

2010 Local Hazard Mitigation Plan Annex

Table of Contents

Introduction	2
The Regional Planning Process	2
The Local Planning Process	2
<i>Public Meetings</i>	3
Hazards Assessment	3
Past Occurrences Of Disasters (natural and human-induced)	3
Risk Assessment	4
<i>Urban Land Exposure</i>	4
<i>Infrastructure Exposure</i>	5
<i>Exposure of County (City, District)-Owned Buildings, Plus Critical Healthcare Facilities and Schools</i>	6
<i>Repetitive Loss Properties</i>	7
<i>Other Risks</i>	7
Mitigation Goals	7
Mitigation Activities and Priorities	7
<i>Future Mitigation Actions and Priorities</i>	7
<i>On-Going Mitigation Strategy Programs</i>	9
Incorporation Into Existing Planning Mechanisms	10
Plan Update Process	10
Exhibit A - Public Meeting Announcements	12
Exhibit B -Town of Atherton 2010 Mitigation Strategy Spreadsheet	13

Town of Atherton

Introduction

The Town of Atherton is a small-sized city in San Mateo County, California. Atherton, incorporated in 1923, is situated on the San Francisco Peninsula midway between San Francisco and San Jose. The Town of Atherton covers 6 square miles and has a population of approximately 7194 people, based on the 2000 census¹. For fiscal year 2009-2010, the Town's budget was \$11,208,661.00. The Town employs 54 full-time employees as well as a number of part-time and contract employees. While the Town provides local police services, the fire services are supplied by the Menlo Park Fire District.

The Regional Planning Process

The Town of Atherton participated in the following ABAG (Association of Bay Area Governments) workshops, conferences, and meetings:

- Commitment letter on file with ABAG, September 2009
- Strategies Worksheet, October 2009
- Critical Facilities Data, October 2009
- Commented on GOVT chapter (ch 5), October 2009

For more information on these meetings and for rosters of attendees, please see Appendix A and H in the ABAG Multi-Jurisdictional Local Hazard Mitigation Plan 2010 (MJ-LHMP). In addition, the Town of Atherton 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 Town of Atherton's Department Heads met on two occasions to identify mitigation strategies and to prioritize appropriate mitigation strategies. Personnel involved in these meetings were:

Jerry Gruber-City Manager
Eileen Wilkerson-Assistant City Manager
Glenn Nielsen-Chief of Police
Mike Wassman-Building Department
Duncan Jones-Public Works
Louise Ho-Finance Director
Lisa Costa-Sanders-Planning Department
Kristin Nichols-Police Sergeant

¹ For complete Census information on this city, see <http://www.bayareacensus.ca.gov/>.

Town of Atherton

The group reviewed and designated priorities for mitigation. A representative from the Redwood City School District also participated in reviewing the Mitigation Strategies for Education. The Local Hazard Mitigation Strategy spreadsheet can be found in Exhibit B to the Town of Atherton 2010 Annex. Comments made by the Department Heads were incorporated into the spreadsheet.

Public Meetings

Opportunity for public comments on the DRAFT mitigation strategies was provided at a public meeting in October 2009, which was held at the Atherton Town Council Chambers. This meeting was advertised on the Town's community bulletin board. The draft mitigation strategies were also published on the Town of Atherton's website for public viewing. No public comments were received from either the meeting or the internet posting. A copy of the internet posting is included as Exhibit A to the Town of Atherton 2010 Annex.

The Town of Atherton Town Council will adopt the plan in a public meeting via an official Resolution upon approval by FEMA. The mitigation strategies will become an implementation appendix of the Safety Element of the Town of Atherton General Plan.

Hazards Assessment

The ABAG Multi-Jurisdictional Local Hazard Mitigation Plan, to which this is an annex, lists nine hazards that impact the Bay Area. There are five hazards related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). These hazards all impact the community of the Town of Atherton, except for surface faulting. Surface faulting is not a hazard in the Town of Atherton because no active faults are located in the Town. Maps of these hazards and risks are shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

While the Town of Atherton has undertaken a number of general hazard mapping activities since the first Safety Element was prepared by the Town of Atherton all of these maps are less detailed and are not as current as those shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

Past Occurrences Of Disasters (natural and human-induced)

The Town of Atherton has experienced a number of different disasters over the last 50 years, including numerous earthquakes, floods, and severe storms. The El Nino storm of 1998, for example, caused record floods in San Mateo County. Severe landslides were triggered by intense rain. Widespread, more than 11,000 people were evacuated because of 80 mile per hour winds and floods. There was a total of 17 deaths and \$550 million in damage.

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. The Town of Atherton suffered from minor damage but the damage was throughout the Town.

Town of Atherton

More information on State and Federally declared disasters in the Town of Atherton can be found at <http://quake.abag.ca.gov/wp-content/documents/ThePlan-D-2010.pdf>.

In addition to the declared disasters noted in Appendix D, locally significant incidents that have also impacted the Town of Atherton in the last several years include:

- July 2010 – Mehserle Verdict. Civil Disturbance. City of Oakland activated their EOC. The Town of Atherton deployed police officers for Mutual Aid assistance.
- September 2010-San Bruno Fire. A PG&E natural gas pipeline ruptured in a residential neighborhood, which caused a major fire and several lives were lost. San Mateo County activated their EOC. The Town of Atherton deployed several police officers for Mutual Aid assistance.
- November 2010-Mehserle Sentencing. Civil Disturbance. City of Oakland activated their EOC. The Town of Atherton deployed two police officers for Mutual Aid assistance.

Risk Assessment

Urban Land Exposure

The Town of Atherton examined the hazard exposure of the Town of Atherton_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”).

The following table described the exposure of urban land within the Town of Atherton to the various hazards.

Exposure (acres of urban land)			
Hazard	2005	2010	Change
<i>Total Acres of Urban Land</i>	3227	3233	6
Earthquake Faulting (within CGS zone)	0	0	0
Earthquake Shaking (within highest two shaking categories) ²	2333	2339	6
Earthquake-Induced Landslides (within CGS study zone)	0	6	6
Liquefaction (within moderate, high, or very high liquefaction susceptibility)	2512	2519	7
Flooding (within 100 year floodplain)	0	0	0
Flooding (within 500 year floodplain)	0	0	0

² The nearest earthquake fault is the San Andreas Fault that runs within one mile of Atherton’s western boundary. Severe shaking is possible in most of the Town.

Town of Atherton

Landslides (within areas of existing landslides)	0	0	0
Wildfire (subject to high, very high, or extreme wildfire threat) ³	199	120	(79)
Wildland-Urban Interface Fire Threat	3178	3196	18
Dam Inundation (within inundation zone)	298	298	0
Tsunamis (within inundation area) ⁴	not applicable		
Drought ⁵	3227	3233	6

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

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.

⁵ The entire Town of Atherton is subject to drought.

Infrastructure Exposure

The Town of Atherton also 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 64 miles of roadway in the Town of Atherton, the following are exposed to the various hazards analyzed.

Exposure (miles of infrastructure)						
Hazard	Roadway		Transit		Rail	
	2005	2010	2005	2010	2005	2010
<i>Total Miles of Infrastructure</i>	64	64	0	1	1	1
Earthquake Shaking (within highest two shaking categories)	41	42	0	0	0	0
Liquefaction Susceptibility (within moderate, high, or very high liquefaction susceptibility)	51	53	0	1	1	1
Liquefaction Hazard (within CGS study zone)	0	4	0	0	0	0
Earthquake-Induced Landslides (within CGS study zone)	0	0	0	0	0	0
Earthquake Faulting (within CGS zone)	0	0	0	0	0	0
Flooding (within 100 year floodplain)	0	0	0	0	0	0
Flooding (within 500 year floodplain)	0	0	0	0	0	0
Landslides (within areas of existing landslides)	0	0	0	0	0	0
Wildfires (subject to high, very high, or extreme wildfire threat)	4	1	0	0	0	0
Wildland-Urban Interface Fire Threat	63	63	0	1	1	1

Town of Atherton

Dam Inundation (within inundation zone)	5	4	0	0	0	0
Tsunamis ¹	not applicable					
Drought ²	not applicable					

¹ 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.

² Drought is not a hazard for roadways.

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

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

Hazard	Schools		Locally owned critical facilities	
	2005	2010	2005	2010
<i>Total Number of Facilities</i>	-	9	-	20
Earthquake Shaking (within highest two shaking categories)	-	5	-	3
Liquefaction Susceptibility (within moderate, high, or very high liquefaction susceptibility)	-	8	-	20
Liquefaction Hazard (within CGS study zone)	-	0	-	0
Earthquake-Induced Landslides (within CGS study zone)	-	0	-	0
Earthquake Faulting (within CGS zone)	-	0	-	0
Flooding (within 100 year floodplain)	-	0	-	0
Flooding (within 500	-	0	-	0

Town of Atherton

year floodplain)				
Landslides (within areas of existing landslides)	-	0	-	0
Wildfires (subject to high, very high, or extreme wildfire threat)	-	0	-	1
Wildland-Urban Interface Fire Threat	-	9	-	19
Dam Inundation	-	0	-	0
Tsunamis ¹ (within inundation area)	-	0	-	0
Drought ²	-	-	-	-

¹ 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.

² Drought will not affect locally owned facilities directly.

Repetitive Loss Properties

There are no repetitive loss properties in the Town of Atherton based on the information at <http://quake.abag.ca.gov/mitigation/pickflood.html>.

Other risks

There are currently no other risks or vulnerabilities that differ from the other nine counties.

The Town of Atherton (through its cooperative disaster planning agencies including the Menlo Park Fire District and the San Mateo County Office of Emergency Services) has done extensive planning to mitigate disasters. The Town will continue 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.

Mitigation Goals

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 Town of Atherton in designing its mitigation program.

Mitigation Activities and Priorities

Future Mitigation Actions and Priorities

Town of Atherton

As a participant in the 2010 ABAG multi-jurisdictional planning process, of the Atherton Town 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.

The draft priorities will be provided to the Town Council for adoption pending approval of this LHMP (Local Hazard Mitigation Plan) by FEMA.

The Town of Atherton planning team also prioritized specific mitigation tasks for the next 5 years. This list includes an implementation process, a funding strategy, and an approximate time frame.

INFR b-8 and GOVT a-10 and a-11: The Town of Atherton is currently working on two new Town buildings: a new public library and a new Town Hall Police Facility. Both structures are planned to be completed in the next five years.

The library building has completed the conceptual design phase and will begin when all of the funding is available from the library fund and pending approval from the Town Council.

The Town Hall Police Facility is currently in committee for conceptual design under the direction of the City Council. Potential funding sources for the Town Hall Police Facility is yet to be determined.

Both structures will be designed and constructed under the most current California Building and Fire codes. The Town Hall Police Facility will also be required to comply with the code requirements for an essential facility. The building department is responsible for this project.

INFR d-16, INFR d-17 and GOVT d-3: In the next 5 years we plan to implement these strategies by working together with Redwood City, Menlo Park, and San Mateo County on a joint ad-hoc committee to address flooding along the Atherton Channel, especially at its downstream terminus.

LAND a-1 and INFR b-8: In December 2010, the Town of Atherton, adopted the most current amended codes dealing with seismic safety. Over the next 5 years, the town will review all new projects and revisions or additions to existing structures to ensure compliance with the minimum state codes and standards.

LAND d-4: The Town in the next 5 years will implement the stormwater management practices that are prescribed in the Municipal Regional Stormwater Permit order No. R2-2009-0074.

HSNG b-2: All new proposed additions to homes where new living space is proposed over any part of the structure are required to provide structural engineering to confirm the design meets all of the structural requirements for seismic safety as prescribed in the California Building Codes.

Town of Atherton

HSNG e-3, f-1, g-6, and g-7: The Town of Atherton adopted the 2010 California Building Standards Codes and ratified the Menlo Park Fire Protection District's amended adoption of the 2010 California Fire Code. This adoption included the adoption of the 2010 California Building Code, California Residential Code, and the Exiting Building Code. Both the 2010 California Building Code section 907.22.11 and the 2010 California Residential Code section R314 require the installation of smoke detectors in new and existing sleeping rooms when construction is permitted.

HSNG g-1: All new homes constructed in or adjacent to urban wildlife interface areas will be required to comply with all of the provisions of the 2010 California Building Code Section 7A which prescribes specific construction features for structures located in these areas.

HSNG g-12: The 2010 California Residential Code requires all new single family homes to be equipped with automatic fire sprinklers. The 2010 California Fire Code as amended by the Menlo Park Fire Protection District requires all new structures, regardless of size or occupancy to be protected by automatic fire sprinklers.

ENVI a-4: In the next 5 years we plan to develop a watershed plan for the Town that will improve the health of the ecosystem, reduce the incidence of flooding downstream and reduce erosion and scour in the natural portions of the Atherton Channel.

ENVI a-5: In the next 5 years we plan to construct projects on the upper Atherton Channel that will slow and smooth the flow of water, restore the eroded channel bottom, restore native vegetation and provide restored habitat for red-legged frogs, an endangered species.

ENV b-8: The Town of Atherton adopted the 2010 California Green Building Standards Code. The Town is further evaluating the mandatory and voluntary measures in this code and may in the next year further amend the code to require additional, tier 1 requirements.

On-Going Mitigation Strategy Programs

The Town 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 Town's priority to find additional funding to sustain these on-going programs over time.

- Vulnerability assessments of Town facilities and infrastructure, including Town Hall and the police department (GOVT-a-1).
- Participation in general mutual-aid agreements and agreements with adjoining jurisdictions for cooperative response to fires, floods, earthquakes, and other disasters (GOVT-C-13).
- Coordinate with Town staff and local utilities to ensure emergency power and backup for critical power needs (INFR-a-9).
- Maintain and update the Town of Atherton's Emergency Operations Plan (GOVT-c-12).

Town of Atherton

- Sponsor the formation and training of Community Emergency Response Teams (CERT) through partnerships with the community and Menlo Park Fire District (GOVT-c-3, HWNG-k-6).
- Continue to be involved in the EOC through partnerships with local emergency response teams (ECON, GOVT, HSNG).
- 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 Town has several planning mechanisms

- ◆ General Plan
- ◆ Capital Improvements Plan

The Town has a Community 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 Town enforces the requirements of the California Environmental Quality Act (CEQA), which, since 1988, requires mitigation for identified natural hazards. The Town 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 by the Disaster Mitigation Act of 2000, the Town of Atherton 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 Atherton Police Department will monitor this Annex on an on-going basis. However, the major disasters affecting our Town, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used to update this plan as needed. Finally, the Annex will be a discussion item on the agenda of the meeting of Department heads 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 heads will be responsible for determining if the plan should be updated.

The Town 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 Atherton Police Department will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the Town again intends 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.

Town of Atherton

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 Town 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.

Town of Atherton

Exhibit A - Internet Posting



ATHERTON POLICE DEPARTMENT



83 Ashfield Road
Atherton CA 94027
(Ph) 650.688.6500
(Fax) 650.323.1804

Home

Chief's Message

Department History

Police Services

Police Units

D.A.R.E. Program

Recruitment

Disaster Plan

Traffic

FAQs

- Identity Theft
- Marsy's Law
- Construction Burglaries

Atherton Police Department Disaster Plan

If You Need Emergency Medical Assistance:

Tie a white pillow slip, sheet, towel, or similar object on your mailbox or on a tree which is visible from the street. In case of a disaster, Atherton officials will be checking all areas for this distress signal. The damage/injury information obtained will be transmitted by radio to the Police Department to request immediate assistance from the command headquarters.

If you are not in need of assistance, use a slip, sheet, etc. of any color besides white to signify your well being.

Broadcasting Information:

Disaster officials will be broadcasting instructions, damage reports and other information over their car public address systems and on local radio broadcasting station KCEA (89.1 FM). It is possible that normal radio, TV, and telephone communications will be knocked out immediately following any major disaster. Therefore, you must have a battery operated FM radio on hand (many car radios are both AM/FM).

It is imperative that you stay home and turn on your radio in order to receive the information and instructions necessary for the safety of you and your family. Parents of school children will be notified of conditions at the local schools on the radio stations.

First Aid Instructions and Emergency Procedures:

For detailed instructions and information regarding first aid, standard emergency procedures and preparation for emergencies see the front section of your telephone book.

Following are suggested items to have stored at home:

- Fire Extinguisher
- First Aid Kit
- Wrench
- Radio, flashlight, batteries, candles, matches
- Water (at least one gallon per person)
- Disinfectant
- Dry or canned food, can opener
- Alternate cooking source and utensils
- Paper goods and plastic bags
- Blankets, towels, change of clothes
- Personal hygiene supplies

Earthquake Preparedness:

[Resident Earthquake Booklet](#) [PDF 2MB]

The Town of Atherton's DRAFT Mitigation Strategy:

Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. Hazard mitigation is most effective when a long-term plan is developed before a disaster occurs.

The federal Disaster Mitigation Act of 2000 (DMA 2000) requires that cities, counties, and special districts have a Local Hazard Mitigation Plan to be eligible to receive hazard mitigation

funds. The DRAFT Mitigation Strategy provided here will show what programs the Town of Atherton currently has in place and what programs are in progress or being considered.

[Town of Atherton Mitigation Strategies](#) [PDF 26.0KB]

Town of Atherton

Exhibit B - Local Hazard Mitigation Strategy Spreadsheet