

Local Hazard Mitigation Plan Annex

City of Brisbane

Introduction

The City of Brisbane encompasses approximately 20.44 square miles (3.44 square miles of land and 17 square miles of water), bounded by the City and County of San Francisco on the north, San Francisco Bay on the east, the City of South Francisco on the southeast, unincorporated lands of San Mateo County on the south and west, and Daly City on the northwest. The city population is 3,597, based on the 2000 Census¹. The City employs approximately 150 people on either a full or part time basis, and its General Fund budget for fiscal year 2004-05 is approximately 9.8 million dollars. The City provides police services and contracts with the North County Fire Authority for fire services.

The Planning Process

The City of Brisbane has demonstrated an ongoing commitment to the protection of public health and safety through the identification and mitigation of local hazards. The Community Health and Safety Element of the 1994 General Plan addresses seismic safety, slope stability, and fire and flood hazard concerns. Additionally, these issues are addressed on a project-by-project basis through compliance with the California Environmental Quality Act (CEQA).

Many of the City's activities have been incorporated into the planning process for the multi-jurisdictional plan. The City participated in various Association of Bay Area Governments (ABAG) workshops and meetings, including the general "kick-off" meeting and the soft-story charrette. In addition the City reviewed and commented on the multi-jurisdictional plan. Finally, the City provided information on facilities that are viewed as "critical" to ABAG.

A committee of key City staff, including the Deputy Fire Chief, Public Works Director, Community Development Director, and Deputy Building Official was formed and met on April 7 and 28, 2005 to evaluate and prioritize appropriate mitigation strategies. The strategies were presented to the Cities executive staff at the staff meeting of November 2, 2005 and November 9, 2005. The committee's recommendation was then presented for public comment and City Council review at the December 5, 2005 City Council meeting. The resolution adopting the plan and strategies was adopted by City Council on December 5, 2005. The mitigation strategies will be incorporated as appropriate into the General Plan during the City's forthcoming General Plan update.

¹ For complete Census information on Brisbane, see <http://www.bavareacensus.ca.gov/>

Hazard and Risk 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 are known to impact the City of Brisbane, with the exception of surface faulting and tsunamis. Surface faulting is not a hazard because no active faults run through the City, and mapping of tsunami inundation areas, if any, has not been completed.

While hazards are mapped within the 1994 General Plan, these hazard maps are less detailed and not as current as those shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

Information on disasters declared in San Mateo County is at <http://quake.abag.ca.gov/mitigation/disaster-history.html>.

The City examined the hazard exposure of City urban land use based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 1,197 urban acres in the City:

- **Earthquake faulting-** No active faults run within the City so fault rupture is not a direct concern.
- **Earthquake shaking-** 1,099 acres are in the highest two categories of shaking potential, in large part due to the proximity of the City to the San Andreas fault.
- **Earthquake-induced landslides-** the California Geological Survey has not completed mapping of this hazard in the City of Brisbane. This hazard is viewed as similar to that posed by weather-related hazards.
- **Earthquake liquefaction-** 588 acres are in areas of moderate, high or very high liquefaction susceptibility.
- **Tsunamis-** While tsunamis are unlikely to be a hazard in the City of Brisbane, the mapping of the inundation area has not been completed at this time.
- **Flooding-** 143 acres are in the 100-year floodplain.
- **Landslides-** 35 acres are within "mostly a landslide area."
- **Wildfires-** 64 acres are subject to high, very high or extreme wildfire threat, while 938 acres are within wildland-urban interface threat areas.
- **Dam Inundation-** Zero acres are subject to dam inundation.
- **Drought-** All 1,197 urban acres are subject to drought.

The City also examined the hazard exposure of infrastructure based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 40 miles of roadway and 5 miles of railway:

- **Earthquake faulting-** No active faults run within the City so fault rupture is not a direct concern.
- **Earthquake shaking-** 30 acres of roadway and 4 acres of railway are in the two highest categories of shaking potential.
- **Earthquake-induced landslides-** the California Geological Survey has not completed mapping of this hazard in the City of Brisbane. This hazard is viewed as similar to that posed by weather-related hazards.
- **Earthquake liquefaction-** 11 miles of roadway and 4 miles of railway are in areas subject to moderate, high, or very high liquefaction susceptibility;
- **Tsunamis-** While tsunamis are unlikely to be a hazard in the City of Brisbane, the mapping of the inundation area has not been completed at this time.
- **Flooding-** 3 miles of roadway and zero acres of railway lie within the 100-year floodplain.
- **Landslides-** 1 mile of roadway and 1 mile of railway are within “mostly a landslide area.”
- **Wildfires-** 4 acres of roadway and zero acres of railway are subject to high, very high, or extreme wildfire threat, while 27 acres of roadway and 4 acres of railway are in wildland-urban interface threat areas.
- **Dam Inundation-** None of the City’s roadways or railway are subject to dam inundation.
- **Drought-** is not a transportation hazard.

Finally, the City examined the hazard exposure of critical health care facilities, schools and city-owned buildings based on the information on ABAG’s website at <http://quake.abag.ca.gov/mitigation/pickcrit.html> . These include two schools and five city-owned buildings. There are no critical health care facilities within the City. Of the critical facilities in the City:

- **Earthquake faulting-** No active faults run within the City so fault rupture is not a direct concern.
- **Earthquake shaking-** both schools and 4 city-owned buildings are in the highest two categories of shaking potential.
- **Earthquake-induced landslides-** the California Geological Survey has not completed mapping of this hazard in the City of Brisbane. This hazard is viewed as similar to that posed by weather-related hazards.
- **Earthquake liquefaction-** no schools are within areas subject to moderate, high, or very high liquefaction susceptibility, while 4 city-owned buildings are in such areas.
- **Tsunamis-** While tsunamis are unlikely to be a hazard in the City of Brisbane, the mapping of the inundation area has not been completed at this time.
- **Flooding-** no schools or city-owned buildings are in either the 100-year flood plain or other flood-prone areas.
- **Landslides-** both schools are in areas of few existing landslides, while all five city-owned buildings are in areas with very few or no landslides.

- **Wildfires-** both schools and three city-owned buildings are located in wildland-urban interface threat areas.
- **Dam Inundation-** no schools or city-owned buildings are in areas subject to dam inundation.
- **Drought-** Drought will not affect city buildings directly. However, the City does operate a water-supply distribution system.

Despite areas of the City being located in flood-prone areas, there are no repetitive loss properties in the City based on the information at <http://quake.abag.ca.gov/mitigation/pickflood.html>.

The City plans to work with ABAG during 2005 to improve the risk assessment information being compiled by ABAG by providing information on unreinforced masonry buildings and soft-story apartments located in the City.

Drought, though a potential problem in the City is not fully assessed. The City will work with ABAG and water supply agencies on this issue.

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. The ABAG Annex states that ABAG will be doing this work in 2005 through early 2006.

As this information is not fully developed, the City has reviewed the identified hazards and ranked them based on degree of occurrence, past disasters and expected future impacts. The conclusion is that earthquakes, landslides and wildfire pose a significant risk for potential loss. Faulting, tsunamis are much less of a threat and there are no dams within the jurisdiction of Brisbane.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, City of Brisbane staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was evaluated at a meeting of the Public Works Director and key Public Works staff, Deputy Fire Chief, Principal Planner, and Deputy Building Official on April 7 and 28, 2005. At the meeting all of the mitigation strategies were reviewed. The draft prioritization was based on numerous criteria, not simply an economic cost-benefit analysis. These criteria include technical, political, and administrative feasibility, consistency with community values, economic viability, and environmental appropriateness.

The draft priorities were presented to City management staff and the City Manager, which resulted in further refinements on November 2, 2005 and November 9, 2005. The priorities were presented to the City Council on December 5, 2005, which included the opportunity for public review and comment. The final strategies (as shown on the

attached table) will be incorporated into the City's forthcoming General Plan update. Many of these strategies are existing City programs.

Over time we are committed to developing better hazard and risk information as a basis for establishing priorities. We are not trying to create a disaster-proof region, but a disaster-resistant one.

There are three projects within the City that we are attempting to complete. First there is the seismic retrofit of the City Hall/Police Department complex which is housed in an older concrete tilt-up structure. This facility does not currently meet critical facilities seismic standards and, as the only police facility and also the seat of government for the City of Brisbane, is of particular interest for retrofit and upgrading to provide continuity of service and governance in the event of a disaster. Additionally, there are two water storage tanks within the City that are in need of seismic upgrading. They are located upslope of the main portion of the city and provide for essential water for firefighting in the event of a disaster. These tanks also pose an inundation hazard for those sections of the city below them that are in the geographic path of a water flow due to a catastrophic failure of these tanks.

The Plan Update Process

The City Manager's Office will ensure that monitoring of this Annex will occur on an ongoing basis. However, major disaster affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be a discussion item on the agenda of City 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 or other significant events during the past year. This group will be responsible for determining if the plan should be updated

The City of Brisbane 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 Director 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 plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

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