

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

Town of Tiburon

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#### Introduction

The Town of Tiburon is a small municipality located in southeastern Marin County, California, bordered by the San Francisco Bay to the east and south, and Richardson Bay to the west. The Town of Corte Madera is directly north. A map of the Town's jurisdictional boundary is provided in **Exhibit A**.

The current population of the Town is 8,666 people, based on the 2000 census<sup>1</sup>. For Fiscal Year 2010/11, the Town's operating budget is \$6.9 million. The Town has 40.15 Fulltime Equivalent (FTE) employees, and has three municipal facilities (Town Hall, Police Department and Public Works Yard). While the Town provides local police services, fire services are supplied by separate fire districts.

The Tiburon Peninsula has not experienced many disasters; however, the Town did experience the Loma Prieta Earthquake of 1989.

## The Regional Planning Process

The Town of Tiburon participated in the various ABAG workshops, conferences, and meetings. Specifically, Town Staff attended a city-county workshop on April 30, 2009. In addition, the Town provided written and oral comments on the multi-jurisdictional plan, and provided information on facilities that are defined as "critical" to ABAG. 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).

## The Local Planning Process

Representatives from Town departments met to identify and prioritize appropriate mitigation strategies. Personnel involved in these meetings included the Public Works Director, Building Official, Emergency Services Coordinator, Police Chief and Community Development Director. This group was formed in order to represent the areas of the Town's government that play an important role in hazard mitigation.

During the meetings, mitigation strategies were identified and prioritized, and preliminary budgets were reviewed, as well as potential funding sources for strategies designated as "High" priority to Town-owned-and-operated facilities.

## Public Meetings

Opportunity for public comments on the Draft Mitigation Strategies were provided at a public meeting of the Town Planning Commission on November 10, 2010, and advertised on the Town of Tiburon website. The Draft Mitigation Strategies were also published on the Town of Tiburon website for public viewing. No public comments were received from either the

<sup>&</sup>lt;sup>1</sup> For complete Census information on this Town, see <a href="http://www.bayareacensus.ca.gov/">http://www.bayareacensus.ca.gov/</a>.

meeting or the internet posting. Copies of the legal notice, internet posting, and Planning Commission Minutes are included as **Exhibit B** to the Town of Tiburon 2010 LHMP Annex.

The Town Council will adopt the plan in a public meeting via an official Resolution upon approval by FEMA.

#### Process for Updating Plan Sections

Town staff began the update process by reviewing the 2005 Plan. Staff then researched Town Records and met with key town and special district personnel in order to provide new information on hazards and susceptibility within the Town. The Planning Process section was updated to reflect the activities that took place as part of the plan update process. The Hazards Assessment section included any new disasters that occurred since the last plan and reflected updates to the hazard maps. The Risk Assessment section was updated to include the new hazard mapping and land use data. The planning team reviewed each section of the plan and determined that there needed to be updates based on new information or better data.

## **Incorporating Other Plans into the Annex**

Existing plans, studies, reports, and	Method of incorporation into the
technical information	jurisdiction annex
Capital Improvement Plan	Mitigation strategies
Emergency Operations Plan	Hazards Assessment
	Mitigation Strategies
General Plan Safety Element	Hazards Assessment
-	Mitigation Strategies

#### 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). These hazards also impact this community with the exception of surface faulting. Surface faulting is not a hazard in the Town of Tiburon because no active faults are located in the Town. Maps of these hazards and risks are shown on the ABAG website at <a href="http://quake.abag.ca.gov/mitigation/">http://quake.abag.ca.gov/mitigation/</a>.

The Town of Tiburon has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes, (particularly shaking) flooding, wildfire, and landslides (including unstable earth) pose a significant risk for potential loss in Tiburon.

The Town came to this conclusion based on several indicators. First is that the Tiburon Peninsula is located between the San Andreas Fault line and the Hayward Fault line. The Hayward fault line lies approximately 10 kilometers to the east of Tiburon, while the San Andreas Fault is approximately 13 kilometers to the west. The San Andreas Fault experienced a

large magnitude earthquake in 1906 and the Hayward Fault in 1868. The U.S. Geological Survey has predicted that California has a 64% chance or greater of having another significant quake.

Second is that the Town is highly susceptible to tidal flooding, storm surges, sea level rise and tsunamis based on a majority of the Town's boundary being surrounded by the San Francisco Bay or Richardson Bay. Tiburon is also a hillside community, a majority of which is located within the Wildland Urban Interface (WUI) Zone. This alone results in a community that is more susceptible to wildfires under specific climatic conditions than areas not designated as WUI. Lastly, a majority of the Town is located on steep hillsides, which have in the past experienced landslides due to severe storms and erosion. These four hazards are the most common and most likely to affect the Town in the future, which is why the Town continues to work towards preparing and mitigating the effects of these particular potential hazards.

The Town of Tiburon does not face any natural disasters that are not listed in the ABAG multijurisdictional plan; however, new hazards have been identified by the Town of Tiburon since the original development of this plan in 2005. Additional hazards identified by the Town of Tiburon include climate change (sea level rise), heat, pandemic flu, and security related threats (terrorism).

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

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

With the exception of the Loma Prieta Earthquake of 1989, the Town of Tiburon has not experienced many large scale disasters over the last 50 years.

Regionally, the Loma Prieta Earthquake killed 63 persons, injured 3,757 persons, 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 in damage. Reconstruction continues some two decades later as the replacement for the damaged section of the Oakland-Bay Bridge is still several years from completion. In the Town of Tiburon, minimal damage (i.e. cracks in walls, unsecured items falling) was reported, but no significant structural or infrastructure damage as a result of the earthquake.

More information on State and Federally declared disasters in Tiburon can be found at http://quake.abag.ca.gov/mitigation/ThePlan-D-Version-December09.pdf

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

- November 2007 Cosco Busan Oil Spill. A container ship struck one of the towers of the San Francisco Bay Bridge, causing over 53,000 gallons of fuel to spill into the bay. Tiburon EOC activated
- January 2008 Winter Storm caused flooding and power outages.
- October 2008 Angel Island Fire, caused by a campfire. CalFire, Tiburon Fire and other local fire agencies responded. Tiburon EOC activated.
- March 2009 Mill Valley Treatment Plant Sewage Spill into Richardson Bay.
- December 2009 H1N1 Outbreak. Marin County Health and Human Services activated the County EOC and held conference calls with local EOC liaisons (i.e. Tiburon OES)

#### Risk Assessment

#### **Urban Land Exposure**

The Town of Tiburon examined the hazard exposure of Town urban land based on information in ABAG's website at <a href="http://quake.abag.ca.gov/mitigation/pickdbh2.html">http://quake.abag.ca.gov/mitigation/pickdbh2.html</a>. 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 Town of Tiburon has mostly decreased over time, even though the amount of urban land has not increased. The Town actually reduced the acres of urban land in the 100 year and 500 year flood zones over the last 5 years due to changes in the new FEMA flood maps. However, the Wildland-Urban Interface Fire Threat has increased due to new mapping provided by local fire agencies (Tiburon Fire Protection District and Southern Marin Fire District). The following table describes the exposure of urban land within the Town to the various hazards.

Exposure (acres of urban land)							
Hazard	2005	2010	Change				
Total Acres of Urban Land	1,883	1,896	13				
Earthquake Faulting (within CGS zone) <sup>2</sup>	Not applicable						
Earthquake Shaking (within highest two shaking	83 83 0						
categories) <sup>3</sup>							
Earthquake-Induced Landslides (within CGS study zone) <sup>4</sup>	Not applicable						
Liquefaction (within moderate, high, or very	265	256	9				
high liquefaction susceptibility							
Flooding <sup>5</sup> (within 100 year floodplain)	107	51	56				

<sup>&</sup>lt;sup>2</sup> No active faults run within the Town; rupture of a fault is not a direct concern.

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<sup>&</sup>lt;sup>3</sup> In large part because the San Andreas, Hayward, and Rodger's Creek fault systems run in close proximity to the Town.

<sup>&</sup>lt;sup>4</sup> While earthquake-induced landslides may be a hazard in the Town of Tiburon, the California Geological Survey has not completed mapping of this hazard in the Town of Tiburon.

<sup>&</sup>lt;sup>5</sup> The Town's urban land exposure to flooding has decreased due to better and more accurate mapping provided by FEMA in May 2009.

Flooding (within 500 year floodplain)	44	12	32
Landslides (within areas of existing landslides)	383	387	4
Wildfire (subject to high, very high, or extreme	86	53	33
wildfire threat) <sup>6</sup>			
Wildland-Urban Interface Fire Threat	1,490	1,569	79
Dam Inundation (within inundation zone)	Not applicable		
Sea Level Rise <sup>7</sup>	Not applicable		
Tsunamis <sup>8</sup> (within inundation area)	Not applicable		
Drought <sup>9</sup>			

<sup>&</sup>lt;sup>6</sup> The decrease is due to better and more accurate mapping provided by Tiburon Fire and Southern Marin Fire.

## Infrastructure Exposure

The Town also examined the hazard exposure of infrastructure within the jurisdiction based on the information on ABAG's website at <a href="http://quake.abag.ca.gov/mitigation/pickdbh2.html">http://quake.abag.ca.gov/mitigation/pickdbh2.html</a>. Of the 50 miles of roadway infrastructure in Town, which includes highway, service roads and road connectors and ramps, the Town only maintains 35 miles of roadway. The following are exposed to the various hazards analyzed.

Exposure (miles of infrastructure)						
Hazard	Roadway		Transit		Rail	
Hazaru	2005	2010	2005	2010	2005	2010
Total Miles of Infrastructure	61	35	0	0	0	0
Earthquake Shaking (within highest	4 4 0 0			0	0	
two shaking categories)						
Liquefaction Susceptibility (within	8	10	0	0	0	0
moderate, high, or very high						
liquefaction susceptibility						
Liquefaction Hazard (within CGS	Not applicable					
study zone) <sup>10</sup>	Not applicable					
Earthquake-Induced Landslides	Not applicable					
(within CGS study zone) <sup>11</sup>	Two applicable					
Earthquake Faulting (within CGS	Not applicable					

6

<sup>&</sup>lt;sup>7</sup> The sea level rise map is not a hazard map. It is not appropriate to assess infrastructure exposure to sea level rise.

<sup>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> The entire Town is subject to drought.

<sup>&</sup>lt;sup>10</sup> Mapping has not yet been completed for Marin County.

<sup>&</sup>lt;sup>11</sup> Mapping has not yet been completed for Marin County.

zone)						
Flooding (within 100 year floodplain)	4 2 0 0 0				0	
Flooding (within 500 year floodplain)	2	0	0	0	0	0
Landslides (within areas of existing	48 39 0 0 0			0	0	
landslides)						
Wildfires (subject to high, very high,	3 1 0 0 0			0		
or extreme wildfire threat)						
Wildland-Urban Interface Fire Threat	39	42	0	0	0	0
Dam Inundation (within inundation	N-41'1-1-					
zone)	Not applicable					
Sea Level Rise <sup>12</sup>	Not applicable					
Tsunamis <sup>13</sup>	Not applicable					
Drought <sup>14</sup>	Not applicable					

<sup>&</sup>lt;sup>12</sup> The sea level rise map is not a hazard map. It is not appropriate to assess infrastructure exposure to sea

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

Finally, the Town examined the hazard exposure of critical health care facilities and schools located within the Town of Tiburon, and Town-owned buildings based on the information on ABAG's website at <a href="http://quake.abag.ca.gov/mitigation/pickcrit2010.html">http://quake.abag.ca.gov/mitigation/pickcrit2010.html</a>. The Town 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.

<sup>&</sup>lt;sup>13</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>&</sup>lt;sup>14</sup> Drought is not a hazard for roadways.

Exposure (number of facility types)									
Hazard	-	ospitals Schools		Locally owned critical facilities		Locally owned bridges and interchanges			
	2005	2010	2005	2010	2005	2010	2005	2010	
Total Number of Facilities	1	2	4	5	6	5	2	3	
Earthquake Shaking (within highest two shaking categories)	0	0	0	0	2	1	0	0	
Liquefaction Susceptibility (within moderate, high, or very high liquefaction susceptibility	0	1	1	3	2	4	0	1	
Liquefaction Hazard (within CGS study zone) <sup>15</sup>	ı	1	ı	-	-	-	-	-	
Earthquake-Induced Landslides (within CGS study zone) <sup>16</sup>	-	-	-	-	-	-	-	-	
Earthquake Faulting (within CGS zone)	0	0	0	0	0	0	0	0	
Flooding (within 100 year floodplain)	0	1	0	0	0	1	0	0	
Flooding (within 500 year floodplain)	0	0	1	0	1	0	0	0	
Landslides (within areas of existing landslides)	1	2	4	5	6	5	2	3	
Wildfires (subject to high, very high, or extreme wildfire threat)	0	0	0	0	0	0	0	0	
Wildland-Urban Interface Fire Threat	1	2	3	4	4	4	0	1	
Dam Inundation	0	0	0	0	0	0	0	0	
Sea Level Rise (exposed to 16in sea level rise) <sup>17</sup>	1	0	-	0	-	0	-	0	
Sea Level Rise (exposed to 55in sea level rise) <sup>18</sup>	-	1	-	0	-	1	-	1	
Tsunamis <sup>19</sup> (within inundation area)	ı	0	ı	0	-	2	-	0	
Drought <sup>20</sup>	-	-	-	-	-	-	-	-	

<sup>&</sup>lt;sup>15</sup> Mapping has not yet been completed for Marin County.

<sup>&</sup>lt;sup>16</sup> Mapping has not yet been completed for Marin County.

<sup>&</sup>lt;sup>17</sup> Sea level rise data was not available in 2005

Sea level rise data was not available in 2005

18 Sea level rise data was not available in 2005

19 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>20</sup> Drought will not affect locally owned facilities directly.

#### Repetitive Loss Properties

There are three (3) repetitive loss properties in the Town based on the information at <a href="http://quake.abag.ca.gov/mitigation/pickflood.html">http://quake.abag.ca.gov/mitigation/pickflood.html</a>. All three (3) repetitive loss properties are residential, according to <a href="http://quake.abag.ca.gov/mitigation/floodloss/marin/#data">http://quake.abag.ca.gov/mitigation/floodloss/marin/#data</a>. However, it is unknown if these properties are located within a flood plain or outside the flood plain.

In 2004 the Town also had three (3) repetitive loss properties, two (2) of which were located outside the flood plain, and one (1) of which was located within a 100-year flood plain. It would appear that the number of repetitive loss properties remains unchanged from the last plan update in 2005.

#### Other risks

The major potential disaster impacts to the Town are earthquakes, flooding, landslides and fire. Pan flu terrorism is another potential disaster, though not as likely to occur as the others.

Tiburon differs from the rest of the region in terms of vulnerability due to its isolated location along the peninsula of southern Marin. With only two (2) roads in and out of Town, these roadways are vulnerable to landslides and liquefaction, which pose a significant threat to residents and emergency services trying to enter and exit the Town during or after a disaster.

Through cooperative disaster planning agencies including the Tiburon Office of Emergency Services, Tiburon Police, Tiburon Fire Protection District, Southern Marin Fire District, and the County of Marin Office of Emergency Services, extensive planning to mitigate disasters has already occurred, and will continue, to ensure our community is prepared. The Town of Tiburon 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 Town of Tiburon has participated in the National Flood Insurance Program since 1977. To date, the Town has not participated in the Community Rating System. The Town continues to keep local ordinances compliant with the FEMA model ordinance, and applies flood ordinance provisions diligently. In addition to using FEMA maps to regulate flood hazard areas, the Town may require elevation certificates at the building permit stage to verify compliance with NFIP requirements. There have been no issues with community participation in the program and no general hurdles have been identified regarding effective implementation of the program.

## 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 Tiburon in designing its mitigation program.

In addition, the Town has the specific objective of reducing the number of public and private buildings within the Town 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. The list below indicates each of the strategies identified, along with responsible party, action taken, and current status of progress.

Government Mitigation Strategies: The Town has established the Tiburon Office of Emergency Services, which has been working towards disaster preparedness for the Town and the community. Tiburon OES staff teaches Get Ready courses and also aides in CERT trainings, as well as oversees the Town's Emergency Operation Center. In addition, the Town has been researching the possibility of constructing a new LEED certified Public Works Corp Yard, which is a primary critical facility within the Town's jurisdiction.

**Education Mitigation Strategies:** Education facilities are under the Reed Union School District; however, the Town has a close working relationship with the school district.

**Health Mitigation Strategies:** The Town of Tiburon is not responsible for health care facilities within the Town's boundaries. The Marin County Health Department would be the responsible agency, along with the State of California.

**Economy Mitigation Strategies:** The Town continues to review and adopt current California Building and Fire codes. With the exception of establishing the Tiburon Office of Emergency Services, which oversees the Tiburon Emergency Operation Center, Get Ready courses and CERT trainings, the majority of the economy mitigation strategies do not apply to the Town.

**Environmental Mitigation Strategies:** In order to control invasive and exotic species that contribute to fire and flooding hazards, the Town has adopted an Open Space Resources Management Plan. The goals of the OSRMP with regard to management of vegetation are to reduce fire hazard on open space, reduce the risk of wildfire, preserve native species and sensitive habitats, and control/reduce non-native species and weeds.

**Housing Mitigation Strategies:** The Town continues to review and adopt current California Building codes. The Town has also established the Tiburon Office if Emergency Services, which educates property owners on disaster preparedness through Get Ready courses and CERT trainings.

**Infrastructure Mitigation Strategies:** The Town successfully completed the under grounding of utilities in the Lyford Cove area of Town in 2009. In 2011, the Town will begin under grounding utilities in the Del Mar neighborhood. In terms of critical facilities, the Town has

started researching the possibility of constructing a new LEED certified Public Works Corp Yard, but has yet to begin construction due to lack of funding.

**Land Use Mitigation Strategies:** The Town continues to keep local ordinances compliant with the FEMA model ordinance, and applies flood ordinance provisions diligently. In addition to using FEMA maps to regulate flood hazard areas, the Town may require elevation certificates at the building permit stage to verify compliance with NFIP requirements.

## Future Mitigation Actions and Priorities

As a participant in the 2010 ABAG multi-jurisdictional planning process, Tiburon 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 several departments then met periodically to review progress on the Town's 2005 strategies, to identify and prioritize additional mitigation strategies to update the list

The draft priorities will be provided to the Town Council for adoption pending approval of this LHMP by FEMA.

The Town has established priorities related to building construction, critical facility upgrades, and specific mitigation tasks for the next 5 years. The Town is undertaking the following:

- In January 2011, the Town Council adopted the 2010 California Building Code which applies to all construction activity within the Town boundaries. The California Building Code is comprised of 11 parts that incorporate public health, safety, energy, green building and access standards used in the design and construction of all buildings. The new code provisions will allow the Town to utilize the latest technologies, advances in construction standards and seismic design for use in new residential and commercial construction and in remodels.
- As part of the Capital Improvement Program, the Town will implement a Shoreline Park rip rap restoration, in order to shore up all the larger rocks at Shoreline Park and help prevent erosion into the San Francisco Bay. Shoreline Park is fully exposed to the Bay which is susceptible to sea level rise, tsunamis and possible tidal flooding.
- Also as part of the Capital Improvement Program, the Town will implement a foundation repair to a section of Paradise Drive in order to shore up the embankment by constructing a "soil nail" wall. This would help stabilize the exposed earthen bank that holds up Paradise Dr. just past the Caprice restaurant, which street segment could be susceptible to landslide as a result of earthquakes or storms.
- The Town will continue to research the possibility of construction of a new LEED certified Public Works Corp Yard, as this is the Town's primary critical facility in need

of repair/updating. Seismic retrofit work would be done simultaneously in order to ensure this critical facility could withstand the next major earthquake in the Bay Area. This project is largely dependent on funding.

• In order to assist with the prevention of wildfires, the Town will work with Conservation Corps North Bay to obtain a matching Cal Fire Grant in order to implement the fire related items within the Town's Open Space Management Plan. The Town's Public Works Department will also begin working on a "zone approach" to remedy the highest priority areas in the open space to clear out invasive species and heavy brush. In addition, the Town will begin implementation of a program designed for residents living adjacent to open space, which outlines the guidelines for mowing grasses and vegetation clearing on open space lands.

#### On-Going Mitigation Strategy Programs

The Town of Tiburon 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.

- Continue to comply with all applicable building and fire codes as well as other regulations when constructing or significantly remodeling infrastructure facilities (INFR, HOUS, ECON, GOVT)
- Continue to enforce and/or comply with State-mandated requirements, such as the California Environmental Quality Act (ENVR a-1)
- Incorporate FEMA guidelines and suggested activities into local government plans and procedures for managing flood hazards (LAND, GOVT, HOUS, INFR)
- Continue to participate in FEMA's National Flood Insurance Program (GOVT d-5)
- Continue to facilitate the distribution of emergency preparedness materials and trainings through the Tiburon Office of Emergency Services (INFR, HOUS, ECON, GOVT)
- Conduct periodic tests of the emergency sirens and BEARS emergency warning systems (GOVT c-15)
- Continue to maintain the emergency operations center (GOVT c-10)

## **Incorporation into Existing Planning Mechanisms**

The Town of Tiburon has several planning mechanisms which this annex can be incorporated into, which include:

- Capital Improvement Plan
- Tiburon Peninsula Emergency Operations Plan
- Municipal Code (i.e. Building Code/Regulations)
- Zoning Ordinance
- General Plan

#### • Open Space Management Plan

As these plans and ordinances are periodically updated, consideration will be given to include the annex as part of their update, as these are commonly referred to in the mitigation strategies as implementation measures.

In addition, the Town enforces the requirements of the California Environmental Quality Act (CEQA), which 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 Tiburon 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 Town of Tiburon will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis by both the Community Development Department (i.e. Planning and Building) and the Emergency Services Coordinator. Major disasters affecting the Town, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used as part of the monitoring process. The Annex will also 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 leaders 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 Community Development Department and/or the Emergency Services Coordinator 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 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 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. In order to better facilitate public participation in the next update process, Staff will consider holding a public workshop to inform the community about hazard mitigation, discuss what the Town has in place to mitigate hazards that are a threat to the Town, and use this public forum as an opportunity to open up a discussion regarding areas of recommended improvement.

## Mitigation Plan Point of Contact

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## Alternate Point of Contact

Name: Laurie Gordon

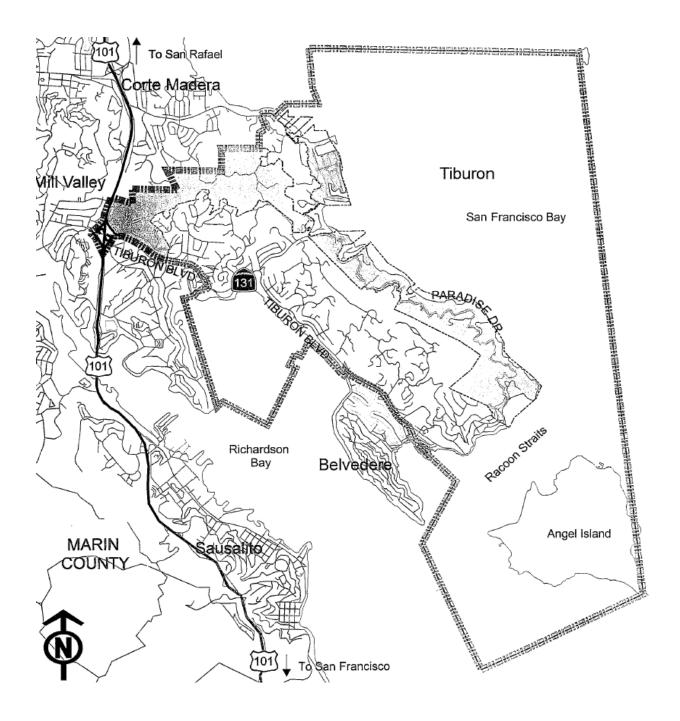
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Exhibit A - Jurisdiction Boundary Map



## **Exhibit B - Public Meeting Announcements**



# TOWN OF TIBURON NOTICE OF PUBLIC HEARING LOCAL HAZARD MITIGATION PLAN ANNEX DRAFT MITIGATION STRATEGIES

Notice is hereby given that the Tiburon Planning Commission will hold a public hearing to consider Draft Mitigation Strategies as part of the Local Hazard Mitigation Plan (LHMP) annex update to the 2010 ABAG Multi-Jurisdictional Local Hazard Mitigation Plan. To implement the Disaster Mitigation Act of 2000 (DMA 2000), the Federal Emergency Management Agency (FEMA) has required that in order to remain eligible to receive federal funding for both pre-disaster and post-disaster mitigation funding, a local government must have a FEMA approved LHMP. The Town adopted an LHMP annex in 2005 and is now conducting an update as part of the larger ABAG Multi-Jurisdictional LHMP. The mitigation strategies are a major component of the LHMP update, and cover the following eight areas: infrastructure, health, housing, economy, government, education, environment and land use.

The public hearing will be held in the Town Council Chambers, 1505 Tiburon Boulevard, Tiburon, California. The Planning Commission will meet on Wednesday, November 10, 2010. The meeting will begin at 7:30 P.M.

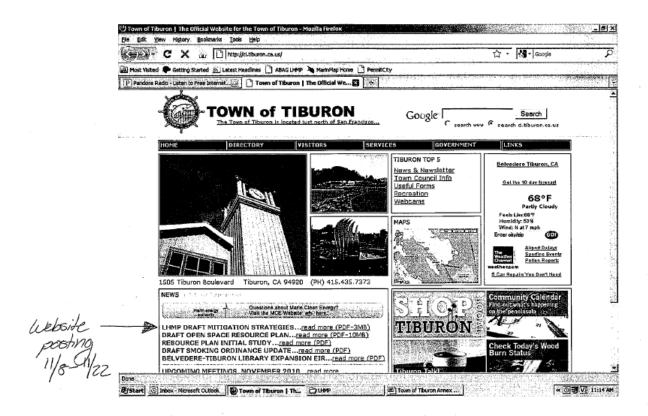
The draft mitigation strategies are available for public review at the Tiburon Community Development Department, Tiburon Town Hall, 1505 Tiburon Boulevard, Tiburon, CA. Office hours are Monday through Thursday, 8:30 AM to 5:30 PM. Questions regarding this review should be directed to Laurie Tyler, Associate Planner, at (415) 435-7397.

#### NOTICE OF LIMITATION ON LEGAL CHALLENGES

Pursuant to Section 65009 of the California Government Code, please be advised that if you challenge the Town's action on this application in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Town at, or prior to, the public hearing.

Laurie Tyler Associate Planner 10/25/10

LEGAL NOTICE
PUBLISH ONCE IN THE <u>IJ</u> ON OCTOBER 28, 2010



## **Exhibit C - Tiburon Mitigation Strategies**

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