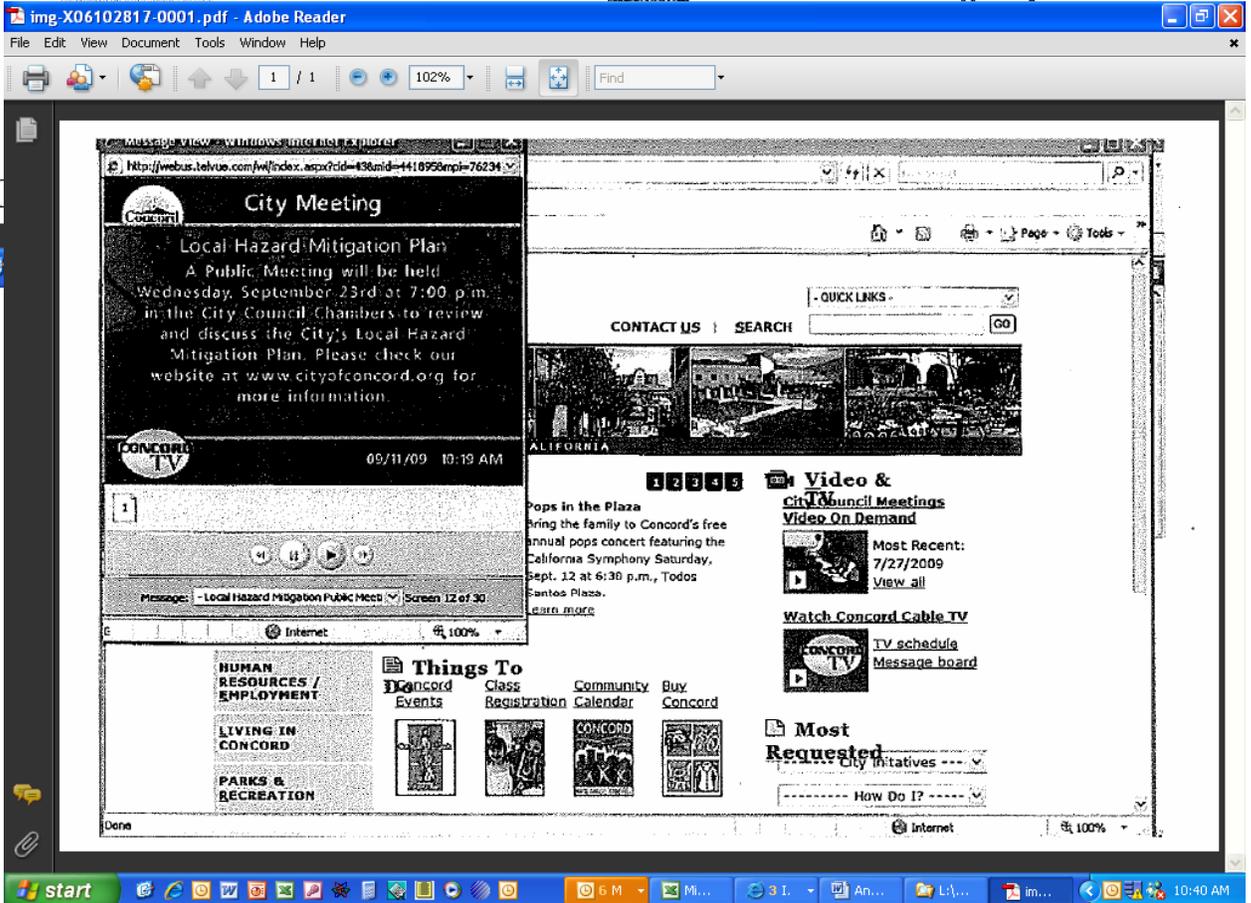
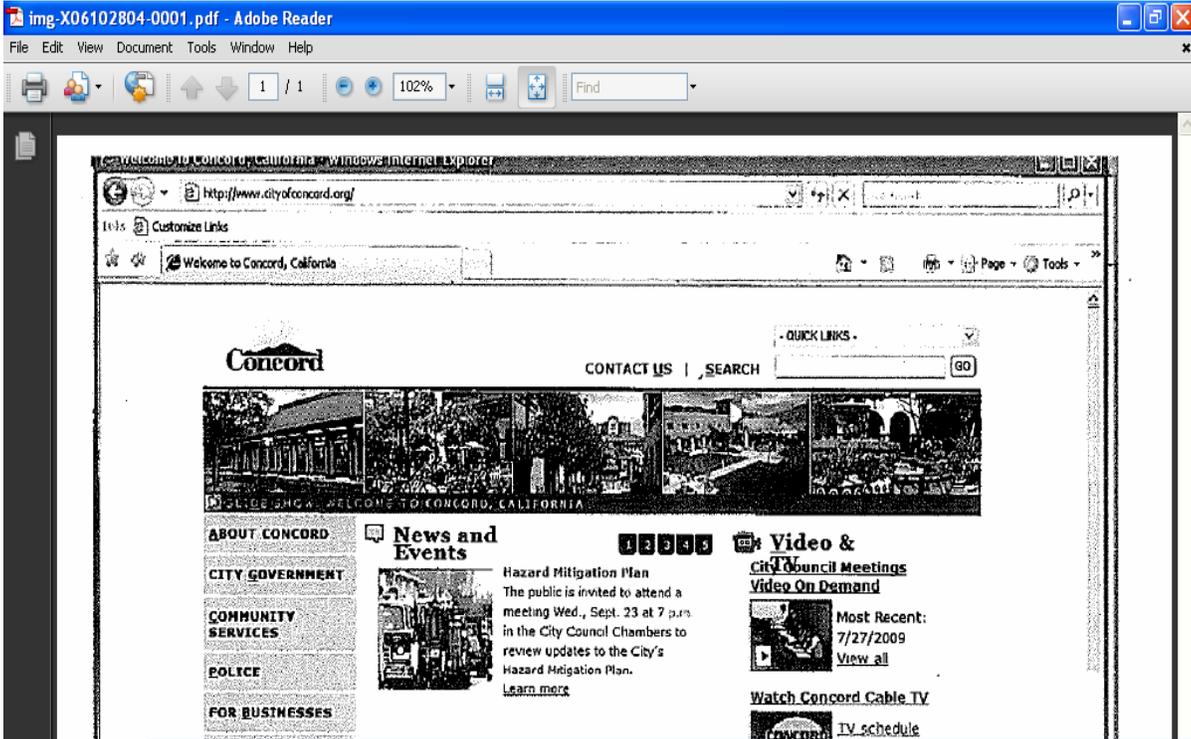
# Public Meeting

## Local Hazard Mitigation Plan Updates

Wednesday,  
September 23, 2009  
7:00 p.m.

City Council Chambers

Check our website: [www.cityofconcord.org](http://www.cityofconcord.org) for  
more information



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## Local Hazard Mitigation Plan

### Local Hazard Mitigation Plan updates



On October 30, 2000, the President signed the Disaster Mitigation Act of 2000 (DMA) into law. The DMA requires local agencies to adopt an approved Hazard Mitigation Plan to be eligible for hazard mitigation funding. The DMA provides that a local agency may adopt a Local Hazard Mitigation Plan or participate in the preparation of and adopt a Multi-Jurisdictional Hazard Mitigation Plan.

The Association of Bay Area Governments (ABAG) invited a number of agencies to participate in its Multi-Jurisdictional Plan. Rather than pursuing the Local Hazard Mitigation Plan for the City as a single entity, staff decided to pursue the more cost-effective option – participation in the ABAG Multi-Jurisdictional Plan. This enabled us to use ABAG's information already gathered for the region. We were responsible for identifying hazards and, as a result, hazard mitigation strategies for our jurisdiction.

The City's Local Hazard Mitigation Plan was adopted by Council on July 26, 2005 and approved by FEMA in October 2005. Having a FEMA approved plan ensures we are eligible for mitigation grant funds such as HMGP (Hazard Mitigation Grant Program), FMA (Flood Mitigation Assistance), and Pre-Disaster Mitigation (PDM).

**We value your comments**

Any comments should be sent in writing to:

*Paula Martinez*  
 Administrative Secretary  
 Public Works &  
 Engineering, M/S 40  
 (925) 671-3103  
[Email](#)

### Public Hearing

A public meeting is scheduled for Wednesday, September 23rd at 7:00 p.m. in the City Council Chambers to review and discuss the [Current Strategy updates](#).

<http://www.cityofconcord.org/police/emergency/hmp.htm> 09/11/2009

## Exhibit C – Status of Mitigation Projects and Strategies

No.	Mitigation Project	2010 MJ-LHMP Strategy Number	Respons. Agency	Action Taken	Status	Comments
1	As an infrastructure operator, designate a back-up Emergency Operations Center with redundant communications systems	INFR a-21	City of Concord	Concord is currently reviewing several facilities as a back-up EOC. A team of city personnel consisting of Engineering, IT, Dispatch and the Emergency Manager are seeking to identify other locations to accommodate the level of technology now associated with disaster emergency response. The Sleep Train pavilion is currently the designated alternate EOC. We have received a vehicle which is being retrofitted as mobile telecommunication vehicle by this same team.	In progress	
2	Expedite the funding and retrofit of seismically-deficient city and county owned bridges and road structures by working with Caltrans and other appropriate governmental agencies	INFR b-1	City of Concord-PWE	Concord received a grant from Caltrans to develop a Bridge Preventive Maintenance Program (BPMP). The BPMP was submitted to Caltrans in 2006. 21 of the 31 bridges were approved. Caltrans provided Concord with another grant for the Preliminary Engineering phase (Design and Environmental phase).	Concord is awaiting the result of the Pre-Award Audit from Caltrans.	The bridge repair program (PJ# 2060) includes replacing joint seals, and unsound concrete; repairing concrete spalling; slope protection; and performing deck sealing. After the design completion, Concord will submit request for funding construction in an estimated amount of \$1.9M.
3	Work cooperatively with the American Red Cross, cities, counties, and non-profits to set up memoranda of understanding for use of education facilities as emergency shelters following disasters.	EDUC b-1	City of Concord	Concord updated the Statement of Understanding (SOU) with American Red Cross Bay Area in 2008. This included an update of shelter sites on schools and city facilities. In 2009 Concord joined the planning committee for Interagency Disaster Alliance of Contra Costa (IDACC) in the development of preparing and training community and faith-based organizations to collaboratively respond to disasters.	In progress	

4	Work cooperatively to ensure that school district personnel and relevant staff understand and are trained that being designated by the American Red Cross or others as a potential emergency shelter does NOT mean that the school has had a hazard or structural evaluation to ensure that it can be used as a shelter following any specific disaster.	EDUC b-2	City of Concord	In 2010 Concord held a county-wide Care & Shelter drill. American Red Cross Bay Area led the training. All appropriate staff and volunteers within the City of Concord are ARC trained. Additionally, Concord purchased two shelter kits that have been placed on site of designated shelter facilities. Concord's Emergency Core Team and Disaster Council have added representatives from Mt. Diablo Unified School District as committee members.	In progress	
5	Work cooperatively to ensure that school district personnel understand and are trained that they are designated as disaster service workers and must remain at the school until released.	EDUC b-3	City of Concord	In 2009 Concord's Emergency Core Team and Disaster Council have added representatives from Mt. Diablo Unified School District as committee members.	In progress	
6	Develop and distribute culturally appropriate materials related to disaster mitigation and preparedness, such as those on the <a href="http://www.preparenow.org">http://www.preparenow.org</a> website.	EDUC d-2	City of Concord	In 2009/2010 in collaboration with Contra Costa County Health Services the Office of Emergency Services, Concord distributed education materials to prevent H1N1 in English, Spanish, Laotian, Vietnamese and Farsi and continues to educate in multiple diverse and culturally appropriate languages.	In progress	

## Exhibit D – 2010 Mitigation Projects

No	Mitigation Project	2010 MJ-LHMP Strategy Number	Applies to New or Existing Assets	Hazard Mitigated	Respons. Agency	Implementation	Est'd Cost	Anticipated Funding Source	Anticipated Schedule	Comments
1	Seismic Retrofit of Soft Story Buildings	ECON b-2	Existing	Earthquake	CDD	Adopt the 2009 International Existing Building Code or the latest applicable standard for the design of voluntary or mandatory soft-story building retrofits for use in city/county building department regulations. In addition, allow use of changes to that standard recommended by SEAOC for the 2012 IEBC.	\$30,000	Submitted Notice of Intent to apply for Pre-disaster Mitigation Grant July 2010 for STA 25.	Implementation will begin as soon as funding is awarded. Project is expected to take 3 to 5 months to complete.	Utilize consultants with staff to identify structures
2	Seismic Retrofit of Soft Story Buildings	ECON b-4	Existing	Earthquake	CDD	Conduct an inventory of privately-owned existing or suspected soft-story commercial or industrial structures as a first step in establishing voluntary or mandatory programs for retrofitting these buildings.	\$250,000	Submitted Notice of Intent to apply for Pre-disaster Mitigation Grant July 2010 for STA 25.	Implementation will begin as soon as funding is awarded. Project is expected to take 6 to 9 months to conduct the inventory research.	Utilize consultants with staff to identify structures
3	Seismic Retrofit of Soft Story Buildings	ECON b-5	Existing	Earthquake	CDD	Use the soft-story inventory to require private owners to inform all existing tenants (and prospective tenants prior to signing a lease agreement) that they may work or live in this type of building.	\$50,000	Submitted Notice of Intent to apply for Pre-disaster Mitigation Grant July 2010 for STA 25.	Implementation will begin as soon as funding is awarded. Project is expected to take 3 to 5 months to implement.	Utilize consultants to work with owners on the notification process

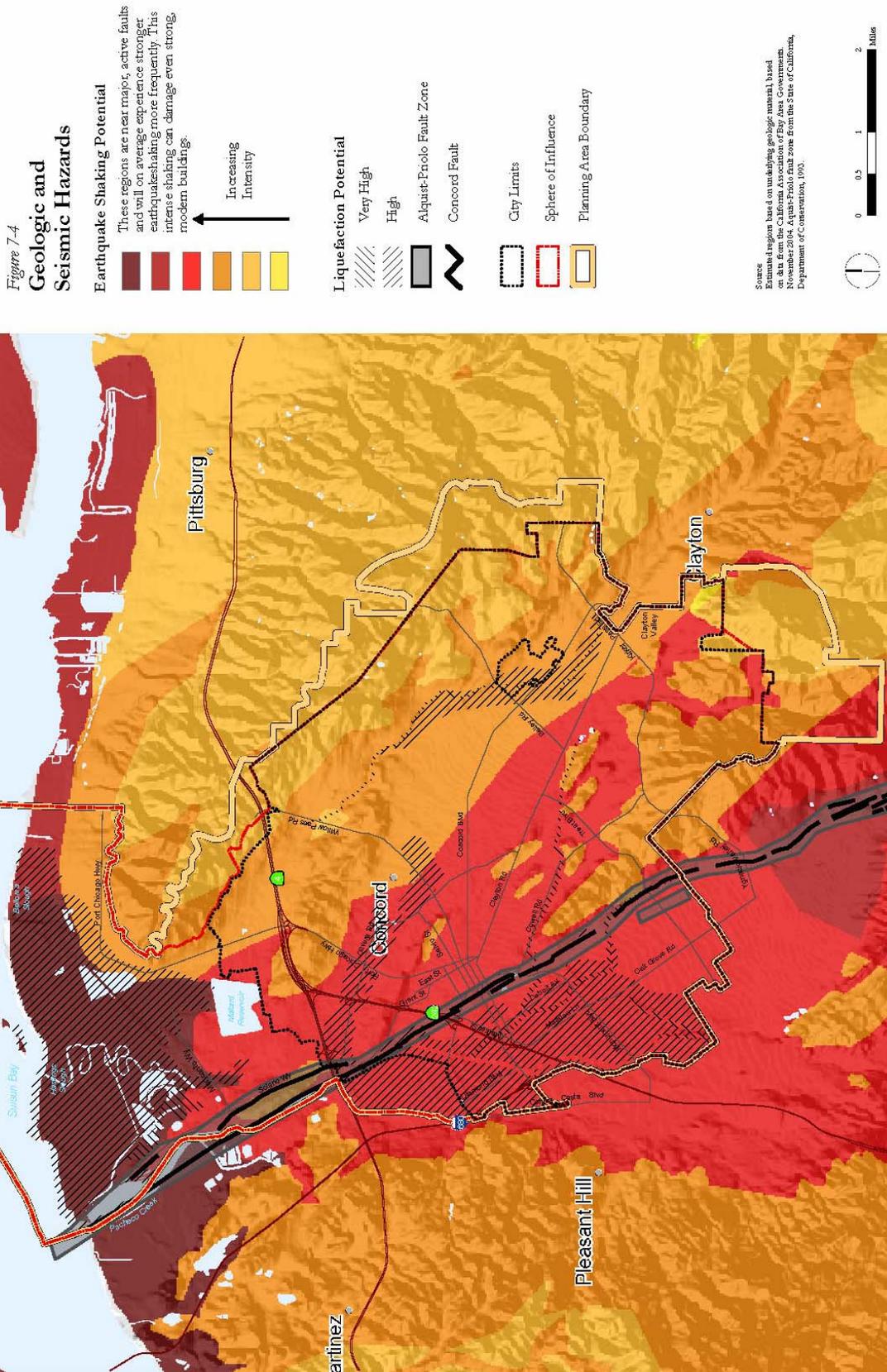
4	Seismic Retrofit of Soft Story Buildings	ECON b-6	Existing	Earthquake	CDD	Use the soft-story inventory to require private owners to inform all existing and prospective tenants that they may need to be prepared to work elsewhere following an earthquake if the building has not been retrofitted.	\$50,000	Submitted Notice of Intent to apply for Pre-disaster Mitigation Grant July 2010 for STA 25.	Implementation will begin as soon as funding is awarded. Project is expected to take 3 to 5 months to implement.	Utilize consultants to work with owners on the notification process
5	Seismic Retrofit of Soft Story Buildings	ECON b-9	Existing	Earthquake	CDD	Provide technical assistance in seismically strengthening privately-owned soft-story structures.	\$100,000	Submitted Notice of Intent to apply for Pre-disaster Mitigation Grant July 2010 for STA 25.	Implementation will begin as soon as funding is awarded. Project will be on-going.	Utilize consultants to work with owners
6	Pre-position emergency power generation capacity (or have rental/lease agreements for these generators) in critical buildings of cities, counties, and special districts to maintain continuity of government and services.	INFR a-8	Existing	EQ LS WF FL SEC	City of Concord	Concord is currently working to develop agreements with The Cooperative Purchasing Network for competitive bids and award contracts for commonly purchased products and services.	\$100,000	n/a	Project will move forward as approved by City Attorney and Cooperative Purchasing Network	

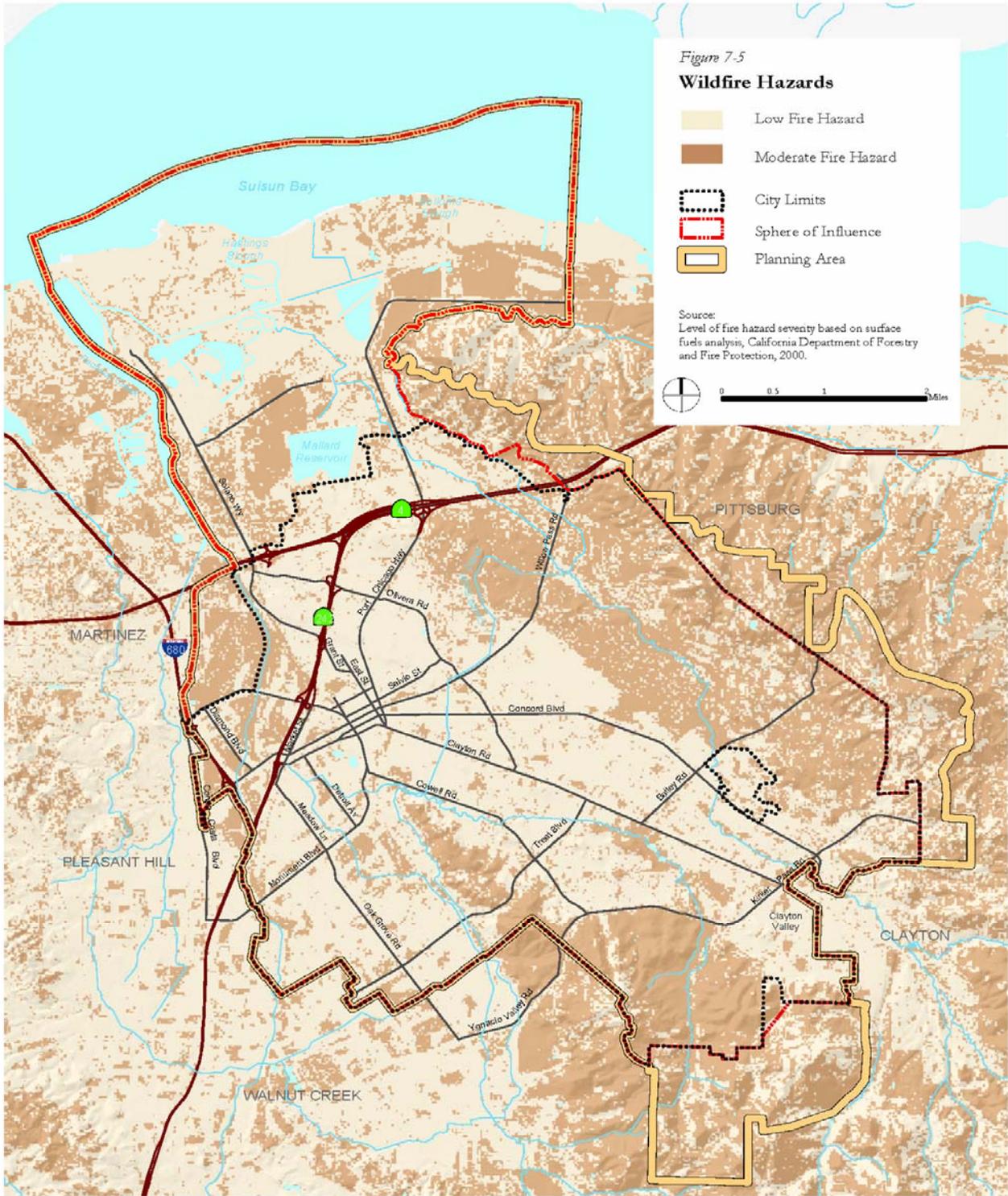
7	Encourage communication between State Emergency Management Agency (CalEMA), FEMA, and utilities related to emergencies occurring outside of the Bay Area that can affect service delivery in the region.	INFR a-14	New	EQ LS WF FL DR SEC	City of Concord OES, Contra Costa County Office of the Sheriff, Office of Emergency Services, Operational Area.	Concord attends quarterly meeting with the Contra Costa County Operational Area through the Sherriff's Office of Emergency Services. Additionally, Concord participates in quarterly Statewide Emergency Planning Committee meetings with the Governor's Office of Emergency Services and CalEMA and Concord is a member of the California Emergency Services Association for the Costal Region.	\$75,000	General Fund	As meetings occur	
8	Conduct and/or promote attendance at local or regional hazard conferences and workshops for elected officials and staff to educate them on the critical need for programs in mitigating earthquake, wildfire, flood, and landslide hazards.	GOVT d-9	New	EQ, WF, FL, LS and all other possible hazards	City of Concord	Concord's Office of Emergency Services Manager has begun attending local, County, State and Regional conferences and workshops. This information is collected, documented and utilized in local meetings and used as mitigation for planning and training City elected officials and staff.	Utilizing billable hourly rate of \$101.68; cost is \$48,196.	General Fund	This strategy is considered to be on-going and being implemented with an All-Hazards approach.	

9	Install alert and warning systems for rapid evacuation or shelter-in-place. Such systems include outdoor sirens and/or reverse-911 calling systems.	GOVT c-14	Existing	EQ, WF, FL, LS, Hazmat and all other possible hazards;	Contra Costa County Office of the Sheriff, Emergency Services Division and Community Awareness & Emergency Response (CAER) organization	Concord has installed the Contra Costa County Community Warning System and currently working with County Office of Emergency Services to promote the warning system and get people to self register their phones	Funded by local corporate refineries and partnerships	The Contra Costa County Community Warning System is an all-hazard public warning system	Concord is currently working with County Office of Emergency Services to promote the warning system and get people to self register their phones	The Contra Costa County Community Warning System is an all-hazard public warning system
10	Purchase command vehicles for use as mobile command/EOC vehicles if current vehicles are unsuitable or inadequate.	GOVT c-9	New	EQ, WF, FL, LS, Hazmat and all other possible hazards	City of Concord	Concord is researching grant funding possibilities to put a proposal together	\$250k-\$500k	Federal or State grant funding sources	Concord is researching funding options at this time	
11	Enforce provisions under creek protection, stormwater management, and discharge control ordinances designed to keep watercourses free of obstructions and to protect drainage facilities to conform with the Regional Water Quality Control Board's Best Management Practices.	ENVI a-13	Existing	Flooding	City of Concord	Required under our Stormwater Management and Grading and Erosion Control Ordinance as well as the PW Maintenance Annual Creek Cleanup Program- Prior to the rainy season all creeks and drainage ditches are inspected and any debris that could obstruct flows is removed. All 6,000 catch basins are inspected and cleaned prior to the rainy season and historical problem areas are checked and cleared, where necessary, before, during and after all major storm events; inspect/vacuum storm	\$250,000	Stormwater	On an annual basis	

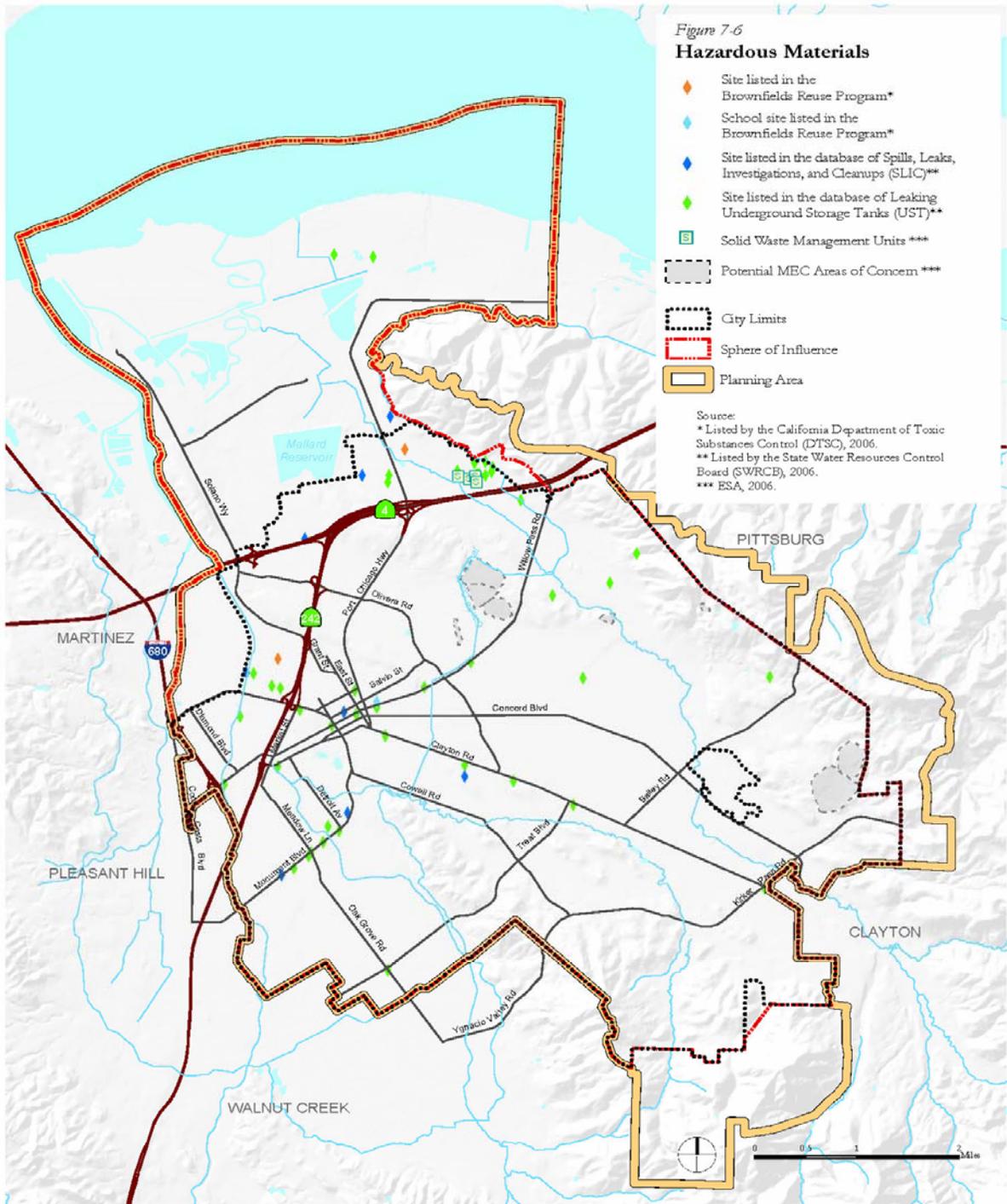
						drain inlets and inspect and clean creeks and open drainage ditches.				
12	Develop and implement a program to control invasive and exotic species that contribute to fire and flooding hazards (such as eucalyptus, cattails, and cordgrass). This program could include vegetation removal, thinning, or replacement in hazard areas where there is a direct threat to structures.	ENVI a-12	Existing	Wildfire Flooding	City of Concord	Concord is currently working to coordinate the current operation to mitigate areas that are direct threats to structures	\$80,000	General Fund	2012	
13	Increase efforts to reduce landslides and erosion in existing and future private development through continuing education of design professionals on mitigation strategies.	ECON g-2	Existing	Landslide	City of Concord	Provide on-going training to staff reviewing development plans	\$10,000	General Fund	Must comply with Conditions of Approval for development, also with CA Building Code adopted by Council in 2007.	
14	Feasibility Study for Detention Basin – Mt. Diablo Creek Watershed	INFR d-1	New	Flooding	City of Concord	Evaluate feasibility of Detention Basin at CSU Hayward-East Bay Campus to reduce flooding within Mt. Diablo Creek watershed	\$200,000	Stormwater, Federal or State grant funding	Concord is researching funding options at this time	

# Exhibit E - Additional maps





7-14



## Exhibit F – Mitigation Strategies

[Available on LHMP CD or at <http://www.abag.ca.gov/bayarea/eqmaps/mitigation/strategy.html>]