

RESOLUTION NO. _____

A RESOLUTION OF THE COUNCIL OF THE CITY OF SANTA BARBARA ADOPTING THE 2011 UPDATE OF THE SANTA BARBARA COUNTY MULTI-JURISDICTION HAZARD MITIGATION PLAN AND THE CITY OF SANTA BARBARA ANNEX

WHEREAS, the Federal Disaster Mitigation Act of 2000 (Act), as described in 44 CFR Section 201.6 mandates local governments to submit and maintain a Federal Emergency Management Agency (FEMA) approved local hazard mitigation plan;

WHEREAS, the City of Santa Barbara has participated in a county-wide Multi-Jurisdictional Plan with Santa Barbara County Office of Emergency Management as the lead agency;

WHEREAS, the Multi-Jurisdiction Hazard Mitigation Plan identifies each jurisdiction's risk assessment and mitigation strategies to reduce the impacts of natural disasters on the public and local government;

WHEREAS, identification of hazards in the City assists with response planning, exercise development, public education and awareness, and other emergency management functions;

WHEREAS, FEMA approved the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan; and

WHEREAS, the Federal Disaster Mitigation Act of 2000 requires the Plan to be formally adopted by the City Council and provided to FEMA for formal approval.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SANTA BARBARA AS FOLLOWS:

SECTION 1. The City Council approves and adopts the 2011 update of the City of Santa Barbara Hazard Identification and Risk Assessment Plan, attached hereto and incorporated herein by reference as "Exhibit".

SECTION 2. The City Council adopts the 2011 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan, as adopted by the County Board of Supervisors by Resolution Number 11-319 on September 13, 2011, to include the addition of the 2011 City of Santa Barbara Hazard Identification and Risk Assessment Plan as the City of Santa Barbara Annex, Section 14.

Contents

Section 14	City of Santa Barbara	14-2
14.1	Introduction	14-2
14.2	Internal Planning Process	14-2
14.2.1	City Local Planning Team Meetings and Outcomes	14-3
14.2.2	Public Involvement	14-4
14.3	Capability Assessment	14-18
14.3.1	Governance	14-18
14.3.2	Departmental Responsibilities, Plans, and Capabilities	14-19
14.3.3	City of Santa Barbara Emergency Services Organization	14-26
14.3.4	General Analysis of Capabilities	14-27
14.3.5	Legal and Regulatory Capabilities	14-28
14.3.6	Fiscal Resources	14-29
14.3.7	Relevant Plans, Policies, and Ordinances	14-30
14.4	Hazard Assessment	14-35
14.4.1	Flood and Coastal Storm Surge	14-38
14.4.2	Wildfire	14-38
14.4.3	Earthquake	14-38
14.4.4	Landslide/Coastal Erosion	14-42
14.4.5	Dam Failure	14-45
14.4.6	Tsunami	14-45
14.5	Vulnerability Assessment	14-46
14.5.1	Critical Facilities and Flood Vulnerability	14-47
14.5.2	Flood Vulnerability	14-53
14.5.3	Wildfire Vulnerability	14-59
14.5.4	Earthquake Vulnerability	14-68
14.5.5	Landslide Vulnerability	14-74
14.5.6	Dam Failure Vulnerability	14-79
14.5.7	Tsunami Vulnerability	14-84
14.6	Mitigation Strategy	14-89
14.6.1	Mitigation Priorities	14-89
14.6.2	Mitigation Progress	14-90
14.6.3	Mitigation Approach	14-92
14.6.4	Implementation Plan	14-95
14.7	Plan Maintenance	14-111
14.7.1	Point of Contact	14-111
14.8	Attachments	14-112
14.8.1	Santa Barbara City Attachment 1: Meeting Documentation	14-112
14.8.2	Santa Barbara City Attachment 2: Outreach Materials	14-114
14.8.3	References	14-116

SECTION 14 CITY OF SANTA BARBARA

14.1 INTRODUCTION

This annex was prepared in 2010 – 2011 as part of an update to the Santa Barbara County Multi-Hazard Multi-Jurisdictional Hazard Mitigation Plan. The City of Santa Barbara participated in the County wide Mitigation Advisory Committee, reviewed all portions of the previous hazard mitigation plan pertaining to the City, and incorporated relevant components into this annex. This annex serves as a complete hazard mitigation planning tool for the City of Santa Barbara. It contains updated capability assessment information, a new vulnerability assessment, and an updated/revised mitigation strategy. The methodology and process for developing this annex is explained throughout the following sections.

The City of Santa Barbara is located on the south coast of the County. Due to the Santa Ynez mountain range that blocks colder air from the north, Santa Barbara enjoys mild and pleasant weather. It sits at an elevation of roughly 50 feet above sea level and has a land area of 19 square miles. The city received its name when the California mission Santa Barbara was founded there in 1786. The mission was known as the Queen of the Missions due to its beauty and the beauty of its surroundings. Attractions in Santa Barbara include the Waterfront, Downtown retail, entertainment and cultural districts, Santa Barbara Museums of Art and Natural History, the Santa Barbara Zoo, and special events such Old Spanish Days – Fiesta Santa Barbara. Santa Barbara is the retail, tourism, government, education, and medical center of the County. It is home to the Santa Barbara Regional Airport, which provides commercial services for Ventura, Santa Barbara and San Luis Obispo Counties.

14.2 INTERNAL PLANNING PROCESS

The City of Santa Barbara participated in the Countywide Mitigation Advisory Committee in development of the update to the entire hazard mitigation plan. Information and discussion topics raised at the MAC meetings were brought to the City's Local Planning Team for discussion of relevance within the City limits and for this annex. Yolanda McGlinchey, Emergency Services Manager, served as the City's liaison on the MAC and coordinated the collaboration of the Local Planning Team.

Table 14-1 lists the City of Santa Barbara Local Planning Team. These individuals collaborated to identify the City's critical facilities, provide relevant plans, report on progress of city mitigation actions and develop the updated mitigation strategy.

Table 14-1 City of Santa Barbara Local Planning Team 2011

Name	Title
Rob Badger	Information Systems
Andrew DiMizio	Fire Chief
John Ledbetter	Principal Planner – CDD Planning
Joe Poire	Division Chief – Prevention
Mick Kronman	Waterfront Ops
Pat Kelly	City Engineer/Asst. PW Dir.
Bettie Weiss	City Planner – CDD Planning
Tom Doolittle	IS Manager –Administrative Services
George Estrella	Building Official – CDD Building & Safety
Santos Escobar	Parks Manager – Parks & Recreation
Rick Fulmer	Streets Manager – Public Works
Chris Hansen	Building Inspector/Plans Check Supv. – CDD
Tracy Lincoln	Operations Manager – Airport
Jill Zachary	Asst. Parks & Recreation Director

14.2.1 City Local Planning Team Meetings and Outcomes

The City of Santa Barbara Local Planning Team (LPT) met regularly during the planning process in coordination with the countywide Mitigation Advisory Committee to discuss updates to this plan and provide comments on review drafts. The table below summarizes the meetings held within the City of Santa Barbara separate from the countywide MAC meetings listed in Section 3. Meeting documentation from the City of Santa Barbara may be found in Section 14.8 as Santa Barbara City Attachment 1: Meeting Documentation.

Table 14-2 City of Santa Barbara Internal Collaboration Meetings Summary

Meeting Dates	Summary of Discussions
November 1, 2010	Memo distributed to City Executive Management kicking off the mitigation plan update efforts.
December 9, 2010	First Local Planning Team Meeting Discussion Topics: <ul style="list-style-type: none"> • Plan Update Prerequisites / Requirements • Planning Process • Risk Assessment • Mitigation Strategies • City's Goals and Objectives – 2005
March 9, 2011	Second Local Planning Team Meeting Discussion Topics: <ul style="list-style-type: none"> • Modifications to the Hazard Ranking • Comments on the revised County Goals/Objectives for 2011 • City Goals/Objectives for 2011

Meeting Dates	Summary of Discussions
	<ul style="list-style-type: none"> • Comments on the draft public survey
June 27, 2011	Third Local Planning Team Meeting Discussion Topics: <ul style="list-style-type: none"> • Review draft annex • Mitigation Strategies • Plan Maintenance
August 31, 2011	Fourth Local Planning Team Meeting Discussion Topics: <ul style="list-style-type: none"> • Mitigation Action Review & Prioritization • Draft Plan Review & Comments

In addition to these meetings, the LPT reviewed the draft documents, incorporated comments and track changes, and collaborated via email and phone to prepare the updated annex.

14.2.2 Public Involvement

In March 2011, an online survey was distributed county-wide to solicit public input regarding the concern for risk to natural hazard events and suggestions for how local government could minimize the risk. The City of Santa Barbara notified residents and businesses of the opportunity to participate in the survey via the City's website. The City also sent out information on the revision of the LHMP via news release in March 2011 and the Santa Barbara Get Ready Newsletter in April 2011.

A copy of the survey is included in County Appendix 3C. Copies of the City's outreach materials are included in Section 14.8, Santa Barbara City Attachment 2: Outreach Materials.

On March 8, 2011, the City's OES Manager and a County OEM Manager were both interviewed on local radio Station 1290 AM. They were interviewed on the Wildland Residents Association Community Alert Program.

Survey Results

The survey respondents from the City of Santa Barbara identified earthquake and wildfire as the two hazards of primary concern. Flooding follows as a secondary concern. Overall, the City of Santa Barbara's Local Planning Group found that all three, earthquake, wildfire, and flooding, were the hazards of primary concern. That rationale is presented in Section 14.4.

Santa Barbara City respondents indicated they have made improvements to their property to reduce risk of damage (refer to Question 3 below) including implementing and/or maintaining defensible space around their properties to reduce damage from wildfires, roof retrofitting using fire resistant material, installing backflow prevention devices, performing seismic retrofits, improving drainage,

and additional efforts. The results of the survey provide valuable information for the City of Santa Barbara as they continue in their mitigation efforts. These responses may be used as a bench mark for future measurements of improvement. For example, the City may choose to focus on educational outreach about what homeowners and renters can do to reduce future damage from natural hazards. After this type of implementation, a similar survey may be administered to validate the progress and confirm that more residents have implemented mitigation practices.

The survey allowed the City of Santa Barbara an opportunity to expand the list of stakeholders. Respondents suggested additional agencies/organizations to be informed of the hazard mitigation planning process, provided contact information and will be given an opportunity to review/comment on the complete draft prior to adoption. As the City continues to increase awareness of hazard mitigation, the suggested stakeholders (item 21 below) will be considered for involvement in future mitigation planning discussions.

The City of Santa Barbara will consider the recommendations provided by survey respondents (items 8 and 20 below) regarding how the local government and the County can help residents prepare for an event, throughout the life of this plan and prioritize those that can be implemented efficiently and effectively.

The survey responses received from the City of Santa Barbara residents are summarized below:

1. 125 out of 510 survey respondents were from the City of Santa Barbara. 2 of the responses were received in Spanish.
2. Respondents were asked which three hazards, out of the seven hazards the MAC identified, are of most concern to their neighborhood or home. Below are responses from residents of Santa Barbara City (in order of most responses):

Hazard	Number of Responses
Earthquake	115
Wildfire	94
Flooding (including coastal surge)	51
Landslide/Coastal Erosion	35
Tsunami	29
Additional Hazards*	19
Agriculture (pests and disease)	13
Dam Failure	11

* Respondents noted the following additional hazards:

- High Winds, potential for trees to fall
- Fire starting in Westside hills, Mesa hillsides, etc. (I'm not concerned about fire spreading from the Riviera across town to my area.)
- Natural Gas Line explosion

- Water pollution, soil pollution, and air pollution
- Radon
- Evacuation, from single-family and multiple residences, commercial structures and South Coast generally; traffic overflow during an emergency; access to property is difficult or impossible for emergency vehicles
- Diablo Canyon Nuclear Power Plant, Vandenberg AFB
- Railroad derailment, nuclear radiation from Diablo Canyon accident?
- Robberies, burglaries and gangs.

3. Respondents were asked what they are doing to their property or within their home to reduce future damage from the hazards identified above. Below is a summary of responses:

Property Mitigation	Responses
Seismic retrofit of the structure and / or foundation	8
House elevation or first floor modification to prevent flood damage	6
Installed backflow prevention device(s)	15
Defensible space landscaping (clear vegetation around house to reduce wildfire risk)	32
Roof retrofit using fire resistant material	23
Installation of fire sprinklers	5
Installation of fire hydrant or above ground water storage tank	2
Strengthened openings (Doors, windows, and/or garage door to reduce high-hazard wind risk)	11
Other (please specify)	40

*The responses to "Other" were:

- Renter or condominium owner with no control over improvement projects. (installation of dual pane windows, receive sand bags annually)
- Will clear more vegetation around house. I have removed one juniper or cypress tree that was fully mature, dense and large, over hanging roof and was planted about 6 feet from my house. My other shrubs and flowers are less oily leaved and wouldn't burn as fast as a conifer.
- bioswale installation; French drain.
- Fire extinguishers and emergency food and water.
- shear wall construction
- Weed abatement
- Turning my lawn into a year-round edible garden...my reasoning is that I will have more "supplies" should a disaster occur and be less of a burden on NGO/govt assistance.
- I live in a retirement home, and intend to bring these matters before its management
- exterior tiling and sump pump

- HUD housing.....safety measures
- Our house was rebuilt 3 years ago.
- Prayer, organizing neighborhood to be safe, secure

4. Respondents were asked if a severe hazard event occurred today, such that all services were cut off from their home and they were unable to leave or access a store for 72 hours, which items they would have readily available. Below is a summary of responses from Santa Barbara City respondents:

Item that is Readily Available	Responses
Potable Water (3 gallons per person)	72
Cooking and eating utensils	119
Can Opener	118
Canned / Non-perishable Foods (ready to eat)	112
Gas grill / Camping stove	76
Extra Medications	68
First Aid Kit/Supplies	100
Portable AM/FM Radio (solar powered, hand crank,or batteries)	80
Handheld "Walkie-Talkie" Radios (with batteries)	25
Important Family Photos/Documentation in a water and fire proof container	30
Extra Clothes and Shoes	95
Blanket(s)/ Sleeping Bag(s)	106
Cash	53
Flashlight (with batteries)	107
Gasoline	23
Telephone (with batteries)	69
Pet Supplies	46
What else do you have in your emergency kit?*	27

* Respondents noted the following additional items in their emergency kits:

- Dust masks
- Gloves, matches.
- eye drops, moist towelettes...
- Games for kids, toys for dog

- Candles, toilet paper, etc.
- Extra batteries, lanterns
- portable water purifier
- Pet first aid kit (Red Cross Certified) w/extra meds/flea treatment, and at least two weeks of pet food and water.
- Ace bandages, kotex pads for deep cuts, bandage tape, latex gloves, heavy boots, burn cream
- MREs, thermal blanket, diapers, wipes
- Solar cell phone charger
- Tent, for nights when aftershocks might occur.
- Solar panel with storage battery and a.c. inverter.
- Extra meds are a problem when insurance pays only for a 1 month supply
- fire extinguisher
- Photos & documentation in a water & fire proof container needed.
- Generator, satellite phone
- Thermal blanket, toilet paper, battery powered TV, handcranked flashlight, whistle, power-off lights
- Crow bar, wrench, wood & matches, portable tv and batteries.
- A gun and ammo.
- Bible, Personal responsibility and knowledge

5. Respondents were asked if they have a plan for evacuating large animals and pets. Below is a summary of responses:

- 26, or **21.7%** of respondents, answered that they **have a plan for evacuating their pets (cats, dogs, etc).**
- 1, or **0.8%** of respondents, answered that they **have a plan for evacuating large animals (horses, cows, etc).**
- 23, or **19.17%** of respondents, answered that **they have pets but have not planned for their evacuation.**
- 1, or 0.8% of respondents, answered that **they have large animals but have not planned for their evacuation.**
- 69, or **57.5% of respondents**, answered that **they have no large animals or pets.**

6. Respondents were asked if they are familiar with the special needs of their neighbors in the event of a disaster situation. Below is a summary of responses:

- 45, or **37.5%** of respondents, indicated that they **are familiar with the special needs of their neighbors.**
- 75, or **62.5%** of respondents, indicated that they **are not** familiar with the special needs of their neighbors.

7. Respondents were asked if they are a trained member of their Community Emergency Response Team (CERT). Below is a summary of responses:

- 21, or **18.3%** of respondents, indicated that **they are part of CERT.**
- 42, or **36.5%** of respondents, indicated that **they are not a part of CERT, but would like to learn more about CERT.**
- 52, or **45.2%** of respondents, indicated that **they are not interested in being a part of CERT.**

Respondents were asked to share why they are a trained CERT member, or why they are not part of CERT. The received responses are listed below:

- City employee
- I am a member of the City of Santa Barbara PIO for the EOC.
- TRAINED IN FIRST-AID.
- As a city employee I am a potential emergency employee. Maybe we should all have CERT training.
- I was trained by the Red Cross years ago....when I authored the City Seismic Safety Ordinance and served as Seismic Program Coordinator for the City Building & Safety Division
- I'm young and strong and not afraid and would want to help in case of emergency
- Never heard of it.
- Trained as part of my job in Industrial Emergency Response
- Not yet as I have training from other sources/agencies/CBOs

8. Respondents were asked what the most important thing local government can do to help communities be more prepared for a disaster. Below is a summary of responses:

Things Local Government can do to help prepare	Number of Responses
Disseminate effective emergency notifications and communication	101
Provide training and education to residents and business owners on how they can reduce future damage	67
Community outreach regarding emergency preparedness	85
Being aware of special needs and vulnerable populations	59
Make a plan to use volunteer residents to help in a disaster	78
Other	14

9. Respondents were asked if they live in an apartment building or home with a living space above a garage or parking area.

- 97, or **80.2%** of respondents, indicated that they **do not** live in an apartment or home with living space above a garage or parking area.
- 24, or **19.8%** of respondents, indicated that they **do** live in an apartment building or home with living space above a garage or parking area.

Those respondents who indicated that they do live in an apartment building or home with living space above the garage or parking area were asked to describe their level of concern for the building to collapse in a large earthquake event. 10 respondents indicated that they are “Extremely Concerned”, 3 respondents indicated that they have “High Concern”, 10 respondents indicated that they have “Moderate Concern”, 7 respondents indicated that they have “Little Concern”, 5 respondents indicated that they have “No Concern”, 50 respondents indicated that the question was “Not Applicable” and 40 respondents skipped this question.

10. Respondents who are homeowners were asked if they have adequate homeowners insurance to cover the hazards that could impact their home. Below is a summary of responses:

Answer	Responses
Yes, my insurance coverage should be adequate	51
No, I don't believe my insurance coverage would be adequate for a major disaster	19
Unsure	6
I do not have an insurance policy	1
Not applicable, I rent my current residence	40

11. Respondents who are renters were asked if they have renter’s insurance. Below is a summary of responses:

Answer	Responses
Yes	21
No	31
Not applicable, I own my residence.	57

12. Respondents were asked if they have earthquake insurance. Below is a summary of responses:

Answer	Responses
---------------	------------------

Yes, I own my home and have earthquake insurance.	26
Yes, I rent my home and have earthquake insurance.	6
No, but I am interested in reviewing earthquake insurance options.	23
No, earthquake insurance is too expensive.	46
No, I do not need earthquake insurance.	18

13. Respondents were asked if they have flood insurance. Below is a summary of responses:

Answer	Responses
Yes, I own my home and have flood insurance.	20
Yes, I rent my home and have flood insurance.	6
No, but I am interested in reviewing flood insurance options.	14
No, I do not need flood insurance	77

14. Respondents were asked to note any additional insurance listed for their home or property.

- Car insurance only
- Fire insurance, home owners insurance for interior of condo
- I'm willing to lose it all....nice fresh start!
- Liability policy
- High Fire Zone Insurance
- Umbrella
- As a renter can we get flood insurance?
- Earthquake, fire, liability but I earthquake only covers so much and unsure whether insurance companies will actually come through. I own a home in New Orleans as well and insurance companies paying in major disaster is iffy (ie a major disaster is not 800 or less burned homes) once a disaster gets into the thousands damaged or destroyed category unsure
- Condominium Insurance
- Insurance needs to be more affordable

15. Respondents were asked if they work in Santa Barbara County.

- 108, or **88.5%** of respondents, indicated that they **do** work in Santa Barbara County.
- 14, or **11.5%** of respondents, indicated that they **do not** work in Santa Barbara County.

16. Respondents were asked if their place of work is in an area susceptible to natural hazards. Below is a list of natural hazards and responses from survey respondents:

Natural Hazard	Response
High-risk flood zone	37
Earthquake fault zone	44
Liquefaction zone	30
Landslide Risk Area	5
Wildland Urban Interface (wildfire risk area)	19
I don't know	28
Other*	20

*The responses to "Other" were:

- Tsunami/ Tsunami Run-up zone
- Not sure about the fault zone, but probably near
- Fire danger and ocean flooding possible
- It's not in the high-risk flood zone, landslide risk area, or Wildland Urban Interface. I don't know if it's in a fault zone or liquefaction zone.
- Retired
- Railroad accident involving toxic chemicals
- Gangs and the homeless are hazards in downtown SB

17. Respondents were asked if their employer has a plan for disaster recovery in place.

- 88, or 79.3% of respondents, **indicated that their employer does have a disaster recovery plan in place.**
- 9, or 8.1% of respondents, **indicated that their employer does not have a disaster recovery plan in place.**
- 14 respondents were unsure if their employer has a disaster recovery plan in place.
- 14 respondents skipped this question.

18. Respondents were asked if their employer has a workforce communications plan to implement following a disaster so they may contact their employees.

- 93, or 83.8% of respondents, indicated that their **employer does** have a workforce communications plan.
- 5, or 4.5% of respondents, indicated that their **employer does not** have a workforce communications plan.

- 13, or 11.7% of respondents, indicated that they are **unsure** if their employer has a workforce communications plan.
- 14 respondent skipped this question.

19. Respondents were asked to list any studies that they are aware of being conducted within their community or the county regarding the risk to future hazard events. 22 respondents replied to this question. These answers are summarized below. 4 respondents skipped this question.

- Hoover Maps
- Seismic Retrofit Program
- I know the City is currently working on several bridge replacement projects and structural upgrades to public parking structures to meet seismic requirements. I believe the Fire Dept works on defensible space programs for home owners in high fire areas.
- Tsunami Runup Map
- FEMA Flood Maps
- Liquefaction Zones
- Wildland Fire Hazard Areas
- Unreinforced masonry survey and retrofitting
- Disaster Mitigation Plan for the City of SB.
- I am familiar with most of the city documents that pertain to environmental resources and hazards.
- Geologic mapping by others
- Dam inundation analyses but the information published in the New Press was not very useful as the map was of poor quality and there was no information about availability of federal flood insurance for houses in this inundation area. Would federal flood insurance even cover damage resulting from such a dam failure?
- I have a map of former oil wells on the mesa
- Newspaper article on San Roque Dam failure

20. Respondents were asked what recommendations they have for Santa Barbara County and the incorporated cities to improve identification, prioritization, and implementation of actions intended to reduce future damage and increase resiliency. The following recommendations were received:

Recommendations for Santa Barbara County	Number of Responses
Perform outreach to ensure people are aware of their environment and the inherent risks	69
Provide training and materials on how residents can be prepared for the identified risks	75
Enforce/update building codes	49
Other*	20

The responses to "Other" were:

- Distributing emergency preparedness kits with water, canned food, batteries, etc., that people could keep in their vehicles or homes would be a good thing - but expensive - perhaps distribution could prioritize the most vulnerable and low income families.
- Westside residences in the W. Valerio, TV hills, Manitou Road, Mesa, Portesuello, Bel Air need to be AS AWARE of fire danger as the RIVIERA!!
- I believe that people have a responsibility to be aware of what they can do to be prepared for an emergency. The government must be prepared on how to respond, identifying hospitals, care facilities that will need special assistance.
- Create one central location (phone#/website) where people can go for info. Give away free emergency kits/supplies at community events.
- Seems that if someone has enough money, current code requirements are deviated to accommodate them. Our home has one drive way serving 5 homes with potential for a 6th. This has made for a very dangerous situation for all who live there. Builders should have been required to make a separate access for the new homes.
- Require employers with 25 or more employees to have a disaster management plan to implement.
- City of Santa Barbara needs a comprehensive social media communication infrastructure for both emergency and non-emergency communication. If one were in place and used, then in the event of an emergency, communication would be more effective.
- materials to read from.....not many will attend outreach events
- The "evacuation" plan only worked because the Jesusita Fire didn't blow into town... you do know that? Half the intersections out on Wednesday, with half the town in evacuation zone, and the rest of the traffic stuffed into the other half of town.
- THERE IS FAR TOO LITTLE BUILDING ENFORCEMENT IN SANTA BARBARA CITY.
- Make available emergency service workers (i.e. police, fire or emergency services) reps to attend and discuss disaster preparedness at Neighborhood group meetings and advertise the service.
- I am a California certified engineering geologist. We should have a program of local volunteer geologists and engineers (civil and structural) to assist the County on an as needed basis in event of a major disaster
- More "training and materials" (as above) to limit human panic and loss in major catastrophes.
- I would like to know about ways of bracing my 3-car garage that has a heavy tile roof but no ceiling. Does anyone sell or install telescoping steel beams that can brace such a structure?

- Provide a warning system beyond reverse 911 for people outdoors or away from their phones.
- please don't scare vulnerable people with the tsunami signs..
- Don't make building code enforcement or updates expensive. Give money incentives to homeowners such as property tax rebates who upgrade and get prepared.
- The County should spearhead a program to retrofit infrastructure and should begin by checking out County-owned buildings. Specifically, the Engineering Building at 123 East Anapamu that houses Public Works/Flood control and Building and Safety looks in bad repair and these are the exact people who will be needed in the event of a disaster following emergency personnel.

21. Respondents were asked to recommend any companies or local associations that should be involved in the Santa Barbara County hazard mitigation planning process. The following contacts were given:

- Habitat for Humanity
- Drug stores
- Isla Vista Association
- Tetra Tech, Inc.
- Santa Barbara Equine Evac
- Santa Barbara Technology and Industry Association

22. Respondents were asked if they would like to review and comment on a draft of their jurisdictions annex to the Multi-Jurisdictional Multi-Hazard Mitigation Plan.

- 23, or % of respondents **said they would** like to review and comment on the draft plan.
- 78, or % of respondents **said they would not** like to review and comment on the plan draft.

Forty-one respondents who said they would like to review and comment on the draft plan included their contact information.

23. Respondents were asked to provide any additional comments/suggestions/questions. All respondents skipped this question.

- Earthquakes are definitely my biggest concern.

- The heavy trees and shrubs in Ehlings Park and the neighboring hilly vicinity, which is only a few blocks from my house, as well as dense street trees in the upper W. Valerio, Manitou, Loma Alta Calle Canon neighborhoods that lead up to the back entrance to Ehlings Park and to the Mesa, are a fire concern with lots of fuel. When I watched the Tea Fire and Jesusita Fire on the Riviera spread so quickly, it is hard not to imagine the same spread if fire started on the Westside in the hills. Prevailing winds in my neighborhood can be quite strong and consistent from the hills above me. The Westside neighborhoods mentioned above should be aware of the need for clearance and fire preparation, to the same degree as the Riviera has been for years. The area is not as organized and pricey as Riviera, doesn't have a homeowners group, nor fire fear and history, so it could use help from the City to address fire concerns.
- Flooding & Earthquake impacts to buildings with parking garages and retail/restaurants on the first floor with condo units above.
- When fire disasters have occurred on weekends it seems the TV coverage is lacking and this could be a problem in any disaster.
- Put more agriculture in the urban-wildfire interface zone and fewer houses... It worked for Goleta anyways...
- I would like the opportunity to purchase rain barrels at a discounted price year round. These barrels can be used to hold potable water in non-rainy seasons, and can be replenished every time people water their gardens by running a hose in it, and then watering from the spigot at the bottom.
- Thanks for doing the survey. Great place to start making improvements.
- Cutting emergency personnel as discussed historically and presently, while it may save money, does not assist with the safety of our county. I am concerned that our current fiscal situation will create large personnel cuts in emergency fields as well as reduce or eliminate needed expansions.
- How do we access volunteer medical assistance when agencies can't meet the demand in extreme emergencies?
- At 89, I'm not especially interested in my risk. But overpopulation has put millions, if not billions, of others at risk throughout the world. The worst forecasts were gross underestimates, and the future will be still worse.
- Local earthquakes in the Santa Barbara Channel may generate tsunamis that will sweep over the low-lying shoreline within seconds to minutes. Therefore it is imperative that Santa Barbara and other coastal cities set up a system for rapid dissemination of TSUNAMI WARNINGS that will reach everyone on the BEACHES. One possibility is a network of loudspeakers. Another is a VHF radio-based system, using inexpensive and currently available walkie-talkies that beach walkers could carry. Still another idea -- for urban areas such as Arroyo Burro Beach -- is a set of inconspicuous solar-powered cell phone transmitters at intervals on the bluff (with directional antennas), such that ALL cell phones that can pick up a signal

from two or more transmitters will ring simultaneously and receive the warning message. This may require an emergency protocol built into future cell phones, but we really need to get this started! I am a retired physics professor (Ph.D., UC Berkeley, 1967), living in Santa Barbara and willing to work on this. Carl Kocher (805) 687-2362.

- see questions/issues above regarding dam inundation area in San Roque.
- Re putting together package of emergency supplies:

A ready-made emergency kit supplied by the county that a person could buy would be a boon to older householders who would have difficulty gathering everything and also do not even know how to find some of these things such as a radio that does not need electricity.

The locations of permanently available shelters should be made known so that no one needs to wonder where to go in the event of a disaster.

I teach at SBCC and often wonder about their preparedness for emergencies. My impression is that there is little in place as I never hear anything about this. On one occasion when the power failed in the evening during one of the fires (Tea), there was apparently no emergency back-up power and everyone had to exit the building in the dark. If there are protocols in place I have not heard of them. If there were an earthquake, I do not know what I am supposed to have my students do.

Advisory information about preparedness should be a regular feature in the media, not just the occasional article but continuous ongoing regular notices, etc. reminding people how they can and should prepare themselves for an emergency. Most of the time people don't think about this."

- Train more CERT people. Organize us CERT people into teams
- As above, Santa Barbara urgently needs an effective warning system. The reverse 911 had problems during the Jesusita Fire, and is effectively useless along Cabrillo where the tsunami risk is highest. We need sirens, PA, etc., for downtown, parks, and beach/harbor area. If UCSB has it, why don't the citizens who pay the taxes to subsidize UCSB?
- "For those who cannot afford cars.....would like to know where nearest shelter is for us / them....that they would evacuate"
- Obviously I am concerned about possible railroad accidents involving hazardous materials within the city area and the contingent need for rapid evacuation. I am also concerned about the influx of refugees from a major disaster to the south and the ability of the authorities (police, sheriff, national guard) to react in a timely manner. I am somewhat wary of radiation fallout from a possible accident at Diablo Canyon.
- Keep the politics and the politicians out of it. Train agencies with experience in emergencies such as the fire department or military take the lead
- Start making presentations to business groups

Public Review Period

Concurrent with the Cal EMA / FEMA review process the City of Santa Barbara is requesting public and stakeholder review of this plan update. Details regarding this review process and comments received will be incorporated prior to adopting the updated 2011 plan.

(press release, website posting, email distribution)

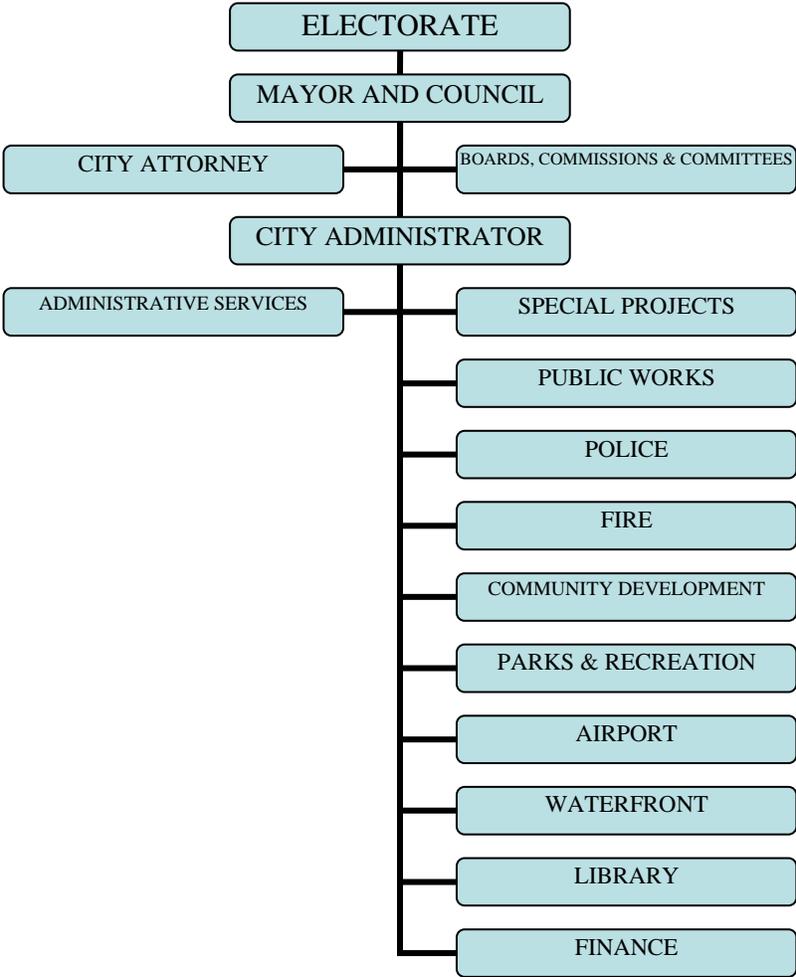
14.3 CAPABILITY ASSESSMENT

The City of Santa Barbara Hazard Mitigation Planning Group assessed potential hazards and identified current capabilities available for mitigation projects, activities and planning. This section outlines Santa Barbara's capabilities as it relates to governance; each city department's responsibility; the City of Santa Barbara Emergency Services Organization; an analysis of the City's capabilities and policies as they relate to hazard mitigation, Fiscal Resources, and the City's planning mechanisms.

14.3.1 Governance

The City of Santa Barbara employs a Manager-Council form of governance. Santa Barbara's City Council is comprised of one Mayor and six Council Members, all of whom are elected officials each serving four year terms. The City of Santa Barbara's organization is comprised of thirteen departments. These departments are Administrative Services; Airport; City Administrator; City Attorney; Community Development; Finance; Fire; Library; Mayor and Council; Parks and Recreation; Police; Public Works; and Waterfront. In addition, Santa Barbara has 29 Advisory Boards, Commissions, and Committees whose job is to advise the City Council on a wide variety of subjects.

CITY OF SANTA BARBARA ORGANIZATION CHART



14.3.2 Departmental Responsibilities, Plans, and Capabilities

City Administrator’s Office

The City Administrator’s Office provides leadership, direction, and oversight to City departments to accomplish goals and objectives approved by the City Council, in accordance with the City Charter. The City Administrator manages all departments, provides training and development for all City employees, reviews the performance of all City departments, and assists the Council in prioritizing goals. The City Administrator’s Office also provides oversight to City TV on Channel 18.

In response to natural disasters, the City Administrator’s Office serves as the primary point of contact to coordinate the entire flow of public information. This is accomplished through the use of media releases, press conferences, website updates, the City TV scroll, and public information kiosks. The

Office works in conjunction with other emergency personnel to coordinate the public release of accurate, timely, and consistent information.

Administrative Services Department

The Administrative Services Department consists of three divisions: City Clerk, Human Resources, and Information Systems. Each division has multiple programs to best define, budget, and administer services. The Department provides important services to over 1,000 city employees and the community.

The City Clerk's Office provides agendas, staff reports, and minutes of City Council meetings; maintains and processes all City Council-approved ordinances, resolutions, deeds, agreements, and contracts; administers municipal elections; recruits and maintains membership records for advisory groups; and provides staff for the City Hall reception area and telephone system.

Human Resources provides a centralized program of personnel administration for over 1,039 regular positions. The division recruits and tests applicants for City positions; establishes job descriptions and compensation levels for over 365 classifications; conducts classification studies; provides staff support to the Civil Service Commission, coordinates disciplinary actions and assists managers on performance issues; administers benefit programs including health insurance, deferred compensation and retirement; in-processes new employees; provides new employee orientation; manages the computerized Financial Management System (FMS) in relationship to job titles, positions, compensation (COLAs, merit increases, status changes, etc.), and employee benefit selections.

Information Systems provides Infrastructure support, Financial and Enterprise Applications, and Centralized GIS. Infrastructure Support provides technical leadership, maintenance and user support for computing and networking services to City staff by operating and maintaining the City's 40+ Local Area Networks; providing maintenance and support to over 750 desktop computers; establishing and maintaining standards for hardware and software; coordinating the City's computer training program; establishing standards and providing oversight of the City's local Intranet and public Website; and performing systems analysis, system integration and system implementation. Financial and Enterprise Applications Support provides financial management systems and related services; maintains enterprise wide applications such as maintenance management, SQL reporting services, and data exportation to support the analysis and inquiry needs of City staff; provides consulting services to all departments in areas of business problems, implementing solutions. Centralized GIS provides a standards and rules based central database of GIS data; provides tools to update and display GIS data; and provides detailed maps, drawings and other GIS services.

Santa Barbara Airport

The Santa Barbara Airport is one of the region's most important and visible assets. A recent University of California, Santa Barbara Economic Forecast Project study found that the Airport has a \$500 million annual impact on the County. Since the 1930s it has been the region's primary air transportation facility. More than 755,000 passengers used the Airport in 2010; making it the busiest airport on the California coast between San Jose and Los Angeles. Consistent with national trends, air travel through the Santa Barbara Airport declined during the recent recession. However, a new airline entrant and additional passengers have increased travel over the past year and airline forecast studies show the passenger volume will grow over the next 10 years.

The Airport is currently preparing a new master plan for development through 2025. The plan will identify Airport facility and capacity needs and prescribe improvements. It is vital that the Airport remain open during natural disaster situations to serve as a transportation point for the ingress and egress of personnel, equipment and supplies during the recovery phase of a disaster. The Airport completed a master drainage plan to address flooding issues, and several of the recommended projects from plan have been completed. The remaining flood control projects are listed in this document as potential projects for funding.

Approximately 400 of the 430 acres of the Goleta Slough Ecological Reserve are within Airport boundaries. As a steward of the slough, the Airport has made significant environmental improvements with plans for further restoration in the future.

In 2008 the Airport completed its airfield safety projects which brought the runway safety areas up to federal standard and reduced the commercial runway flood hazard.

As mitigation for the Airfield Safety Projects, the Airport has spent nearly \$9 million to improve or restore 40 acres of wetland habitat in the Goleta Slough. Ten of those acres were completed in 2010 after a 3-year study of bird behavior in tidal wetlands. The results of this study show that the restoration of tidal circulation has improved habitat for wildlife while reducing the risk of wildlife strikes on or near the airfield. This study has national significance as other airports may follow in Santa Barbara's footsteps. Each restoration site is overseen in a 7-year maintenance and monitoring program to ensure success.

City Attorney Department

The City Attorney Department is responsible for representation and advice to the City Council, the Redevelopment Agency, Boards, Commissions and all City officers and staff in all matters of law pertaining to the City.

These responsibilities include, attending City Council, Planning Commission and other board and commission meetings as needed; annually handling over one thousand opinion requests and other assignments involving necessary legal work; and weekly agenda preparation and review of items that come before City Council and Planning Commission. In addition, the office is responsible for all City code enforcement and litigation services.

The office is staffed by six attorneys (the City Attorney and five assistants) and five clerical staff, which function as a close team. Many assignments cross over into several departments (e.g., Public Works, Community Development, Risk Management, Parks and Recreation, Police and Fire departments). Attorneys work cooperatively on complex matters such as the negotiations for Airport property development, redevelopment projects, affordable housing projects, major land use, environmental and water law issues, and complex litigation.

Community Development Department

The Community Development Department is responsible for planning and zoning, building and safety, and housing and redevelopment for the City of Santa Barbara. The department has four divisions: Administration, Housing and Redevelopment, Building & Safety; and Planning.

The Housing and Redevelopment Division is responsible for a number of programs including: Redevelopment Agency Administration, Affordable Housing Development, Housing Rehabilitation

Loans, Community Development Block Grant (CDBG) Administration & Human Services Grants, Rental Housing Mediation, and Fair Housing Enforcement for the City of Santa Barbara. This division contributes to disaster mitigation through the funding of the housing rehabilitation and community improvement programs as well as capital improvement projects.

The Building and Safety Division is responsible for three programs: Building Inspection and Code Enforcement; Building Counter and Plan Review; and Records, Archives and Clerical Services. One of the primary functions of this division is to ensure all new and remodeled structures as well as additions to existing structures are constructed to current health and safety codes, thus lessening the potential impact of future disasters.

The Planning Division is responsible for four programs: Long Range Planning and Special Studies; Zoning Ordinance Information and Enforcement; Development / Environmental Review; and Design Review and Historical Preservation. This division mitigates natural and man-made hazards through the implementation of the General Plan, Zoning Ordinance, California Environmental Quality Act (CEQA), the Local Coastal Plan, the Subdivision Map Act, and a variety of other California planning statutes.

The primary responsibilities of this division in mitigating disasters is through: 1) the development of General Plan goals and policies, e.g. the Safety Element, 2) the permitting of proposed projects to ensure all development is consistent with disaster related goals polices, and 3) the enforcement of existing development to ensure continued compliance with existing goals, policies through the Zoning Ordinance. In addition, all four divisions of the Community Development Department are regularly trained to respond to disasters and assist with the recovery efforts.

Fire Department

The mission of the Fire Department is to serve and protect the community from the perils of fires, medical emergencies, environmental emergencies, and natural disasters. This will be accomplished through education, code enforcement, planning, prevention, emergency response, and disaster recovery. The Fire Department is responsible for managing the following programs, Fire Administration; Fire Prevention; Wildland; Office of Emergency Services; Fire Operations.

Fire Administration provides leadership, policy direction and administrative support to the entire department. Fire Prevention protects life, property and the environment from the perils of fire, hazardous materials, and other disasters through proactive code enforcement, modern fire prevention methods, fire and arson investigation and progressive public safety education, which provides fire and life safety education to the community to reduce the loss of life and property. Wildland ensures a safer community in the wildland-urban interface by assisting with and enforcing road clearance, defensible space and vegetation management, the Office of Emergency Services coordinates the City's response to disaster, educates residents to prepare and operates the City Emergency Operations Center, located at Fire Station 1; Fire Operations saves and protects lives, property, and the environment of the Santa Barbara community by preventing the impact of future events through proactive planning, public education, and occupancy fire code inspections.

In 2004 the City adopted the Wildland Fire Plan, a comprehensive approach to mitigating the wildland fire hazard in the wildland- urban interface. The policies and actions developed for the Plan cover a wide range of areas. They include re-designation of the City's high fire hazard area, public

education programs, evacuation preplanning, changes to City codes, fire protection services, biomass utilization, and vegetation management programs on both private and public lands. The plan has recently been designated as the City's Community Wildfire Protection Plan. In an effort to implement elements of that plan the City adopted the Wildland Fire Suppression Assessment District (WFSAD) in 2006. In cooperation with residents of the district, the program has removed hundreds of tons of flammable vegetation, reducing the threat of wildfire and enhancing evacuation routes throughout the district.

The City of Santa Barbara's Manager of the Office of Emergency Services is a non-sworn management position within the Fire Department. The Emergency Services Manager is responsible for the development and maintenance of emergency plans, organization and coordination of emergency programs and training. For further information regarding the City of Santa Barbara's Emergency Services Organization see section 14.3.3 below.

Public Library System

The Library System provides information services, reading materials and educational resources to residents of all ages from the Santa Ynez Valley through Carpinteria. The largest components of the department are areas of public service in the Central Library including circulation, reference, and youth services. The system includes seven branches, five of which are owned and funded by the County of Santa Barbara and administered under an agreement with the City. The Goleta Library is owned by the City of Goleta and administered under an agreement with the City. Additional activities include access to the Internet via public computers, an Adult Literacy program, interlibrary loan and borrowing, acquisition of materials, cataloging and processing of materials, and maintenance of the Library's catalog and users database.

Parks and Recreation Department

The City of Santa Barbara Parks and Recreation Department maintains 59 parks totaling nearly 1800 acres. The Parks Division is responsible for all aspects of park, open space, street tree and beach management and during emergencies provides logistical support such as personnel and supply transportation. The Recreation Division provides numerous recreational and cultural opportunities as well as community services. During emergencies the Department manages community buildings and recreation facilities as shelters and staging areas. The Golf Division manages the city's municipal golf course, which is a second staging area for emergency operations. The mission of the Creeks Restoration and Water Quality Improvement Division is to improve creek and ocean water quality and restore natural creek systems with the implementation of storm water and urban runoff pollution reduction, creek restoration and community education programs. The water quality program focuses on creek clean-up, street sweeping and storm water projects. Creek restoration programs improve creek health and water quality. Objectives include reducing erosion by bank stabilization and providing access where feasible. The Creeks Division has prepared Watershed Action Plans for Santa Barbara's three major watersheds and has held community forums for public input into these plans.

Police Department

The mission of the Santa Barbara Police Department, through the philosophy of community oriented policing, is to create a safe community where all people can live in peace without the fear of crime.

This commitment will ensure a professional quality of service and accountability to the citizens of the City of Santa Barbara.

While the primary mission of the Santa Barbara Police Department is law enforcement, the Police Department plays a pivotal role in general public safety as it relates to disaster preparedness. In addition, the Police Department has created some mitigation strategies that is included in their Unusual Occurrence Manual (UOM). The UOM is a guide for how officers will respond during a major incident or disaster.

The City's dispatch center is housed within the Police Department building. The dispatch center, or Combined Communications Center, acts as the public safety communication center for police, fire and EMS. In many emergency situations, police officers are among the first responders, assisting with traffic control, effecting evacuations and monitoring potentially life threatening situations.

Public Works Department

The City's largest department is Public Works. The department's total annual budget of over \$70 million represents approximately 41% of the City's total budget and its 276 full time employees is approximately 26% of the City's permanent work force. The Department is responsible for operating the City's El Estero Wastewater Treatment Facility on Yanonali Street and the Cater Water Treatment Facility on San Roque Road. The Department's mission is to provide for the public's needs relative to the City's transportation system, water and wastewater services, refuse collection, construction and maintenance of all City facilities, automotive equipment communications equipment and repair and maintenance of all streets, sidewalks, and street lights throughout the City.

The Public Works Department is divided into five divisions: Administrative Services, Engineering, Facilities Maintenance, Transportation and Water Resource. The Engineering Division is responsible for contract engineering; construction; land development; real property; sewer design; surveying; and water design. The Facilities Maintenance Division is responsible for building maintenance; communications; custodial services; and motor pool. The Transportation Division is responsible for alternative transportation; parking; streets maintenance; transportation operations; and transportation planning. The [Water Resources Division](#) is responsible for water and wastewater administration; water supply management; water treatment; water distribution; wastewater collection; wastewater treatment; laboratory and environmental services.

The Department is responsible for the following emergency activities and areas:

- Recovery operations in all types of disasters.
- Coordinating with Public Utilities companies in the repair of utilities essential to the life, health and welfare of the community.
- Coordinating and furnishing of transportation to all emergency agencies of the City and providing maintenance for disaster vehicles and equipment throughout the State of Emergency.
- Assuring of an adequate supply of water for emergency requirements and an adequate supply of potable water for human consumption.
- Assuring that sanitary facilities are operational or that alternate emergency facilities are provided.

- Assisting in and providing for traffic controls (signs, barricades, signalization) and warning signs.
- Providing personnel to assist in EOC operations (office and field). Setting up and operating Public Works Command Post.

The Public Works Engineering Division is very involved in hazard mitigation activities. It manages the City's Capital Improvement Program and provides professional engineering services for planning, designing, surveying, inspecting and managing public works improvements. Long-range master planning to support the City's street, water, wastewater, transportation and parking infrastructures is also provided. The Division also provides the Airport, Waterfront, Redevelopment Agency and all General Fund departments with engineering services. Services include in-house design, construction management and inspection of the annual water, sewer replacement and street capital improvement programs, plus contract administration of Airport, Waterfront, Redevelopment Agency and Parks and Recreation capital projects.

Waterfront Department

The mission of the Waterfront Department is to provide the community with a quality Waterfront for recreation and commercial use, along with mooring and landside services for boating. The Waterfront Department manages approximately 252 acres of tidelands and submerged lands encompassing the Harbor and Stearns Wharf. These lands belong to the State and are held in trust by the City of Santa Barbara. The Waterfront Department consists of three Divisions: Business Services, Harbor Operations and Facilities Management.

Harbor Operations oversees the Santa Barbara Harbor Patrol. The mission of the Santa Barbara Harbor Patrol is to enforce laws, educate the public and provide emergency fire, medical and ocean response services to facilitate the safe and orderly use of the Waterfront area. In many instances, Harbor Patrol Officers are the first emergency personnel on scene to a critical incident. The Waterfront Department's Operations Division is also responsible for coordinating the Department's Tsunami response and is researching warning systems and evacuation plans.

The Waterfront Department's Facilities Division is responsible for maintenance of the breakwater, Stearns Wharf City Pier, and all of the marinas, providing clean and safe commercial and recreational facilities for tenants and visitors. They take the lead on the projects in the waterfront, including sediment management plans, structure remodels and marina reconfigurations.

The Business Division's Financial Management Section supports the Waterfront Department by staying within budget and processing revenue and expenditure accurately. The Property Management Section manages waterfront leases to ensure that the public receives quality services and that the Department collects market value rents. The Parking Services Section provides competitively priced parking that is convenient, clean and customer friendly to the community and the City's visitors.

In response to a natural disaster, the Waterfront Department, during a hazardous or disaster event, immediately transforms into an emergency response organization that includes the first responders, maintenance and finance sections. Preparation, mitigation and response plans are contained in the Waterfront's Department's Emergency Response Plan (2009).

A local base of operations called a Disaster Operating Center (DOC) located in the Waterfront Administration Building is established in order to effectively coordinate personnel and resources in order to immediately respond to hot spots as they are identified by the Incident Commander, local agencies and/or the public. The DOC becomes a base of operations and collection center for information, inspection/damage reports, and response strategies as they are developed. In addition, monitoring with the City's Emergency Operations Center (EOC) is coordinated with the Operations Section for public information, dispatch to the law enforcement, and dispatch to maintenance staff for any channel or road closures; as needed. Staff are deployed to mitigate hazards and inspect critical structures, as well as oversee any contracted clean-up or construction crews. The Waterfront Department has a pre-planned routine for emergency response, to assure FEMA reimbursement by using the correct reporting techniques with pre-assigned teams responsible for inspecting critical facilities and to perform as flexible response units, all the disaster locations identified and numbered and called into the EOC (if opened).

14.3.3 City of Santa Barbara Emergency Services Organization

The City of Santa Barbara's Office of Emergency Services (OES) is a Division of the Fire Department. The purpose of OES is to develop and implement plans for the protection of persons and property within the City of Santa Barbara in the event of a disaster, and to coordinate Emergency Services functions of the City with all other public agencies and affected private persons, corporations and organizations.

The City of Santa Barbara's Emergency Services Organization is managed by the Emergency Services Council (ESC). The City Administrator serves as the Director of Emergency Services and acts as chair of the ESC. Other members of the ESC include: the Police Chief; Fire Chief; Public Works Director; and representatives of departments, service, or divisions designated by the City Administrator. The Emergency Services Manager is responsible for the development and maintenance of emergency plans, organization and coordination of emergency programs and training, and is also a member of the ESC.

The City of Santa Barbara's Emergency Services Organization is comprised of all officers and employees of the City, together with those volunteer forces enrolled to aid the City during a disaster, and all groups, organizations and persons who may by agreement or operation of law, including persons pressed into service under the provisions of Section 9.116.060(3) of the Santa Barbara Municipal Code be charged with duties incident to the protection of life and property in the City during such disaster. This includes, but is not limited to: School Districts; Santa Barbara Community College District; Santa Barbara Metropolitan Transit District; American Red Cross; and the Amateur Radio Emergency Services (ARES).

The City of Santa Barbara revised their Standardized Emergency Management System Emergency Operations Plan (SEMS EOP) in November 2007 to ensure the most effective and economical allocation of resources for the maximum benefit and protection of the civilian population in time of emergency. The EOP was developed in conjunction with the Santa Barbara County Operational

Area, as part of the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The EOP addresses emergency responses associated with natural disasters, technological incidents, and national security. The objective of the plan is to establish an effective organization capable of responding to potential large-scale emergency situations using all appropriate facilities and personnel in the City. The SEMS EOP assigns tasks and specifies policies and procedures for coordination of emergency staff and service elements. The SEMS EOP identifies emergency response actions associated with the large-scale emergencies through standard operation procedures.

The plan states that hazard mitigation is a year round effort and encourages all entities to prepare hazard mitigation plans. The following activities are identified by the plan as potential mitigation activities: improving structures and facilities at risk; identifying hazard-prone areas and developing standards for prohibited or restricted use; recovery and relief from loss; and providing hazard warning.

14.3.4 General Analysis of Capabilities

Table 14-3 provides a general analysis of administrative and technical capabilities within the City's departments.

Table 14-3
City of Santa Barbara: Administrative and Technical Capacity

Staff/Personnel Resources	Y/N	Department/Agency and Position
A. Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Airport, Community Development, Public Works, Waterfront
B. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Airport, Community Development, Public Works, Waterfront
C. Planners or Engineer(s) with an understanding of natural and/or manmade hazards	Y	Airport, Community Development, Parks and Recreation, Public Works, Waterfront
D. Floodplain Manager	Y	Community Development, Public Works
E. Surveyors	Y	Public Works
F. Staff with education or expertise to assess the community's vulnerability to hazards	Y	Airport, Community Development, OES, Police, Public Works, Fire, Waterfront
G. Personnel skilled in GIS and/or HAZUS	Y	Administrative Services , Airport, Community Development, Fire,

Staff/Personnel Resources	Y/N	Department/Agency and Position
		Police, Public Works
H. Scientists familiar with the hazards of the City	Y	Public Works, Community Development
I. Emergency Director	Y	City Administrator
J. Grant writers	Y	All Departments

14.3.5 Legal and Regulatory Capabilities

The legal and regulatory capabilities of the City of Santa Barbara are shown in Table 14-4, which presents the existing ordinances and codes that affect the physical or built environment of the City of Santa Barbara. Examples of legal and/or regulatory capabilities can include: City building codes, zoning ordinances, subdivision ordinances, special purpose ordinances, growth management ordinances, site plan review, general plans, capital improvement plans, economic development plans, emergency response plans, and real estate disclosure requirements.

Table 14-4
City of Santa Barbara: Legal and Regulatory Capability

Regulatory Tools (ordinances, codes, plans)	Local Authority (Y/N)	Does State Prohibit (Y/N)
A. Building code	Y	N
B. Zoning ordinance	Y	N
C. Subdivision ordinance or regulations	Y	N
D. Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	Y	N
E. Growth management ordinances (also called “smart growth” or anti-sprawl programs)	Y	N
F. Site plan review requirements	Y	N
G. General or comprehensive plan	Y	N
H. A capital improvements plan	Y	N
I. An economic development plan	Y	N
J. Emergency response plan (s)	Y	N
K. A post-disaster recovery plan	Y	N

L. Real estate disclosure requirements	Y	N
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14.3.6 Fiscal Resources

The fiscal year 2011 adopted budget includes a total operating budget of \$246.9 million and a citywide capital program of \$26.8 million. The General Fund, which includes traditional local government services, is composed of a \$101.6 million operating budget and a \$758,170 million capital program.

In addition to the General Fund, the City has a number of other funds used to account for various activities. Special revenue funds, totaling \$34.5 million (17%), are used to account for revenues legally restricted for a specific purpose. Enterprise funds, totaling \$94.5 million (39%) are used to account for the activities of the City operating in a manner similar to the private sector, including water, wastewater, airport, golf, downtown parking, and waterfront operations. Finally, internal service funds, totaling \$16.2 million (7%) are used to account for services provided internally to City departments and programs, such as Information Systems and Risk Management Services.

In 1996, the City Council established minimum reserve levels for all operating funds, including the General Fund. Pursuant to the adopted resolution, the General Fund currently maintains three separate reserves:

Emergency Reserve – Set at 15% of the adopted operating budget, established to respond to natural disasters, such as floods, earthquakes, etc.

Economic Contingency Reserve – Set at 10% of the adopted operating budget, established to respond to provide for unique one-time costs and maintenance of City services, and to permit orderly adjustments during periods of reductions.

General Fund Capital Reserve – Set at \$1 million to fund unexpected and unforeseen capital expenditures in the general fund. Special and Enterprise funds also have budgetary reserves.

Table 14-5 shows specific financial and budgetary tools available to the City of Santa Barbara such as community development block grants; capital improvements project funding; authority to levy taxes for specific purposes; fees for water, sewer, building impact fees for homebuyers or developers for new development; ability to incur debt through general obligations bonds; and the withholding spending in hazard-prone areas.

**Table 14-5
City of Santa Barbara: Fiscal Capability**

Financial Resources	Accessible or Eligible to Use (Yes/No)
A. Community Development Block Grants (CDBG)	Yes
B. Capital improvements project funding	Yes
C. Limited authority to levy taxes for specific purposes	Yes
D. Fees for services	Yes

E. Impact fees for homebuyers or developers for new developments/homes	Yes
F. Incur debt through general obligation bonds	Yes
G. Incur debt through special tax and revenue bonds	Yes
H. Incur debt through private activity bonds	Yes
I. Withhold spending in hazard-prone areas	Yes
J. Local, state and federal grant funds	Yes

14.3.7 Relevant Plans, Policies, and Ordinances

The City of Santa Barbara has a range of guidance documents and plans for each of its departments. These include a general plan, public works and public utilities plans, capital improvement plans, emergency management plans, Local Coastal Program (LCP), Master Environmental Assessment (MEA), Circulation Element, Mission Creek project, Conejo slide area program, airport plans, and slough programs. The City uses building codes, zoning ordinances, subdivision ordinances, and various planning strategies to address how and where development occurs. One of the essential ways the City guides its future is through policies laid out in the General Plan.

The General Plan

The City of Santa Barbara General Plan was first adopted in the 1960's and was last updated in 1995. The General Plan is comprised of the seven state mandated elements, as well as two optional elements, Scenic Highways and Parks & Recreation.

Santa Barbara is a mature city, and not much vacant land remains for residential or nonresidential development. Open land is found more in areas where the topography is steeper. The amount of land devoted to residential use has increased over the past decades, much of the increase being in single family homes. Institutional and public facilities are mainly found near residential areas all over the city and have seen a sizeable increase over the past five decades. Most of the City's government facilities are found in the historical center of the community. There are approximately 265 acres of land dedicated to parks in the city.

Zoning Ordinance

Local land use controls also include the Zoning Ordinance, which shapes the form and intensity of residential development. Consistent with the General Plan, the City's Zoning Ordinance allows a range of zones and dwelling unit densities from one unit per acre (single-family) to 27 units per acre (studio units with variable density). These zones also allow mobile home and emergency shelter units. The minimum dwelling unit size for single-family residences, duplexes, and multifamily units is 400 square feet. Minimum setbacks for residential use range from 5 to 15 feet for the interior yard, and from 10 to 35 feet for the front yard. Maximum building height ranges from 30 feet in the single family zones to 45 feet in the multi-family zones. Appendix C to this Housing Element contains a

series of handouts that provide a description of allowed uses in each zone as well as the development standards and requirements (height limits, setbacks, opens space and yard requirements and quantified parking standards).

Floodplain Management

The City of Santa Barbara does not participate in the National Flood Insurance Program (NFIP). The City purchases property insurance on the commercial market that provides coverage for loss related to flood. However, Flood Insurance Rate Maps (FIRMs) were developed through the NFIP and were last updated in September 2005 and have been made available in GIS format as Digital Flood Insurance Rate Maps. These are shown in Section 5.3.3 which discusses the location and extent of the flooding hazard throughout Santa Barbara County. Also on file with the Santa Barbara Operational Area Office of Emergency Services, County Flood Control, and the Santa Barbara City Public Library are maps that identify floodplains, along with evacuation routes and locations of public shelters.

Repetitive Loss (RL) Properties

Repetitive Loss Properties are defined as property that is insured under the NFIP that has filed two or more claims in excess of \$1,000 each within any consecutive 10-year period since 1978. The City does not maintain information on property damage to specific buildings or locations and does not have any information regarding Repetitive Loss Properties. However, as shown in this plan, several City facilities and other buildings owned by the City are located within various local floodplains.

Safety Element

This Safety Element is the one General Plan element most relevant to hazard mitigation and emergency response (see page 14-35). This Element is concerned with public safety related hazards, such as fire, flood, seacliff retreat, and dam safety, including their identification, mapping evaluation, and how the hazard can be avoided or minimized in the planning process.

Seismic Safety

This Element contains a technical evaluation of primary and secondary seismic and geologic hazards as well as a planning study to deal with the policy implications from the technical study for the City.

Ground Displacement

The only reasonable method of mitigating this hazard is to avoid placing structures across faults that are capable of moving. When other structures, such as roads or pipelines must cross the faults, back-up systems, emergency shut-off valves and rapid repair of damages should be operations/standards already in place.

Ground Shaking

Two types of mitigation can be put in place to lessen the impacts of this hazard including structural protection and land use planning. Structural protection would be actions taken to ensure that buildings are constructed adequately to withstand maximum ground shaking intensities.

Structural Hazards

Given that there are limited funds, it is unreasonable to assume every structure can be earthquake-proofed. Large, multi story wood frame structures, braced structural steel buildings, improperly poured concrete in reinforced masonry buildings, and unreinforced masonry are all at very high risk to collapse. Mitigation efforts would best be concentrated in the Downtown and Lower State Street areas. Mitigation efforts should target to repair as many buildings or worst areas as possible.

Liquefaction

To mitigate the potential for liquefaction, future development may consider incorporating the “vibro’ replacement” technique of construction utilized in the expansion of the sewage treatment facility. Also there is the option to remove the objectionable soil material and replace it with well-compacted artificial fill under the supervision of a qualified soils engineer.

Tsunamis

To mitigate the impacts of tsunamis, the City will review and amend tsunami warning and evacuation procedures, conduct training focused on tsunami warning and evacuation, amend and update the Disaster Contingency Plan, educate the general public, and develop a boat warning system.

Seiche

This hazard should be considered in all development within areas near open bodies of water and the harbor, and take action to mitigate against any potential seiche hazard related to the Lauro Canyon Reservoir.

Landslides

The first step in mitigating against landslides is to identify where they occur or may occur. Mitigating against damage from landslides may include a number of actions listed below:

- Leaving hazardous areas undeveloped
- Removal of unstable slope material
- Well engineered grading prior to construction
- Provisions for surface and subsurface drainage
- Construction of retaining walls or other barriers to buttress old slides
- Reduce the driving force acting on the slope by reducing the slope angle or the weight of the objects placed on the slope
- Planting drought resistant vegetation with deep, strong root systems.

High Groundwater

In areas where near surface groundwater is present or where historic high groundwater levels could return to their previous high levels, soils engineering and foundation studies shall be conducted to determine what engineering measures would best mitigate any potentially adverse impacts.

Expansive Soils/Soil Creep

Some methods to reduce the effects of expansive soils include: compaction and water content of the building site can be designed to allow some open spaces or voids; stabilizing the moisture content by soaking the building site and maintaining that water content during and after construction; increasing the thickness of concrete slab floors; installing drains and water barriers around and under foundations to prevent water from entering the foundation area; extending foundations downwards by piers so that building structures rest on underlying nonexpansive materials; using gravel blankets under concrete slabs.

Erosion

Detailed grading plans with strict vegetation provisions shall be required for all sites of proposed structures in areas of active erosion or high erosion potential. If cuts greater than 4 feet in height are proposed, the grading plan should consider erosion control in areas with a conditional erosion potential. Major construction projects in areas of active erosion or high erosion potential shall be required to implement erosion and sediment control procedures during the construction phase of the project.

Safety

Seacliff Retreat

Seacliff retreat impacts can be mitigated in four effective manners:

- Establish adequate building setbacks for new development from the edge of the seacliff.
- Install systems to collect, control, and dispose of water deposited on the cliff.
- Eliminate hazardous practices that accelerate the rate and severity of seacliff retreat.
- Construction of cliff and shoreline protection devised to diminish the impact of ocean waves.

Fire

The City of Santa Barbara Fire Departments has responsibility for fire suppression within the City. There are multiple ways outlined in this Element to mitigate the damages from fires. Managing the amount of fuel available to fires will decrease their impacts. Fuel management may employ strategies including fire breaks, fuel breaks, or conducting prescribed burns. Having wide roads in the City to allow for emergency personnel to fight fires can also mitigate the impacts. Water is a necessary resources when combating fires; having enough water flow in all areas of the city can reduce the impacts of wildfires. Finally, loss of life can be avoided by having effective warning and evacuation for residents.

Flooding

The City of Santa Barbara is subject to periodic flooding from Sycamore, Mission, Arroyo Burro, and San Roque Creeks. The airport is also located in an area subject to flooding. These creeks can flood during and immediately after rains, as their characteristics do not allow for continuous stream flow of rainwater runoff.

Mission Creek is a good example of a stream that has been surrounded and modified by intense urban development pressure. This stream has been modified by streambank residents to keep the channel out of their property but not for efficiently carrying water downstream. The 100-year floodplain for this creek covers many residential and commercial properties.

The land beside Sycamore Creek has been developed, exposing the properties to flooding risk. Homeowners are attempting to create their own flood control structures and can impede the flow of water. Once this creek crosses Carpinteria Street, the floodplain no longer threatens just adjacent lands, but widens putting more properties at risk.

Arroyo Burro Creek above State Street are in a narrow channel, but below it, the flooding potential widens. Further downstream the stream returns to a defined channel until it reaches the ocean.

San Roque Creek floodwaters would merge with Arroyo Burro Creek.

In the Airport area, a 100-year flood would allow the nearby creeks to inundate the airport along with the Goleta Slough.

To mitigate against the damages from these floods, many methods are recommended:

- Establish and enforce setbacks or buffers
- Conduct ‘precise-alignment’ studies to determine the most efficient channel, and allow for appropriate setback determinations.
- Santa Barbara County Flood Control District should approve all construction prescribed for flood containment.
- Only allow light intensity use in the floodway that will not impede the efficiency of the channel.
- Develop a program to remove or anchor floatable objects within the floodplain.

City of Santa Barbara Redevelopment Agency – Implementation Plan

The plan specifies land uses and controls to encourage environmentally compatible land uses, to coordinate the standards, controls and regulations with existing City Controls, and to create an economically viable central core. Within the plan there is a list of capital improvement projects that the City plans to implement to revitalize the project area. A number of these projects are designed to mitigate against hazards that can impact the City. Some of these include:

- Mission Creek Flood Control Project Enhancement: Acquire two residential properties adjacent to the creek and use as a park.

- Downtown Bridge Replacement: Replacement of several structurally deficient, downtown bridges
- Police Department Building Renovations: Seismic and structural upgrades of the police station headquarters
- Opportunity Acquisitions and Dispositions: The Agency will appropriate funds, as necessary, to acquire and dispose of real property related to revitalization efforts

Local Coastal Plan

The City of Santa Barbara Local Coastal Program is comprised of the City Local Coastal Plan and the Airport Local Coastal Plan. Both of these documents derive their authority from the State Coastal Act, which mandates certification by the California Coastal Commission. These documents protect the City's Coastal resources through guided development afforded by the goals and polices found within each document. Protecting native habitats and public safety are two key objectives which help to mitigate natural disasters along the City's coastline.

14.4 HAZARD ASSESSMENT

The Hazard Assessment presented here reflects the City's 2011 review and modifications to the updated risk assessment presented in Sections 5 and 6 of the County Plan. Applicable hazard information from the City's 2004 plan was incorporated during the development of this section.

The City of Santa Barbara's Local Planning Team reviewed the hazard ranking worksheet developed by the County MAC. The City's Local Planning Team validated the countywide hazard rankings as being similarly relevant to the City with the exception of Agriculture. The City's LPT recognized agricultural pests and diseases are not a concern within the City's boundaries. For this reason, the agricultural hazard is not considered within the City's analysis.

Table 14-6 provides the hazard ranking for the City of Santa Barbara while Table 14-7 provides the ranking worksheet for how the Local Planning Team calculated each specific hazard as impacting the City (which for the City of Santa Barbara is the same as the County's ranking worksheet).

Table 14-6
City of Santa Barbara - Hazard Ranking and Planning Consideration 2011

Hazard Type and Ranking	Planning Consideration Based on Hazard Level
Flooding (including coastal surge)	Significant
Wildfire	Significant
Earthquake	Significant
Landslide/Coastal Erosion	Moderate

Dam Failure	Limited
Tsunami	Limited

Table 14-7

HAZARD RANKING WORKSHEET - Santa Barbara County Mitigation Advisory Committee

CITY OF SANTA BARBARA

April 11, 2011

Hazard Type	Probability	Impact			Total Score	Hazard Planning Consideration
		Affected Area	Primary Impact	Secondary Impacts		
Importance Factor:	2	0.8	0.7	0.5		
DAM FAILURE	4	1.6	2.8	1.5	24	Limited
EARTHQUAKE	6	3.2	2.1	1.5	41	Significant
WILDFIRE	8	3.2	2.1	1.5	54	Significant
FLOODING (include coastal surge)	8	3.2	2.1	2	58	Significant
TSUNAMI	4	2.4	2.1	1.5	24	Limited
LANDSLIDE/COASTAL EROSION	8	1.6	1.4	1.5	36	Moderate
Orange cells reflect revisions/changes to the 2004 ranking						
2011 Revisions: Coastal Surge was separated from Tsunami and included in the Flooding hazard. Agriculture (pests and disease) has been added to the list of identified hazards countywide. Santa Barbara City removed this hazard from consideration within the City limits.						
The probability for Tsunami was reduced since it no longer includes consideration of the coastal storm surges. Recent Wildfires have increased the affected area for flooding and landslides. Similarly, the recent wildfires have increased the secondary impacts from wildfire and landslide. The secondary impacts for dam failure were increased because the 2004 ranking seemed unrealistic. Climate Change exacerbations and infrastructure failure, while not ranked, are important to the MAC and will be considered throughout the risk assessment.						

The probability of each hazard is determined by assigning a level, from 1 to 4, based on the likelihood of occurrence from historical data. This ranking is multiplied by an importance factor of 2. The total impact value includes a summed ranking for affected area, primary impact and secondary impact. Each ranking is multiplied by an importance factor as indicated. The probability score is multiplied by the sum of the three impact scores to determine the total score for the hazard. The hazard planning consideration is determined by the total score as indicated by the Hazard Level scale below.

Probability Importance
Based on estimated likelihood of occurrence from historical data

Level	Probability	Score
1	Unlikely	2
2	Somewhat Likely	4
3	Likely	6
4	Highly Likely	8

Affected Area Importance
Based on size of geographical area of community affected by hazard

Level	Affected Area	Score
1	Isolated	0.8
2	Small	1.6
3	Medium	2.4
4	Large	3.2

Primary Impact Importance
Based on percentage of damage to typical facility in community

Level	Impact	Score
1	Negligible - less than 10% damage	0.7
2	Limited - between 10% and 25% damage	1.4
3	Critical - between 25% and 50% damage	2.1
4	Catastrophic - more than 50% damage	2.8

Secondary Impacts Importance
Based on estimated secondary impacts to community at large

Level	Impact	Score
1	Negligible - no loss of function, downtime, and/or evacuations	0.5
2	Limited - minimal loss of function, downtime, and/or evacuations	1
3	Moderate - some loss of function, downtime, and/or evacuations	1.5
4	High - major loss of function, downtime, and/or evacuations	2

Total Score = Probability x Impact, where:

Probability = (Probability Score x Importance)

Impact = (Affected Area + Primary Impact + Secondary Impacts), where:

Affected Area = Affected Area Score x Importance

Primary Impact = Primary Impact Score x Importance

Secondary Impacts = Secondary Impacts Score x Importance

Hazard Level		Total Score	(Range)	Distribution	Hazard Level
		0.0	12.0	2	None
		12.1	32.0	1	Limited
		32.1	39.6	3	Moderate
		39.7	64.0	0	Significant

Hazard Level			
Total Score	(Range)	Hazard Level	Distribution
0.0	12.0	None	0
12.1	32.0	Limited	0
32.1	39.6	Moderate	0
39.7	64.0	Significant	0

14.4.1 Flood and Coastal Storm Surge

The City of Santa Barbara ranked the flooding and coastal storm surge hazard as being a significant risk to the City. For the complete flood and coastal storm surge profile, please refer to Section 5.3. The City of Santa Barbara does not have additional city specific information on the risk to flooding and coastal storm surge.

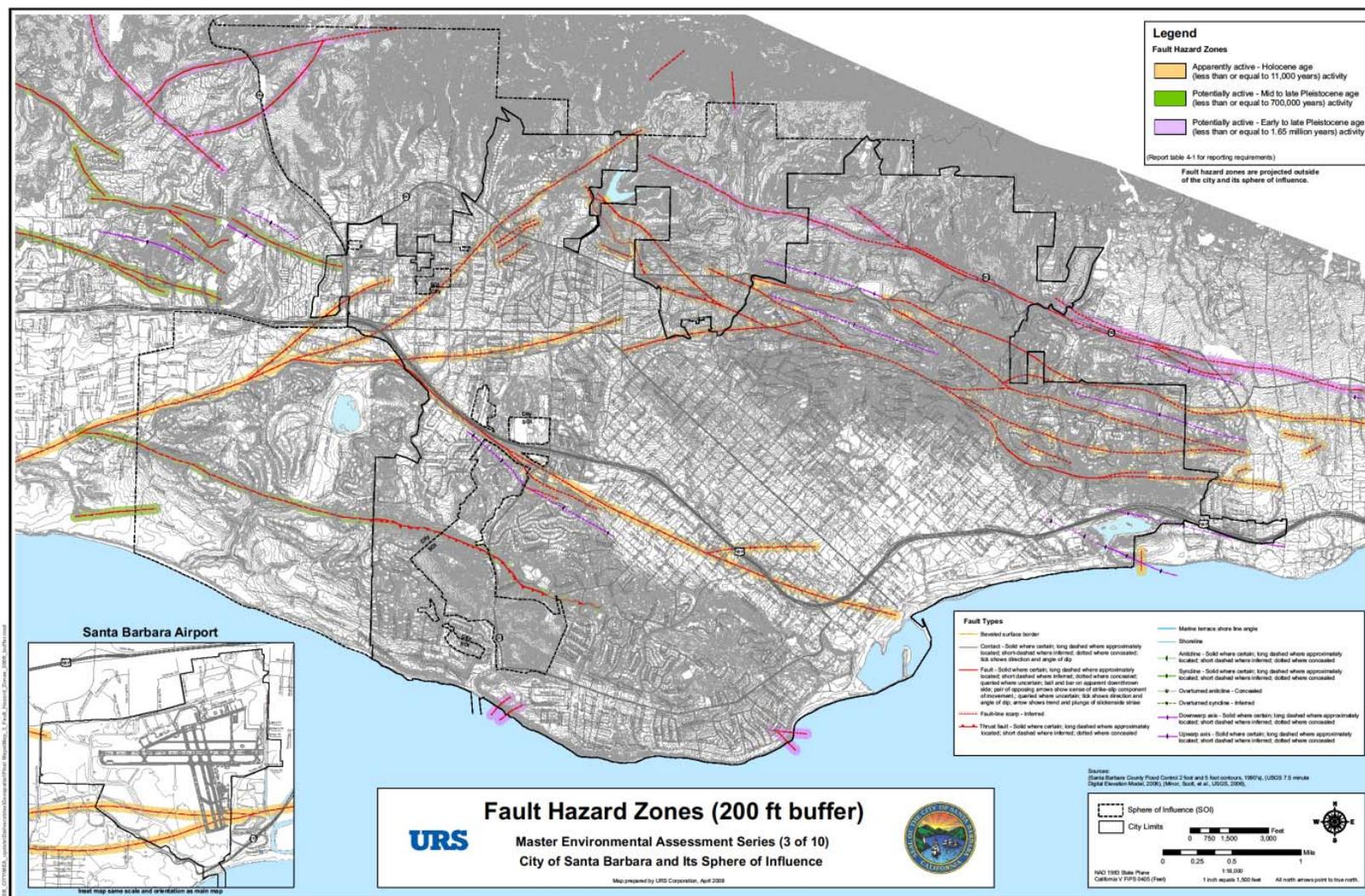
14.4.2 Wildfire

The City of Santa Barbara ranked the wildfire hazard as being a significant risk to the City. For a complete listing of the wildfire profile, please refer to Section 5.4. The City of Santa Barbara does not have additional city specific information on the risk to wildfire.

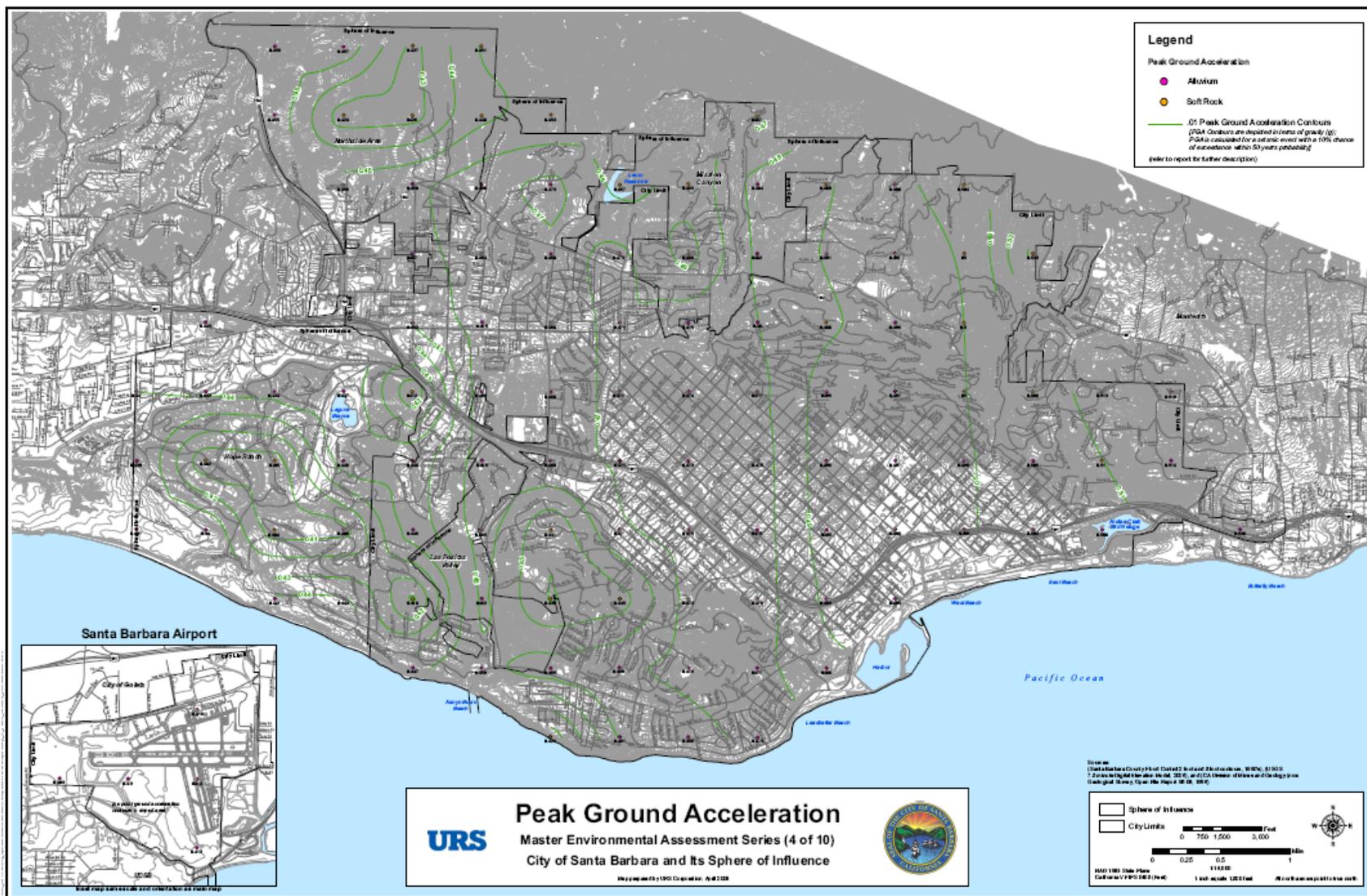
14.4.3 Earthquake

The City of Santa Barbara ranked the earthquake hazard as being a significant risk to the City. For a complete listing of the earthquake profile, please refer to Section 5.6. The following figures depict earthquake hazards and the associated risks with earthquake prone areas.

The following figure shows the fault hazard zones in the City of Santa Barbara.



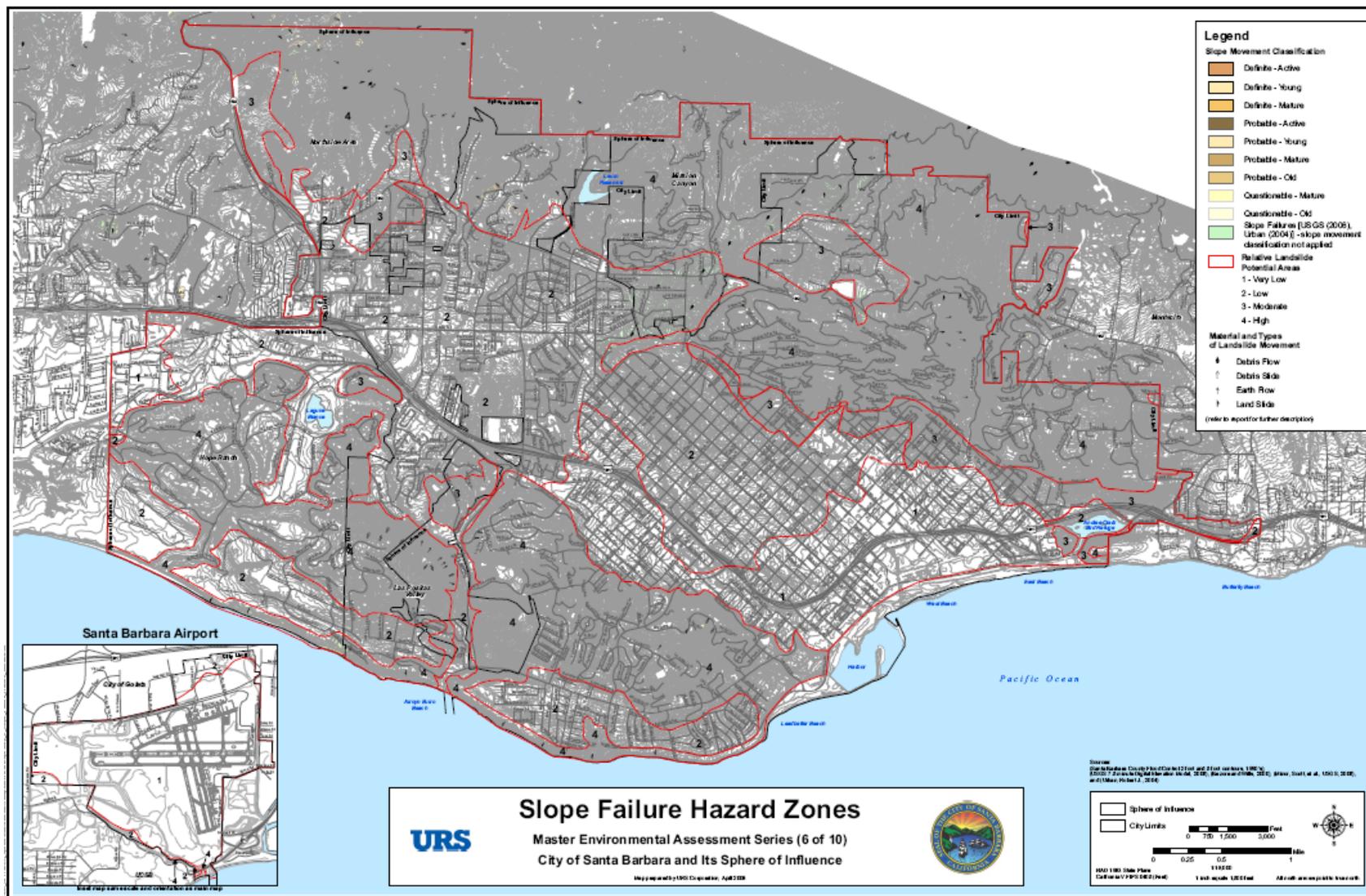
The following figure shows the peak ground acceleration in the City of Santa Barbara.



14.4.4 Landslide/Coastal Erosion

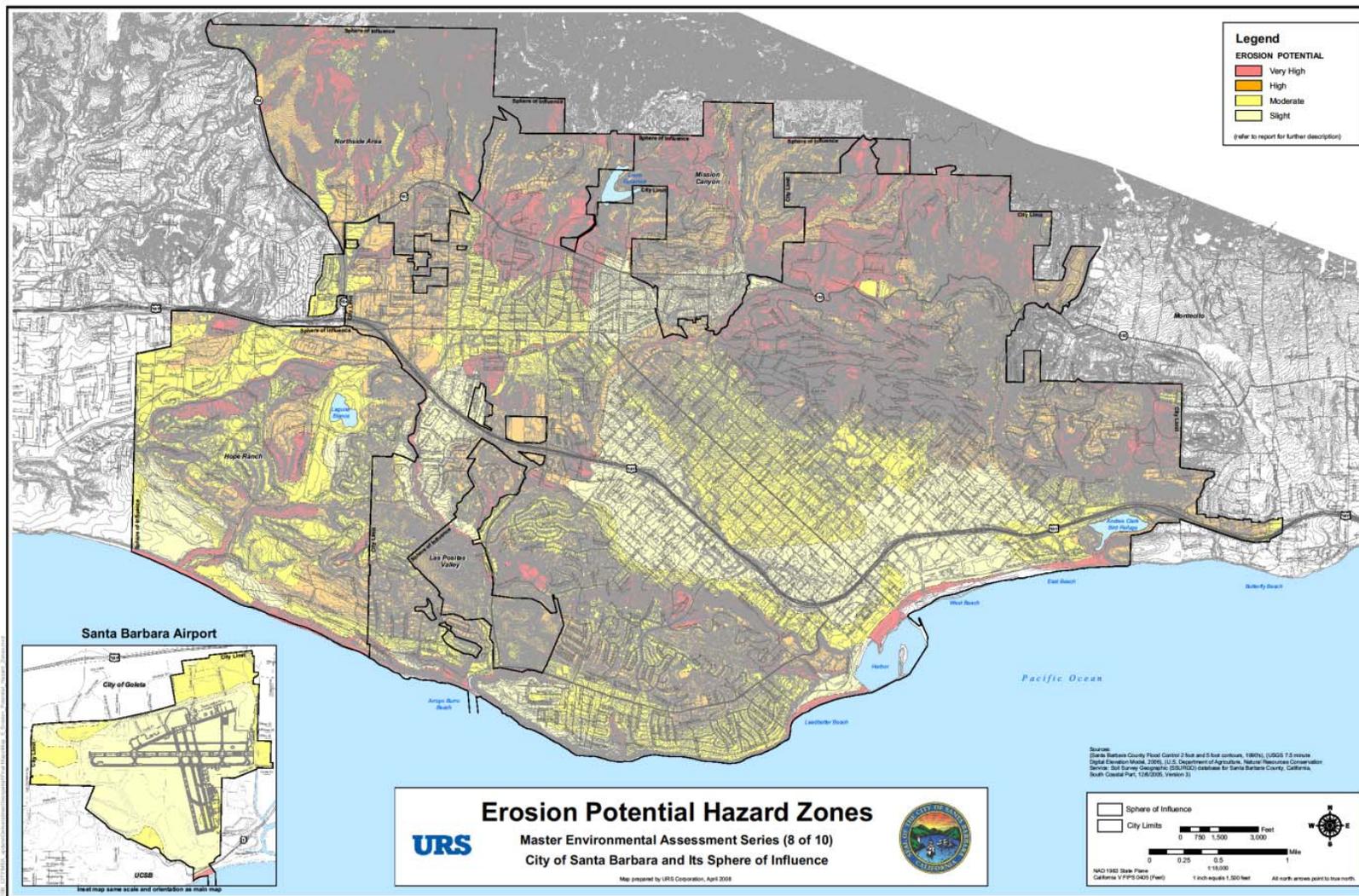
The City of Santa Barbara ranked the landslide and coastal erosion hazard as being a moderate risk to the City. For a complete listing of the landslide and coastal erosion profile, please refer to Section 5.7. The City of Santa Barbara has provided maps of hazardous landslide and coastal erosion areas, including slope failure hazard areas and areas with potential for erosion hazards.

The following figure shows the slope failure hazard zones in the City of Santa Barbara.



Slope Failure Hazard Zones - Map 6

The following figure shows the erosion hazard zones in the City of Santa Barbara.



14.4.5 Dam Failure

The City of Santa Barbara ranked the dam failure hazard as being a limited risk to the City. For a complete listing of the dam failure profile, please refer to Section 5.8. The City of Santa Barbara has worked with Bureau of Reclamation in development of a Lauro Dam Table Top Exercise. However, the County Flood Control is the liaison with the Bureau of Reclamation for both Gibraltar and Lauro Dam. The City however will continue to work with the Cachuma Operations Management Board (COMB) in all response activities.

14.4.6 Tsunami

The City of Santa Barbara ranked the tsunami hazard as being a limited risk to the City. For a complete listing of the tsunami profile, please refer to Section 5.9. The City of Santa Barbara does not have any additional city specific information on the risk to tsunami.

14.5 VULNERABILITY ASSESSMENT

The vulnerability assessment has been improved from the previous plan in that this update considers a specific list of critical facilities identified within the City of Santa Barbara. The previous plan (2004) relied on the dataset used in FEMA's HAZUS software as a representation of assets.

The City of Santa Barbara identified 100 critical facilities to be included in the Vulnerability Assessment. These facilities primarily included utilities, government, and public safety structures. Of the data that was available, it was shown that these buildings are worth approximately \$223 million in structure value and \$30 million in content value for a general citywide exposure to critical facilities of \$253 million. Replacement values for approximately 20% of the structures were unavailable at the time of this plan update. This vulnerability assessment may be improved in future updates as these values become available.

City Staff determined that a "Moderate" hazard level in Table 14-8, Hazard Ranking and Planning Consideration 2011, would potentially result in an impact to critical facilities. The results of the critical facilities shown to be impacted from each hazard are shown in the table below:

Table 14-8

Hazard Type	Specific Risk	Count or (Average)	% of Critical Facilities Impacted	Exposure*
Flood				
	FEMA Flood Zone	19	19%	\$92,083,141
	Flood Overlay Zone	19	19%	\$92,083,141
Fire				
	Fire Severity Zone	20	20%	\$30,198,178
	WUI	76	76%	\$228,439,240
	Fire Threat	98	98%	\$252,573,508
Dam Inundation		2	2%	\$561,160
Tsunami Inundation		36	36%	\$186,258,811
Landslide Incidence		0	0%	\$0
Earthquake				
	Groundwater/Liquefaction Severity	66	66%	\$200,118,998
	Peak Ground Acceleration	(2.56)	N/A	N/A

*- Exposure is based on a combination of building structure value and contents value. In all cases some of the impacted structures had incomplete values for structure, contents, or both.

It is worth noting that a majority of the Santa Barbara City critical facilities evaluated were at least moderately impacted by the following threats:

- Wildland Urban Interface
- Fire Threat
- Groundwater/Liquefaction Severity

A further description of the threats and methodologies used in the table above is provided in Section 6 of the countywide mitigation plan. As the City continues to assess its vulnerability the collection of better data will help to improve the risk assessment process in order to direct planning and mitigation decisions.

14.5.1 Critical Facilities and Flood Vulnerability

Table 14-9 presents the 100 identified critical facilities and available values. The Map ID number for each critical facility corresponds to those found on the following maps showing the location of the critical facilities in relation to the County's profiled hazards. Using a GIS and the data shown in these maps, it was determined which critical facilities are exposed to which hazards by whether or not they fall within the mapped hazard area. This data is available to Santa Barbara City to be used digitally, as appropriate, for further computations in Excel or additional GIS analyses/mapping.

Table 14-9 Santa Barbara City Critical Facilities

EXHIBIT

Map ID	Critical Facility	Type	Address	Real Property	Personal Property	Total Value
1	Public Works Yard		635 LAGUNA STREET	\$28,859	\$41,483	\$70,342
2	HEADHOUSE / OPERATIONS	CATER WATER TREATMENT PLANT	1150 SAN ROQUE RD.	\$5,383,441	\$2,226,907	\$7,610,348
3	OPERATIONS ANNEX	CATER WATER TREATMENT PLANT	1150 SAN ROQUE RD.	\$1,728,609	\$805,333	\$2,533,942
4	SEDIMENTATION / FLOCCULATION BASINS	CATER WATER TREATMENT PLANT	1150 SAN ROQUE RD.	\$8,355,812	\$1,073,778	\$9,429,590
5	EQUALIZATION BASIN	CATER WATER TREATMENT PLANT	1150 SAN ROQUE RD.	\$1,227,260	\$80,533	\$1,307,793
6	SOLIDS RECOVERY BASIN	CATER WATER TREATMENT PLANT	1150 SAN ROQUE RD.	\$1,566,715	\$134,222	\$1,700,937
7	SCC BOOSTER STATION	CATER WATER TREATMENT PLANT	1150 SAN ROQUE RD.	\$123,770	\$805,333	\$929,103
8	RESERVOIR - 5.0 MG	CATER WATER TREATMENT PLANT	1150 SAN ROQUE RD.	\$2,558,968	\$0	\$2,558,968
9	UNDERGROUND PROCESS PIPE T/O PLANT	CATER WATER TREATMENT PLANT	1150 SAN ROQUE RD.	\$0	\$0	\$0
10	ORTEGA WELL TRMT PLANT	ORTEGA WELL TRMT PLANT	220 E. ORTEGA STREET	\$120,194	\$1,170,976	\$1,291,170
11	ORTEGA WELL TRMT PLANT	ORTEGA WELL TRMT PLANT	631 GARDEN ST	\$65,066	\$0	\$65,066
12	ORTEGA WELL TRMT PLANT	ORTEGA WELL TRMT PLANT	631 GARDEN ST.	\$197,512	\$0	\$197,512
13	PUBLIC WORKS	PUBLIC WORKS	220 E. ORTEGA STREET	\$56,446	\$0	\$56,446
14	ORTEGA WELL TRMT PLANT	ORTEGA WELL TRMT PLANT	220 E. ORTEGA STREET	\$0	\$821,905	\$821,905
15	SHEFFIELD TRMT PLANT	SHEFFIELD TRMT PLANT	605 MISSION RIDGE ROAD	\$1,655,085	\$512,674	\$2,167,759
16	SHEFFIELD TRMT PLANT	SHEFFIELD TRMT PLANT	605 MISSION RIDGE ROAD	\$0	\$145,580	\$145,580
17	PUBLIC WORKS	PUBLIC WORKS	700 ANACAPA STREET	\$211,986	\$0	\$211,986
18	CLORINATION ROOM	PUBLIC WORKS	3111 STATE STREET	\$18,846	\$24,958	\$43,804
19	PUBLIC WORKS	PUBLIC WORKS	2491 FOOTHILL ROAD	\$0	\$123,448	\$123,448
20	TUNNELL RESERVOIR	PUBLIC WORKS	1500 TUNNEL ROAD	\$0	\$181,377	\$181,377
21	EL CIELITO	PUBLIC WORKS	2410 STANWOOD DRIVE	\$0	\$320,777	\$320,777
22	HOPE RESERVOIR	PUBLIC WORKS	428 CENTENELLA LANE	\$0	\$138,435	\$138,435
23	CALLE LAS CALERAS	PUBLIC WORKS	3400 CALLE LAS CALERAS	\$0	\$72,676	\$72,676

Map ID	Critical Facility	Type	Address	Real Property	Personal Property	EXHIBIT Total Value
24	ESCONDIDO PUMP STATION	PUBLIC WORKS	2300 SKYLINE WAY	\$0	\$134,440	\$134,440
25	VIC TRACE	PUBLIC WORKS	1631 LA CORONILLA	\$0	\$192,852	\$192,852
26	SKOFIELD PUMP STATION	PUBLIC WORKS	2117 MOUNT CALVARY	\$0	\$155,235	\$155,235
27	PUBLIC WORKS	PUBLIC WORKS	605 MISSION RIDGE ROAD	\$132,101	\$264,487	\$396,588
28	PUBLIC WORKS	PUBLIC WORKS	55 CRESTVIEW LANE	\$8,088	\$50,712	\$58,800
29	BOTHIN PUMP STATION	PUBLIC WORKS	55 CRESTVIEW LANE	\$80,075	\$134,306	\$214,381
30	MAIN DESALINATION PLANT	DESALINATION PLANT	525 E. YANANOLI ST.	\$18,800,578	\$0	\$18,800,578
31	SCADA / MCC BUILDING	DESALINATION PLANT	525 E. YANANOLI ST.	\$70,189	\$80,533	\$150,722
32	PUBLIC WORKS YARD	PUBLIC WORKS YARD	635 LAGUNA ST	\$0	\$185,413	\$185,413
33	ADMINISTRATION BUILDING	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$819,392	\$365,084	\$1,184,476
34	LAB BUILDING	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$1,140,569	\$536,889	\$1,677,458
35	MAINTENANCE SHOP	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$822,108	\$268,444	\$1,090,552
36	FLOTATION & GRAVITY THICKENER TANKS	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$559,735	\$102,009	\$661,744
37	DIGESTERS #1, #2 & CONTROL BUILDING	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$4,418,135	\$322,133	\$4,740,268
38	COGENERATION PLANT	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$52,224	\$375,822	\$428,046
39	SLUDGE HANDLING BUILDING	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$2,945,424	\$2,684,443	\$5,629,867
40	SLUDGE HOLDING TANK & CONTROL BUILDING	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$1,472,712	\$214,755	\$1,687,467
41	ELECTRICAL SUBSTATION A	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$198,450	\$161,066	\$359,516
42	INFLUENT PUMP STATION	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$1,925,911	\$1,342,222	\$3,268,133
43	PRIMARY / SECONDARY SEDIMENTATION & AERATION TANKS	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$26,785,600	\$3,221,332	\$30,006,932
44	RECLAIM FILTERS	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$920,915	\$107,378	\$1,028,293

Map ID	Critical Facility	Type	Address	Real Property	Personal Property	EXHIBIT Total Value
45	CHLORINE BUILDING & SODIUM HYPOCHLORITE STATION	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$344,678	\$375,822	\$720,500
46	CHLORINE CONTACT TANK & BISULFITE FACILITY	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$1,227,260	\$322,133	\$1,549,393
47	RECLAIM CHLORINE CONTACT & DISTRIBUTION	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$1,441,795	\$536,889	\$1,978,684
48	RECLAIM WATER STORAGE TANK	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$511,794	\$26,844	\$538,638
49	OUTFALL MIXING BOX	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$34,468	\$80,533	\$115,001
50	OUTFALL STRUCTURE	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$2,088,953	\$0	\$2,088,953
51	UNDERGROUND PROCESS PIPE T/O PLANT	EL ESTERO WASTEWATER TREATMENT PLANT	520 E. YANANOLI ST.	\$0	\$0	\$0
52	Skofield park	PUBLIC WORKS	1819 Las Canoas Road	\$0	\$75,732	\$75,732
53	STEARNS WHARF	STEARNS WHARF	219 Stearns Wharf	\$0	\$65,797	\$65,797
54	AIRPORT	AIRPORT	40 HARTLEY PLACE	\$3,224,298	\$0	\$3,224,298
55	AIRPORT	AIRPORT	500 FOWLER	\$23,030	\$64,577	\$87,607
56	AIRPORT TERMINAL	AIRPORT TERMINAL	500 FOWLER ROAD	\$52,746,000	\$0	\$52,746,000
57	NEW AIRLINE TERMINAL	NEW AIRLINE TERMINAL	500 Fowler Road	\$33,000,000	\$0	\$33,000,000
58	PUBLIC WORKS YARD	PUBLIC WORKS YARD	635 LAGUNA STREET	\$263,169	\$39,332	\$302,501
59	PUBLIC WORKS YARD	PUBLIC WORKS YARD	635 LAGUNA STREET	\$425,755	\$21,293	\$447,048
60	STEARNS WHARF	STEARNS WHARF	223 STEARNS WHARF	\$17,565	\$140,644	\$158,209
61	HARBOR	HARBOR	132 HARBOR WAY	\$346,873	\$25,098	\$371,971
62	HARBOR	HARBOR	117 HARBOR WAY	\$260,156	\$66,325	\$326,481
63	HARBOR	HARBOR	301 W. CABRILLO	\$143,289	\$0	\$143,289
64	HARBOR	HARBOR	120 HARBOR WAY	\$177,232	\$0	\$177,232
65	Harbor	Harbor	122 Harbor Way	\$177,232	\$0	\$177,232
66	HARBOR	HARBOR	111 HARBOR WAY	\$398,028	\$0	\$398,028
67	Colin Campbell Cooper - Art Collection	CITY HALL	735 ANACAPA STREET	\$0	\$4,185,000	\$4,185,000
68	FINANCE	FINANCE	635 LAGUNA STREET	\$367,922	\$12,864	\$380,786
69	CITY HALL	CITY HALL	735 ANACAPA STREET	\$302,240	\$128,643	\$430,883

Map ID	Critical Facility	Type	Address	Real Property	Personal Property	EXHIBIT Total Value
70	COMM DEVEL	COMM DEVEL	630 GARDEN STREET	\$2,339,719	\$536,281	\$2,876,000
71	FIRE STANWOOD	FIRE STANWOOD	2411 STANWOOD DRIVE	\$46,062	\$0	\$46,062
72	FIRE	FIRE	121 W. CARRILLO ST	\$2,270,158	\$257,043	\$2,527,201
73	FIRE	FIRE	121 W. CARRILLO STREET	\$0	\$103,695	\$103,695
74	FIRE	FIRE	819 CACIQUE	\$164,235	\$23,258	\$187,493
75	FIRE	FIRE	415 E. SOLA STREET	\$398,103	\$33,492	\$431,595
76	FIRE	FIRE	19 N. ONTARE	\$301,897	\$0	\$301,897
77	FIRE	FIRE	2505 MODOC	\$222,999	\$74,362	\$297,361
78	FIRE	FIRE	1801 CLIFF DRIVE	\$0	\$30,400	\$30,400
79	FIRE	FIRE	2411 STANWOOD	\$210,527	\$22,231	\$232,758
80	FIRE	FIRE	30 S. OLIVE STREET	\$0	\$2,088	\$2,088
81	Police Department Headquarters	POLICE	215 E. FIGUEROA ST.	\$5,982,173	\$1,789,158	\$7,771,331
82	PUBLIC WORKS YARD	PUBLIC WORKS YARD	635 LAGUNA STREET	\$0	\$15,633	\$15,633
83	PUBLIC WORKS YARD	PUBLIC WORKS YARD	635 LAGUNA STREET	\$0	\$12,567	\$12,567
84	PUBLIC WORKS YARD	PUBLIC WORKS YARD	630 GARDEN STREET	\$1,411,366	\$328,688	\$1,740,054
85	ADMIN WELL CORP. @ PARKS DEPARTMENT	PUBLIC WORKS	402 EAST ORTEGA STREET	\$8,229	\$59,280	\$67,509
86	RECREATION	RECREATION	1232 DE LA VINA STREET	\$478,013	\$24,680	\$502,693
87	RECREATION	RECREATION	100 E. CARRILLO STREET	\$839,248	\$23,560	\$862,808
88	LOWER WESTSIDE COMM. CTR	LOWER WESTSIDE COMM. CTR	629 CORONEL PLACE	\$62,652	\$0	\$62,652
89	FRANKLIN COMM CENTER	FRANKLIN COMM CENTER	1136 E. MONTECITO STREET	\$1,157,885	\$26,759	\$1,184,644
90	RECREATION	RECREATION	100 E. CARRILLO ST.	\$3,408,716	\$76,014	\$3,484,730
91	RECREATION	RECREATION	620 LAGUNA ST.	\$576,799	\$33,842	\$610,641
92	Airport	Airport	Firestone Rd and Hartley Pl	\$10,527	\$72,081	\$82,608
93	Public Works	Public Works	State St and Las Positas Rd	\$140,039	\$377,317	\$517,356
94	Marina 1	SB Waterfront Harbor	Shoreline Dr and Harbor Wy	\$11,475,428	\$0	\$11,475,428
95	Marina 2	SB Waterfront Harbor	Shoreline Dr and Harbor Wy	\$2,157,857	\$0	\$2,157,857
96	Marina 3	SB Waterfront Harbor	Shoreline Dr and Harbor Wy	\$2,280,296	\$0	\$2,280,296
97	Marina 4	SB Waterfront Harbor	Shoreline Dr and Harbor Wy	\$2,137,768	\$0	\$2,137,768

Map ID	Critical Facility	Type	Address	Real Property	Personal Property	EXHIBIT Total Value
98	Navy Pier	SB Waterfront Harbor	Shoreline Dr and Harbor Wy	\$1,873,745	\$0	\$1,873,745
99	Desalination Chemical Site	Desalination Plant	Adjacent to El Estero WWTP	\$744,190	\$161,066	\$905,256
100	Ortega Well	Public Works	Ortega St and Salsipuedes St	\$295,400	\$0	\$295,400

14.5.2 Flood Vulnerability

EXHIBIT

Map ID	Critical Facility	Real Property	Personal Property	Total Value	FEMA Flood Zone	Flood Overlay Zone
1	Public Works Yard	\$28,859	\$41,483	\$70,342	100 Year	Within Flood Overlay Zone
2	HEADHOUSE / OPERATIONS	\$5,383,441	\$2,226,907	\$7,610,348	Outside Floodplain	Outside Flood Overlay Zone
3	OPERATIONS ANNEX	\$1,728,609	\$805,333	\$2,533,942	Outside Floodplain	Outside Flood Overlay Zone
4	SEDIMENTATION / FLOCCULATION BASINS	\$8,355,812	\$1,073,778	\$9,429,590	Outside Floodplain	Outside Flood Overlay Zone
5	EQUALIZATION BASIN	\$1,227,260	\$80,533	\$1,307,793	Outside Floodplain	Outside Flood Overlay Zone
6	SOLIDS RECOVERY BASIN	\$1,566,715	\$134,222	\$1,700,937	Outside Floodplain	Outside Flood Overlay Zone
7	SCC BOOSTER STATION	\$123,770	\$805,333	\$929,103	Outside Floodplain	Outside Flood Overlay Zone
8	RESERVOIR - 5.0 MG	\$2,558,968	\$0	\$2,558,968	Outside Floodplain	Outside Flood Overlay Zone
9	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Outside Floodplain	Outside Flood Overlay Zone
10	ORTEGA WELL TRMT PLANT	\$120,194	\$1,170,976	\$1,291,170	Outside Floodplain	Outside Flood Overlay Zone
11	ORTEGA WELL TRMT PLANT	\$65,066	\$0	\$65,066	Outside Floodplain	Outside Flood Overlay Zone
12	ORTEGA WELL TRMT PLANT	\$197,512	\$0	\$197,512	Outside Floodplain	Outside Flood Overlay Zone
13	PUBLIC WORKS	\$56,446	\$0	\$56,446	Outside Floodplain	Outside Flood Overlay Zone
14	ORTEGA WELL TRMT PLANT	\$0	\$821,905	\$821,905	Outside Floodplain	Outside Flood Overlay Zone
15	SHEFFIELD TRMT PLANT	\$1,655,085	\$512,674	\$2,167,759	Outside Floodplain	Outside Flood Overlay Zone
16	SHEFFIELD TRMT PLANT	\$0	\$145,580	\$145,580	Outside Floodplain	Outside Flood Overlay Zone
17	PUBLIC WORKS	\$211,986	\$0	\$211,986	Outside Floodplain	Outside Flood Overlay Zone
18	CLORINATION ROOM	\$18,846	\$24,958	\$43,804	Outside Floodplain	Outside Flood Overlay Zone
19	PUBLIC WORKS	\$0	\$123,448	\$123,448	Outside Floodplain	Outside Flood Overlay Zone
20	TUNNELL RESERVOIR	\$0	\$181,377	\$181,377	Outside Floodplain	Outside Flood Overlay Zone
21	EL CIELITO	\$0	\$320,777	\$320,777	Outside Floodplain	Outside Flood Overlay Zone
22	HOPE RESERVOIR	\$0	\$138,435	\$138,435	Outside Floodplain	Outside Flood Overlay Zone
23	CALLE LAS CALERAS	\$0	\$72,676	\$72,676	Outside Floodplain	Outside Flood Overlay Zone
24	ESCONDIDO PUMP STATION	\$0	\$134,440	\$134,440	Outside Floodplain	Outside Flood Overlay Zone
25	VIC TRACE	\$0	\$192,852	\$192,852	Outside Floodplain	Outside Flood Overlay Zone
26	SKOFIELD PUMP STATION	\$0	\$155,235	\$155,235	Outside Floodplain	Outside Flood Overlay Zone

Map ID	Critical Facility	Real Property	Personal Property	Total Value	FEMA Flood Zone	EXHIBIT
						Flood Overlay Zone
27	PUBLIC WORKS	\$132,101	\$264,487	\$396,588	Outside Floodplain	Outside Flood Overlay Zone
28	PUBLIC WORKS	\$8,088	\$50,712	\$58,800	Outside Floodplain	Outside Flood Overlay Zone
29	BOTHIN PUMP STATION	\$80,075	\$134,306	\$214,381	Outside Floodplain	Outside Flood Overlay Zone
30	MAIN DESALINATION PLANT	\$18,800,578	\$0	\$18,800,578	Outside Floodplain	Outside Flood Overlay Zone
31	SCADA / MCC BUILDING	\$70,189	\$80,533	\$150,722	Outside Floodplain	Outside Flood Overlay Zone
32	PUBLIC WORKS YARD	\$0	\$185,413	\$185,413	100 Year	Within Flood Overlay Zone
33	ADMINISTRATION BUILDING	\$819,392	\$365,084	\$1,184,476	Outside Floodplain	Outside Flood Overlay Zone
34	LAB BUILDING	\$1,140,569	\$536,889	\$1,677,458	Outside Floodplain	Outside Flood Overlay Zone
35	MAINTENANCE SHOP	\$822,108	\$268,444	\$1,090,552	Outside Floodplain	Outside Flood Overlay Zone
36	FLOTATION & GRAVITY THICKENER TANKS	\$559,735	\$102,009	\$661,744	Outside Floodplain	Outside Flood Overlay Zone
37	DIGESTERS #1, #2 & CONTROL BUILDING	\$4,418,135	\$322,133	\$4,740,268	Outside Floodplain	Outside Flood Overlay Zone
38	COGENERATION PLANT	\$52,224	\$375,822	\$428,046	Outside Floodplain	Outside Flood Overlay Zone
39	SLUDGE HANDLING BUILDING	\$2,945,424	\$2,684,443	\$5,629,867	Outside Floodplain	Outside Flood Overlay Zone
40	SLUDGE HOLDING TANK & CONTROL BUILDING	\$1,472,712	\$214,755	\$1,687,467	Outside Floodplain	Outside Flood Overlay Zone
41	ELECTRICAL SUBSTATION A	\$198,450	\$161,066	\$359,516	Outside Floodplain	Outside Flood Overlay Zone
42	INFLUENT PUMP STATION	\$1,925,911	\$1,342,222	\$3,268,133	Outside Floodplain	Outside Flood Overlay Zone
43	PRIMARY / SECONDARY SEDIMENTATION & AERATION TANKS	\$26,785,600	\$3,221,332	\$30,006,932	Outside Floodplain	Outside Flood Overlay Zone
44	RECLAIM FILTERS	\$920,915	\$107,378	\$1,028,293	Outside Floodplain	Outside Flood Overlay Zone
45	CHLORINE BUILDING & SODIUM HYPOCHLORITE STATION	\$344,678	\$375,822	\$720,500	Outside Floodplain	Outside Flood Overlay Zone
46	CHLORINE CONTACT TANK & BISULFITE FACILITY	\$1,227,260	\$322,133	\$1,549,393	Outside Floodplain	Outside Flood Overlay Zone
47	RECLAIM CHLORINE CONTACT & DISTRIBUTION	\$1,441,795	\$536,889	\$1,978,684	Outside Floodplain	Outside Flood Overlay Zone
48	RECLAIM WATER STORAGE TANK	\$511,794	\$26,844	\$538,638	Outside Floodplain	Outside Flood Overlay Zone
49	OUTFALL MIXING BOX	\$34,468	\$80,533	\$115,001	Outside Floodplain	Outside Flood Overlay Zone
50	OUTFALL STRUCTURE	\$2,088,953	\$0	\$2,088,953	Outside Floodplain	Outside Flood Overlay Zone
51	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Outside Floodplain	Outside Flood Overlay Zone

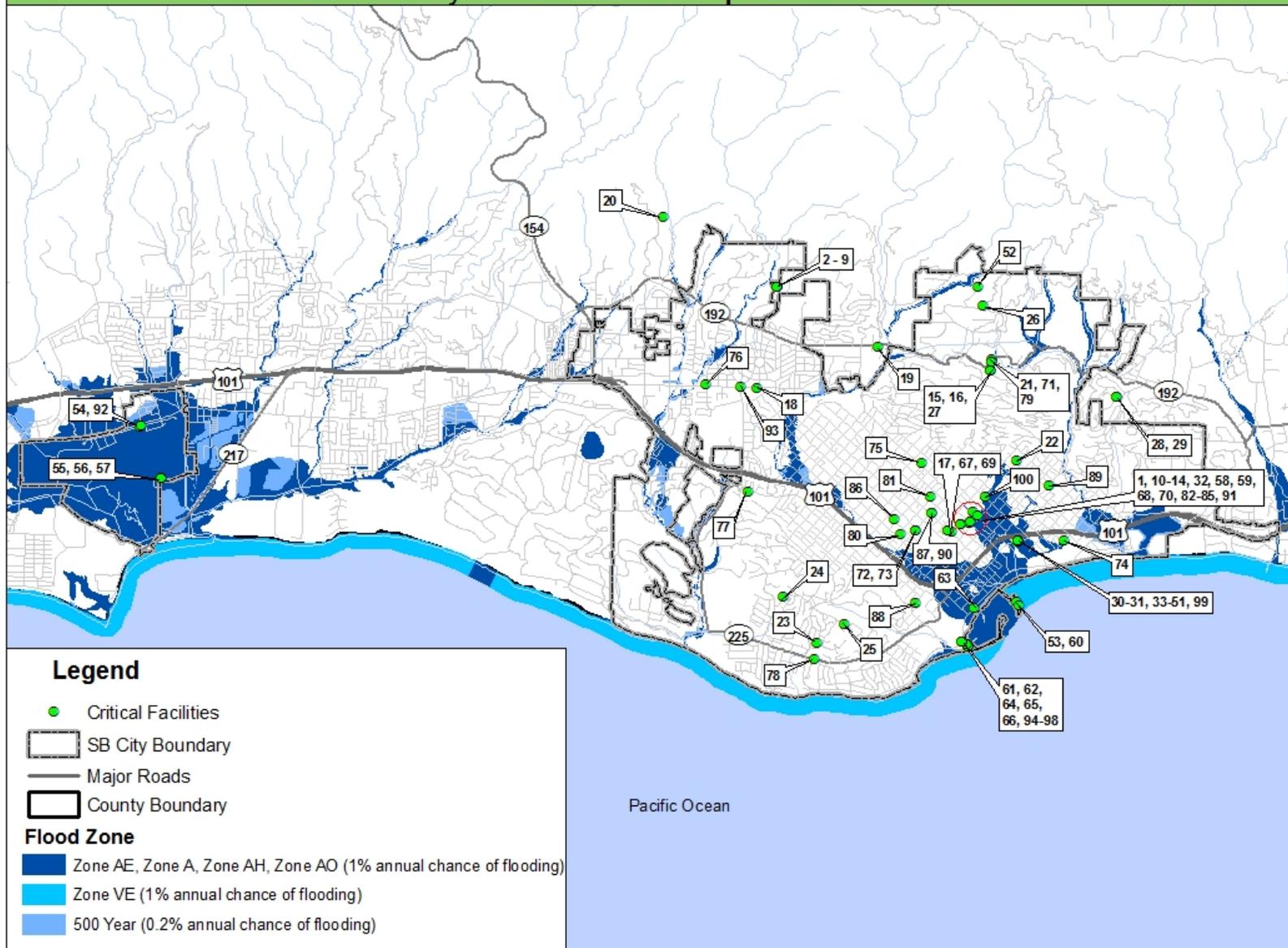
Map ID	Critical Facility	Real Property	Personal Property	Total Value	FEMA Flood Zone	EXHIBIT
						Flood Overlay Zone
52	Skofield park	\$0	\$75,732	\$75,732	Outside Floodplain	Outside Flood Overlay Zone
53	STEARNS WHARF	\$0	\$65,797	\$65,797	100 Year	Within Flood Overlay Zone
54	AIRPORT	\$3,224,298	\$0	\$3,224,298	100 Year	Within Flood Overlay Zone
55	AIRPORT	\$23,030	\$64,577	\$87,607	100 Year	Within Flood Overlay Zone
56	AIRPORT TERMINAL	\$52,746,000	\$0	\$52,746,000	100 Year	Within Flood Overlay Zone
57	NEW AIRLINE TERMINAL	\$33,000,000	\$0	\$33,000,000	100 Year	Within Flood Overlay Zone
58	PUBLIC WORKS YARD	\$263,169	\$39,332	\$302,501	100 Year	Within Flood Overlay Zone
59	PUBLIC WORKS YARD	\$425,755	\$21,293	\$447,048	100 Year	Within Flood Overlay Zone
60	STEARNS WHARF	\$17,565	\$140,644	\$158,209	100 Year	Within Flood Overlay Zone
61	HARBOR	\$346,873	\$25,098	\$371,971	Outside Floodplain	Outside Flood Overlay Zone
62	HARBOR	\$260,156	\$66,325	\$326,481	Outside Floodplain	Outside Flood Overlay Zone
63	HARBOR	\$143,289	\$0	\$143,289	100 Year	Within Flood Overlay Zone
64	HARBOR	\$177,232	\$0	\$177,232	Outside Floodplain	Outside Flood Overlay Zone
65	Harbor	\$177,232	\$0	\$177,232	Outside Floodplain	Outside Flood Overlay Zone
66	HARBOR	\$398,028	\$0	\$398,028	Outside Floodplain	Outside Flood Overlay Zone
67	Colin Campbell Cooper - Art Collection	\$0	\$4,185,000	\$4,185,000	Outside Floodplain	Outside Flood Overlay Zone
68	FINANCE	\$367,922	\$12,864	\$380,786	100 Year	Within Flood Overlay Zone
69	CITY HALL	\$302,240	\$128,643	\$430,883	Outside Floodplain	Outside Flood Overlay Zone
70	COMM DEVEL	\$2,339,719	\$536,281	\$2,876,000	Outside Floodplain	Outside Flood Overlay Zone
71	FIRE STANWOOD	\$46,062	\$0	\$46,062	Outside Floodplain	Outside Flood Overlay Zone
72	FIRE	\$2,270,158	\$257,043	\$2,527,201	Outside Floodplain	Outside Flood Overlay Zone
73	FIRE	\$0	\$103,695	\$103,695	Outside Floodplain	Outside Flood Overlay Zone
74	FIRE	\$164,235	\$23,258	\$187,493	100 Year	Within Flood Overlay Zone
75	FIRE	\$398,103	\$33,492	\$431,595	Outside Floodplain	Outside Flood Overlay Zone
76	FIRE	\$301,897	\$0	\$301,897	Outside Floodplain	Outside Flood Overlay Zone
77	FIRE	\$222,999	\$74,362	\$297,361	Outside Floodplain	Outside Flood Overlay Zone
78	FIRE	\$0	\$30,400	\$30,400	Outside Floodplain	Outside Flood Overlay Zone
79	FIRE	\$210,527	\$22,231	\$232,758	Outside Floodplain	Outside Flood Overlay Zone
80	FIRE	\$0	\$2,088	\$2,088	Outside Floodplain	Outside Flood Overlay Zone

Map ID	Critical Facility	Real Property	Personal Property	Total Value	FEMA Flood Zone	EXHIBIT
						Flood Overlay Zone
81	Police Department Headquarters	\$5,982,173	\$1,789,158	\$7,771,331	Outside Floodplain	Outside Flood Overlay Zone
82	PUBLIC WORKS YARD	\$0	\$15,633	\$15,633	100 Year	Within Flood Overlay Zone
83	PUBLIC WORKS YARD	\$0	\$12,567	\$12,567	100 year	Within Flood Overlay Zone
84	PUBLIC WORKS YARD	\$1,411,366	\$328,688	\$1,740,054	Outside Floodplain	Outside Flood Overlay Zone
85	ADMIN WELL CORP. @ PARKS DEPARTMENT	\$8,229	\$59,280	\$67,509	100 Year	Within Flood Overlay Zone
86	RECREATION	\$478,013	\$24,680	\$502,693	Outside Floodplain	Outside Flood Overlay Zone
87	RECREATION	\$839,248	\$23,560	\$862,808	Outside Floodplain	Outside Flood Overlay Zone
88	LOWER WESTSIDE COMM. CTR	\$62,652	\$0	\$62,652	Outside Floodplain	Outside Flood Overlay Zone
89	FRANKLIN COMM CENTER	\$1,157,885	\$26,759	\$1,184,644	Outside Floodplain	Outside Flood Overlay Zone
90	RECREATION	\$3,408,716	\$76,014	\$3,484,730	Outside Floodplain	Outside Flood Overlay Zone
91	RECREATION	\$576,799	\$33,842	\$610,641	100 Year	Within Flood Overlay Zone
92	Airport	\$10,527	\$72,081	\$82,608	100 Year	Within Flood Overlay Zone
93	Public Works	\$140,039	\$377,317	\$517,356	Outside Floodplain	Outside Flood Overlay Zone
94	Marina 1	\$11,475,428	\$0	\$11,475,428	Outside Floodplain	Outside Flood Overlay Zone
95	Marina 2	\$2,157,857	\$0	\$2,157,857	Outside Floodplain	Outside Flood Overlay Zone
96	Marina 3	\$2,280,296	\$0	\$2,280,296	Outside Floodplain	Outside Flood Overlay Zone
97	Marina 4	\$2,137,768	\$0	\$2,137,768	Outside Floodplain	Outside Flood Overlay Zone
98	Navy Pier	\$1,873,745	\$0	\$1,873,745	Outside Floodplain	Outside Flood Overlay Zone
99	Desalination Chemical Site	\$744,190	\$161,066	\$905,256	Outside Floodplain	Outside Flood Overlay Zone
100	Ortega Well	\$295,400	\$0	\$295,400	100 Year	Within Flood Overlay Zone

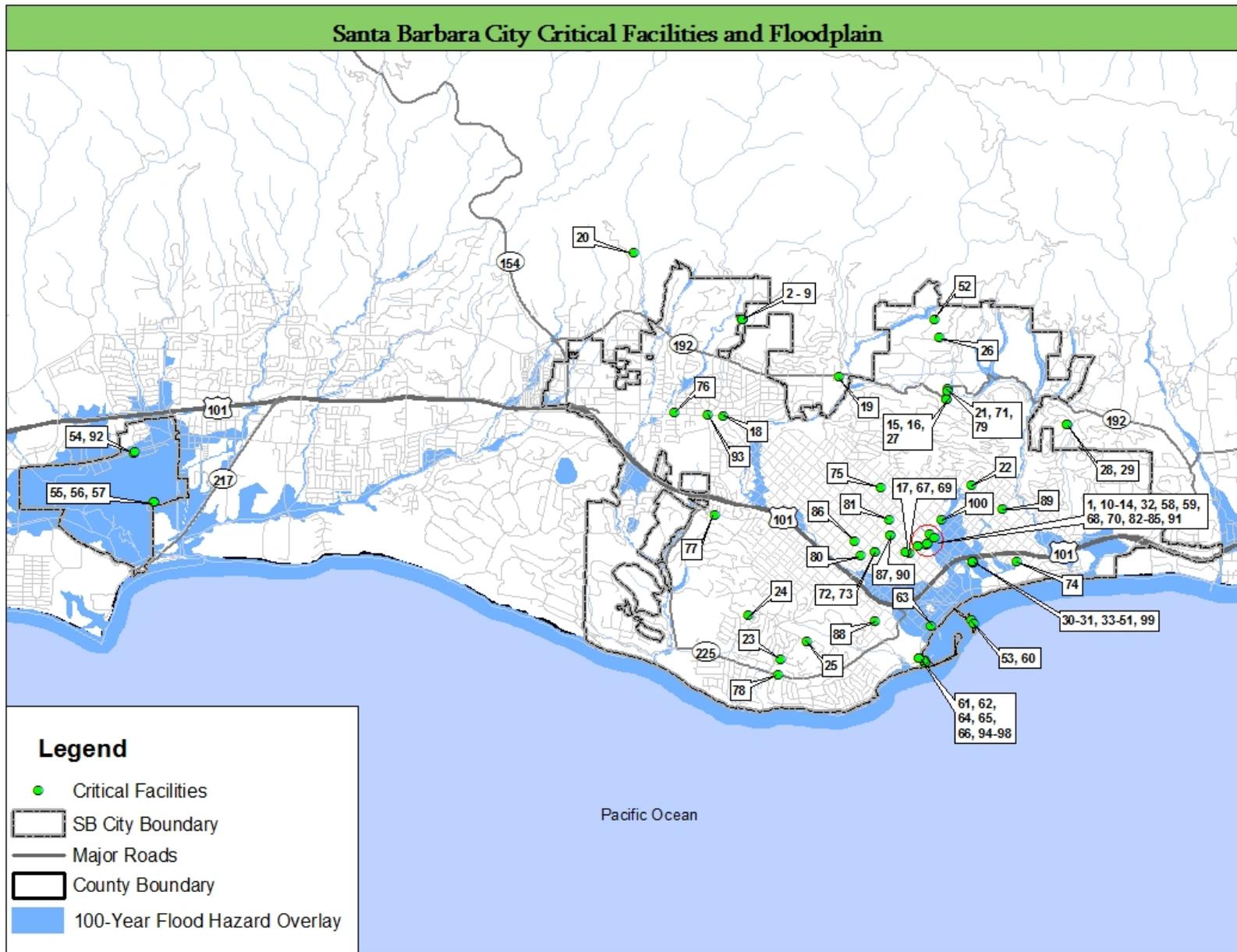
Exposure	\$222,966,543	\$29,830,971	\$252,797,514	\$92,083,141	\$92,083,141
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Count of Facilities Impacted	19	19
% of Facilities Impacted	19%	19%

Santa Barbara City Critical Facilities and Special Flood Hazard Areas



Source: Flood Insurance Rate Map (FIRM) Boundaries, Santa Barbara County GIS available at <http://www.countyofsb.org/itd/gis/default.aspx?id=2802>, September 15, 2009, prepared by FEMA.



Source: Overlay – Flood Hazard, Santa Barbara County GIS, available at <http://www.countyofsb.org/itd/gis/default.aspx?id=2802>, November 23, 2010

14.5.3 Wildfire Vulnerability

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Fire Severity Zone	WUI Zone	Fire Threat
1	Public Works Yard	\$28,859	\$41,483	\$70,342	Outside Fire Severity Zone	Within WUI	Moderate
2	HEADHOUSE / OPERATIONS	\$5,383,441	\$2,226,907	\$7,610,348	Very High	Within WUI	Moderate
3	OPERATIONS ANNEX	\$1,728,609	\$805,333	\$2,533,942	Very High	Within WUI	Moderate
4	SEDIMENTATION / FLOCCULATION BASINS	\$8,355,812	\$1,073,778	\$9,429,590	Very High	Within WUI	Moderate
5	EQUALIZATION BASIN	\$1,227,260	\$80,533	\$1,307,793	Very High	Within WUI	Moderate
6	SOLIDS RECOVERY BASIN	\$1,566,715	\$134,222	\$1,700,937	Very High	Within WUI	Moderate
7	SCC BOOSTER STATION	\$123,770	\$805,333	\$929,103	Very High	Within WUI	Moderate
8	RESERVOIR - 5.0 MG	\$2,558,968	\$0	\$2,558,968	Very High	Within WUI	Moderate
9	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Very High	Within WUI	Moderate
10	ORTEGA WELL TRMT PLANT	\$120,194	\$1,170,976	\$1,291,170	Outside Fire Severity Zone	Outside WUI	Moderate
11	ORTEGA WELL TRMT PLANT	\$65,066	\$0	\$65,066	Outside Fire Severity Zone	Outside WUI	Moderate
12	ORTEGA WELL TRMT PLANT	\$197,512	\$0	\$197,512	Outside Fire Severity Zone	Outside WUI	Moderate
13	PUBLIC WORKS	\$56,446	\$0	\$56,446	Outside Fire Severity Zone	Outside WUI	Moderate
14	ORTEGA WELL TRMT PLANT	\$0	\$821,905	\$821,905	Outside Fire Severity Zone	Outside WUI	Moderate
15	SHEFFIELD TRMT PLANT	\$1,655,085	\$512,674	\$2,167,759	Very High	Within WUI	Moderate
16	SHEFFIELD TRMT PLANT	\$0	\$145,580	\$145,580	Very High	Within WUI	Moderate
17	PUBLIC WORKS	\$211,986	\$0	\$211,986	Outside Fire Severity Zone	Outside WUI	Moderate
18	CLORINATION ROOM	\$18,846	\$24,958	\$43,804	Outside Fire Severity Zone	Outside WUI	Moderate
19	PUBLIC WORKS	\$0	\$123,448	\$123,448	Very High	Within WUI	Moderate
20	TUNNELL RESERVOIR	\$0	\$181,377	\$181,377	Very High	Within WUI	Very High
21	EL CIELITO	\$0	\$320,777	\$320,777	Very High	Within WUI	Moderate

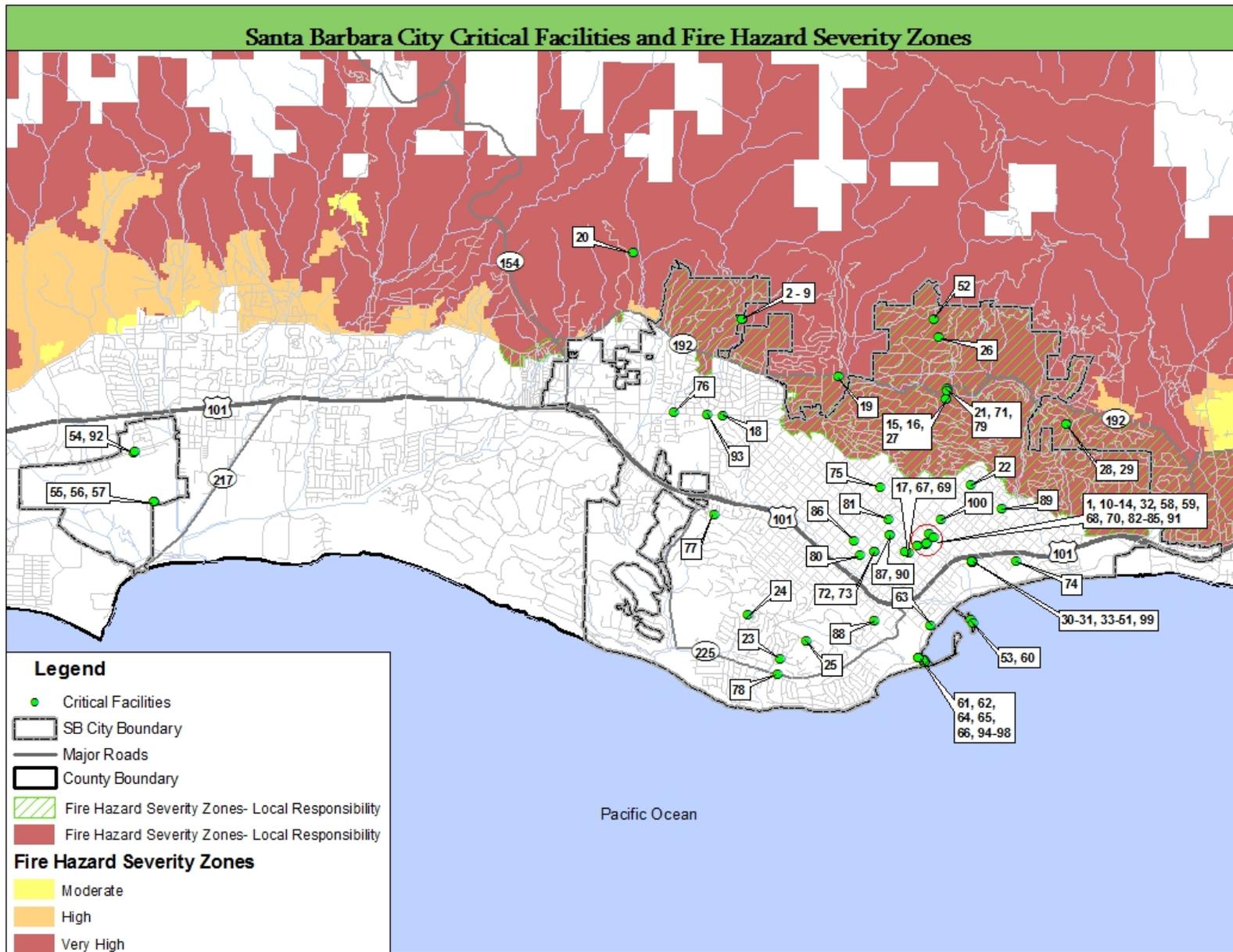
Map ID	Critical Facility	Real Property	Personal Property	Total Value	Fire Severity Zone	WUI Zone	EXHIBIT Fire Threat
22	HOPE RESERVOIR	\$0	\$138,435	\$138,435	Outside Fire Severity Zone	Within WUI	Moderate
23	CALLE LAS CALERAS	\$0	\$72,676	\$72,676	Outside Fire Severity Zone	Outside WUI	Moderate
24	ESCONDIDO PUMP STATION	\$0	\$134,440	\$134,440	Outside Fire Severity Zone	Within WUI	Moderate
25	VIC TRACE	\$0	\$192,852	\$192,852	Outside Fire Severity Zone	Outside WUI	Moderate
26	SKOFIELD PUMP STATION	\$0	\$155,235	\$155,235	Very High	Within WUI	Moderate
27	PUBLIC WORKS	\$132,101	\$264,487	\$396,588	Very High	Within WUI	Moderate
28	PUBLIC WORKS	\$8,088	\$50,712	\$58,800	Very High	Within WUI	Moderate
29	BOTHIN PUMP STATION	\$80,075	\$134,306	\$214,381	Very High	Within WUI	Moderate
30	MAIN DESALINATION PLANT	\$18,800,578	\$0	\$18,800,578	Outside Fire Severity Zone	Within WUI	Moderate
31	SCADA / MCC BUILDING	\$70,189	\$80,533	\$150,722	Outside Fire Severity Zone	Within WUI	Moderate
32	PUBLIC WORKS YARD	\$0	\$185,413	\$185,413	Outside Fire Severity Zone	Within WUI	Moderate
33	ADMINISTRATION BUILDING	\$819,392	\$365,084	\$1,184,476	Outside Fire Severity Zone	Within WUI	Moderate
34	LAB BUILDING	\$1,140,569	\$536,889	\$1,677,458	Outside Fire Severity Zone	Within WUI	Moderate
35	MAINTENANCE SHOP	\$822,108	\$268,444	\$1,090,552	Outside Fire Severity Zone	Within WUI	Moderate
36	FLOTATION & GRAVITY THICKENER TANKS	\$559,735	\$102,009	\$661,744	Outside Fire Severity Zone	Within WUI	Moderate
37	DIGESTERS #1, #2 & CONTROL BUILDING	\$4,418,135	\$322,133	\$4,740,268	Outside Fire Severity Zone	Within WUI	Moderate
38	COGENERATION PLANT	\$52,224	\$375,822	\$428,046	Outside Fire Severity Zone	Within WUI	Moderate
39	SLUDGE HANDLING BUILDING	\$2,945,424	\$2,684,443	\$5,629,867	Outside Fire Severity Zone	Within WUI	Moderate
40	SLUDGE HOLDING TANK & CONTROL BUILDING	\$1,472,712	\$214,755	\$1,687,467	Outside Fire Severity Zone	Within WUI	Moderate
41	ELECTRICAL SUBSTATION A	\$198,450	\$161,066	\$359,516	Outside Fire Severity Zone	Within WUI	Moderate
42	INFLUENT PUMP STATION	\$1,925,911	\$1,342,222	\$3,268,133	Outside Fire Severity Zone	Within WUI	Moderate

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Fire Severity Zone	WUI Zone	EXHIBIT Fire Threat
43	PRIMARY / SECONDARY SEDIMENTATION & AERATION TANKS	\$26,785,600	\$3,221,332	\$30,006,932	Outside Fire Severity Zone	Within WUI	Moderate
44	RECLAIM FILTERS	\$920,915	\$107,378	\$1,028,293	Outside Fire Severity Zone	Within WUI	Moderate
45	CHLORINE BUILDING & SODIUM HYPOCHLORITE STATION	\$344,678	\$375,822	\$720,500	Outside Fire Severity Zone	Within WUI	Moderate
46	CHLORINE CONTACT TANK & BISULFITE FACILITY	\$1,227,260	\$322,133	\$1,549,393	Outside Fire Severity Zone	Within WUI	Moderate
47	RECLAIM CHLORINE CONTACT & DISTRIBUTION	\$1,441,795	\$536,889	\$1,978,684	Outside Fire Severity Zone	Within WUI	Moderate
48	RECLAIM WATER STORAGE TANK	\$511,794	\$26,844	\$538,638	Outside Fire Severity Zone	Within WUI	Moderate
49	OUTFALL MIXING BOX	\$34,468	\$80,533	\$115,001	Outside Fire Severity Zone	Within WUI	Moderate
50	OUTFALL STRUCTURE	\$2,088,953	\$0	\$2,088,953	Outside Fire Severity Zone	Within WUI	Moderate
51	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Outside Fire Severity Zone	Within WUI	Moderate
52	Skofield park	\$0	\$75,732	\$75,732	Very High	Within WUI	Moderate
53	STEARNS WHARF	\$0	\$65,797	\$65,797	Outside Fire Severity Zone	Outside WUI	Little or No Threat
54	AIRPORT	\$3,224,298	\$0	\$3,224,298	Outside Fire Severity Zone	Within WUI	Moderate
55	AIRPORT	\$23,030	\$64,577	\$87,607	Outside Fire Severity Zone	Within WUI	Moderate
56	AIRPORT TERMINAL	\$52,746,000	\$0	\$52,746,000	Outside Fire Severity Zone	Within WUI	Moderate
57	NEW AIRLINE TERMINAL	\$33,000,000	\$0	\$33,000,000	Outside Fire Severity Zone	Within WUI	Moderate
58	PUBLIC WORKS YARD	\$263,169	\$39,332	\$302,501	Outside Fire Severity Zone	Within WUI	Moderate
59	PUBLIC WORKS YARD	\$425,755	\$21,293	\$447,048	Outside Fire Severity Zone	Within WUI	Moderate
60	STEARNS WHARF	\$17,565	\$140,644	\$158,209	Outside Fire Severity Zone	Outside WUI	Little or No Threat
61	HARBOR	\$346,873	\$25,098	\$371,971	Outside Fire Severity Zone	Within WUI	Moderate
62	HARBOR	\$260,156	\$66,325	\$326,481	Outside Fire Severity Zone	Within WUI	Moderate

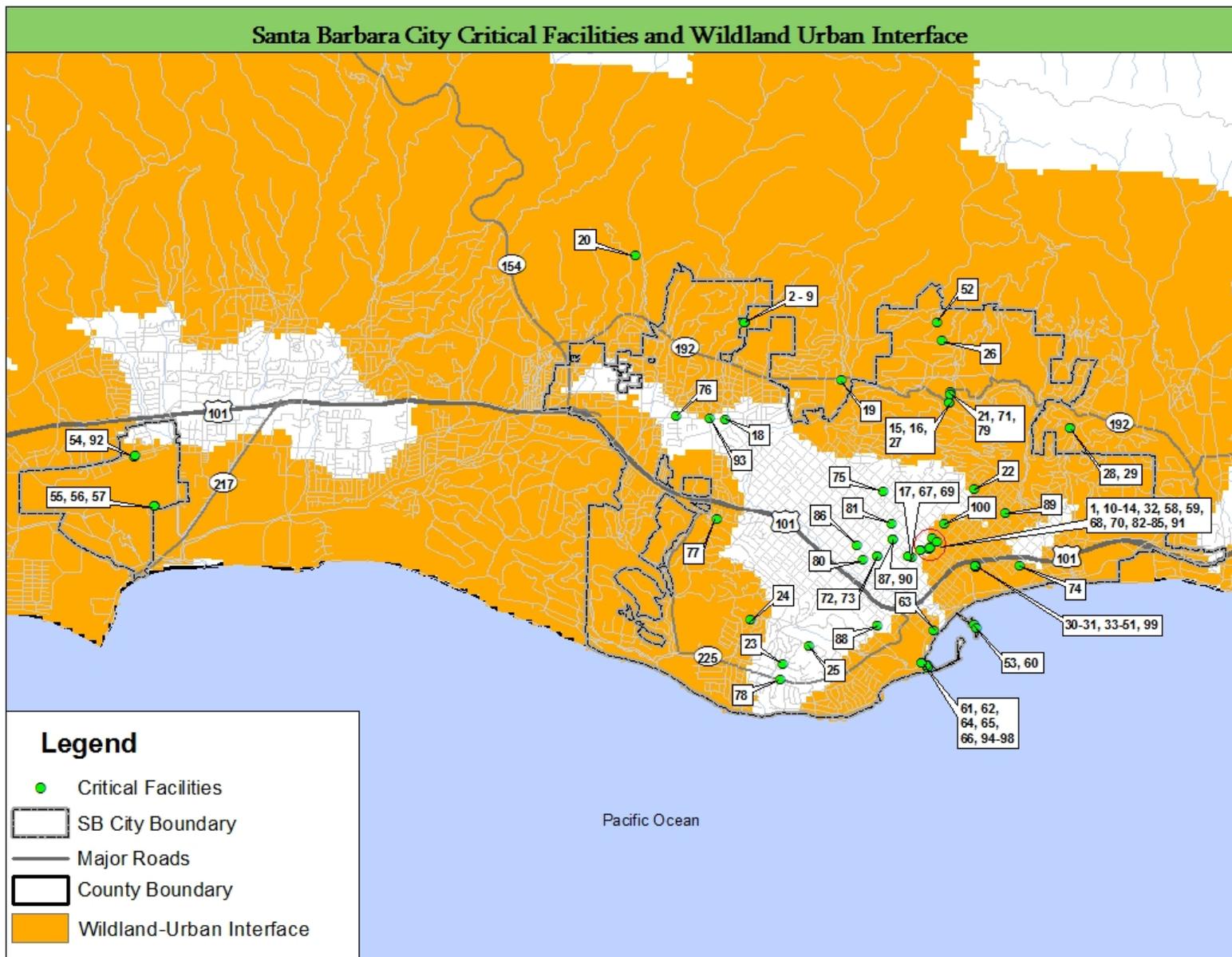
Map ID	Critical Facility	Real Property	Personal Property	Total Value	Fire Severity Zone	WUI Zone	EXHIBIT Fire Threat
63	HARBOR	\$143,289	\$0	\$143,289	Outside Fire Severity Zone	Within WUI	Moderate
64	HARBOR	\$177,232	\$0	\$177,232	Outside Fire Severity Zone	Within WUI	Moderate
65	Harbor	\$177,232	\$0	\$177,232	Outside Fire Severity Zone	Within WUI	Moderate
66	HARBOR	\$398,028	\$0	\$398,028	Outside Fire Severity Zone	Within WUI	Moderate
67	Colin Campbell Cooper - Art Collection	\$0	\$4,185,000	\$4,185,000	Outside Fire Severity Zone	Outside WUI	Moderate
68	FINANCE	\$367,922	\$12,864	\$380,786	Outside Fire Severity Zone	Within WUI	Moderate
69	CITY HALL	\$302,240	\$128,643	\$430,883	Outside Fire Severity Zone	Outside WUI	Moderate
70	COMM DEVEL	\$2,339,719	\$536,281	\$2,876,000	Outside Fire Severity Zone	Within WUI	Moderate
71	FIRE STANWOOD	\$46,062	\$0	\$46,062	Very High	Within WUI	Moderate
72	FIRE	\$2,270,158	\$257,043	\$2,527,201	Outside Fire Severity Zone	Outside WUI	Moderate
73	FIRE	\$0	\$103,695	\$103,695	Outside Fire Severity Zone	Outside WUI	Moderate
74	FIRE	\$164,235	\$23,258	\$187,493	Outside Fire Severity Zone	Within WUI	Moderate
75	FIRE	\$398,103	\$33,492	\$431,595	Outside Fire Severity Zone	Outside WUI	Moderate
76	FIRE	\$301,897	\$0	\$301,897	Outside Fire Severity Zone	Outside WUI	Moderate
77	FIRE	\$222,999	\$74,362	\$297,361	Outside Fire Severity Zone	Within WUI	Moderate
78	FIRE	\$0	\$30,400	\$30,400	Outside Fire Severity Zone	Outside WUI	Moderate
79	FIRE	\$210,527	\$22,231	\$232,758	Very High	Within WUI	Moderate
80	FIRE	\$0	\$2,088	\$2,088	Outside Fire Severity Zone	Outside WUI	Moderate
81	Police Department Headquarters	\$5,982,173	\$1,789,158	\$7,771,331	Outside Fire Severity Zone	Outside WUI	Moderate
82	PUBLIC WORKS YARD	\$0	\$15,633	\$15,633	Outside Fire Severity Zone	Within WUI	Moderate

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Fire Severity Zone	WUI Zone	EXHIBIT Fire Threat
83	PUBLIC WORKS YARD	\$0	\$12,567	\$12,567	Outside Fire Severity Zone	Within WUI	Moderate
84	PUBLIC WORKS YARD	\$1,411,366	\$328,688	\$1,740,054	Outside Fire Severity Zone	Within WUI	Moderate
85	ADMIN WELL CORP. @ PARKS DEPARTMENT	\$8,229	\$59,280	\$67,509	Outside Fire Severity Zone	Within WUI	Moderate
86	RECREATION	\$478,013	\$24,680	\$502,693	Outside Fire Severity Zone	Outside WUI	Moderate
87	RECREATION	\$839,248	\$23,560	\$862,808	Outside Fire Severity Zone	Outside WUI	Moderate
88	LOWER WESTSIDE COMM. CTR	\$62,652	\$0	\$62,652	Outside Fire Severity Zone	Outside WUI	Moderate
89	FRANKLIN COMM CENTER	\$1,157,885	\$26,759	\$1,184,644	Outside Fire Severity Zone	Within WUI	Moderate
90	RECREATION	\$3,408,716	\$76,014	\$3,484,730	Outside Fire Severity Zone	Outside WUI	Moderate
91	RECREATION	\$576,799	\$33,842	\$610,641	Outside Fire Severity Zone	Within WUI	Moderate
92	Airport	\$10,527	\$72,081	\$82,608	Outside Fire Severity Zone	Within WUI	Moderate
93	Public Works	\$140,039	\$377,317	\$517,356	Outside Fire Severity Zone	Within WUI	Moderate
94	Marina 1	\$11,475,428	\$0	\$11,475,428	Outside Fire Severity Zone	Within WUI	Moderate
95	Marina 2	\$2,157,857	\$0	\$2,157,857	Outside Fire Severity Zone	Within WUI	Moderate
96	Marina 3	\$2,280,296	\$0	\$2,280,296	Outside Fire Severity Zone	Within WUI	Moderate
97	Marina 4	\$2,137,768	\$0	\$2,137,768	Outside Fire Severity Zone	Within WUI	Moderate
98	Navy Pier	\$1,873,745	\$0	\$1,873,745	Outside Fire Severity Zone	Within WUI	Moderate
99	Desalination Chemical Site	\$744,190	\$161,066	\$905,256	Outside Fire Severity Zone	Within WUI	Moderate
100	Ortega Well	\$295,400	\$0	\$295,400	Outside Fire Severity Zone	Within WUI	Moderate
	Exposure	\$222,966,543	\$29,830,971	\$252,797,514	\$30,189,178	\$228,439,240	\$252,573,508
	Count of Facilities Impacted				20	76	98

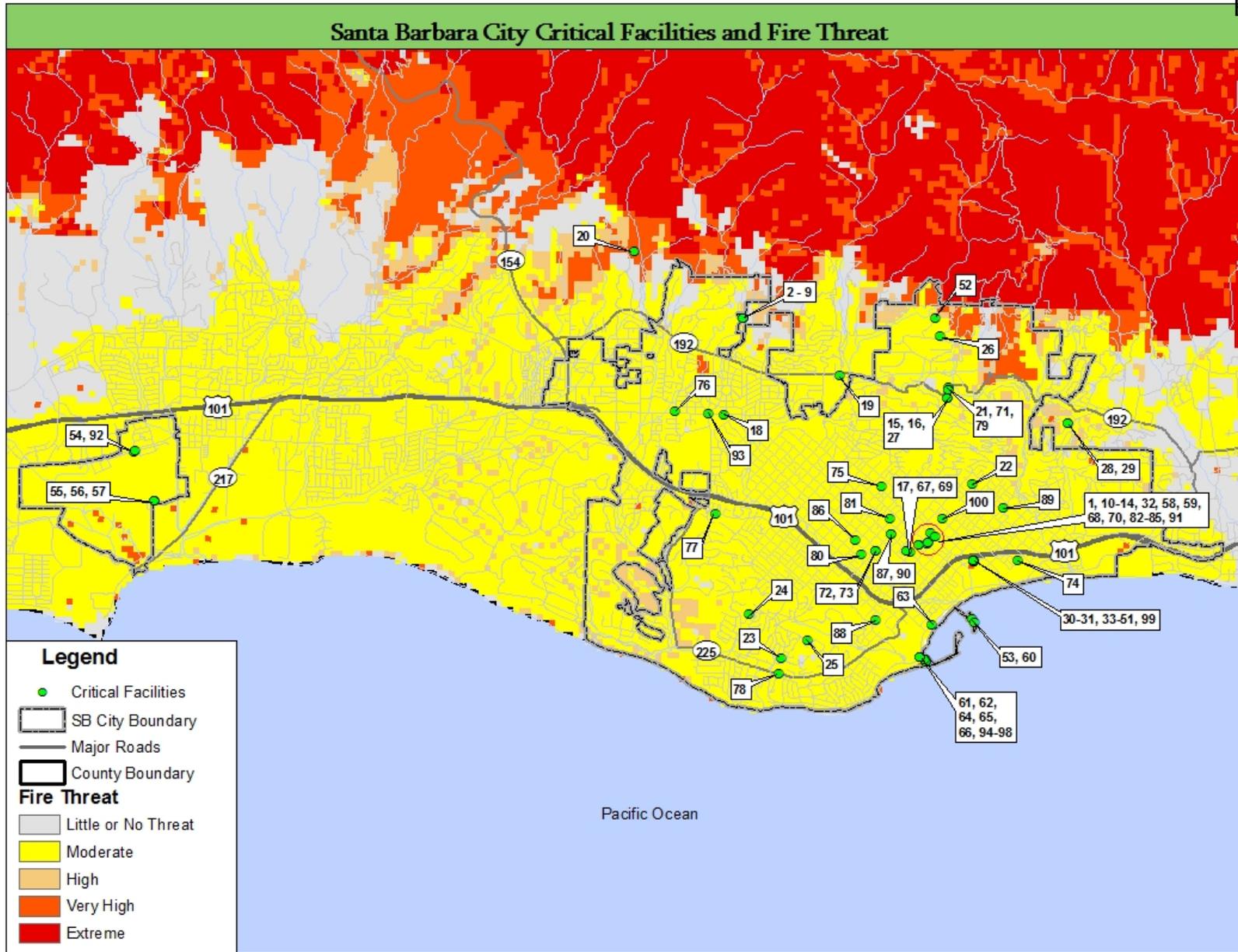
Map ID	Critical Facility	Real Property	Personal Property	Total Value	Fire Severity Zone	WUI Zone	EXHIBIT Fire Threat
	% of Facilities Impacted				20%	76%	98%



Source: County of Santa Barbara Fire GIS



Source: Wildland Urban Interface (WUI) Fire Threat, Fire and Resource Assessment Program (FRAP) available at <http://frap.cdf.ca.gov/data/frapgisdata/select.asp?theme=5>, 2003



Source: Fire Threat, Fire and Resource Assessment Program (FRAP) available at <http://frap.cdf.ca.gov/data/frapgisdata/select.asp?theme=5>, 2004

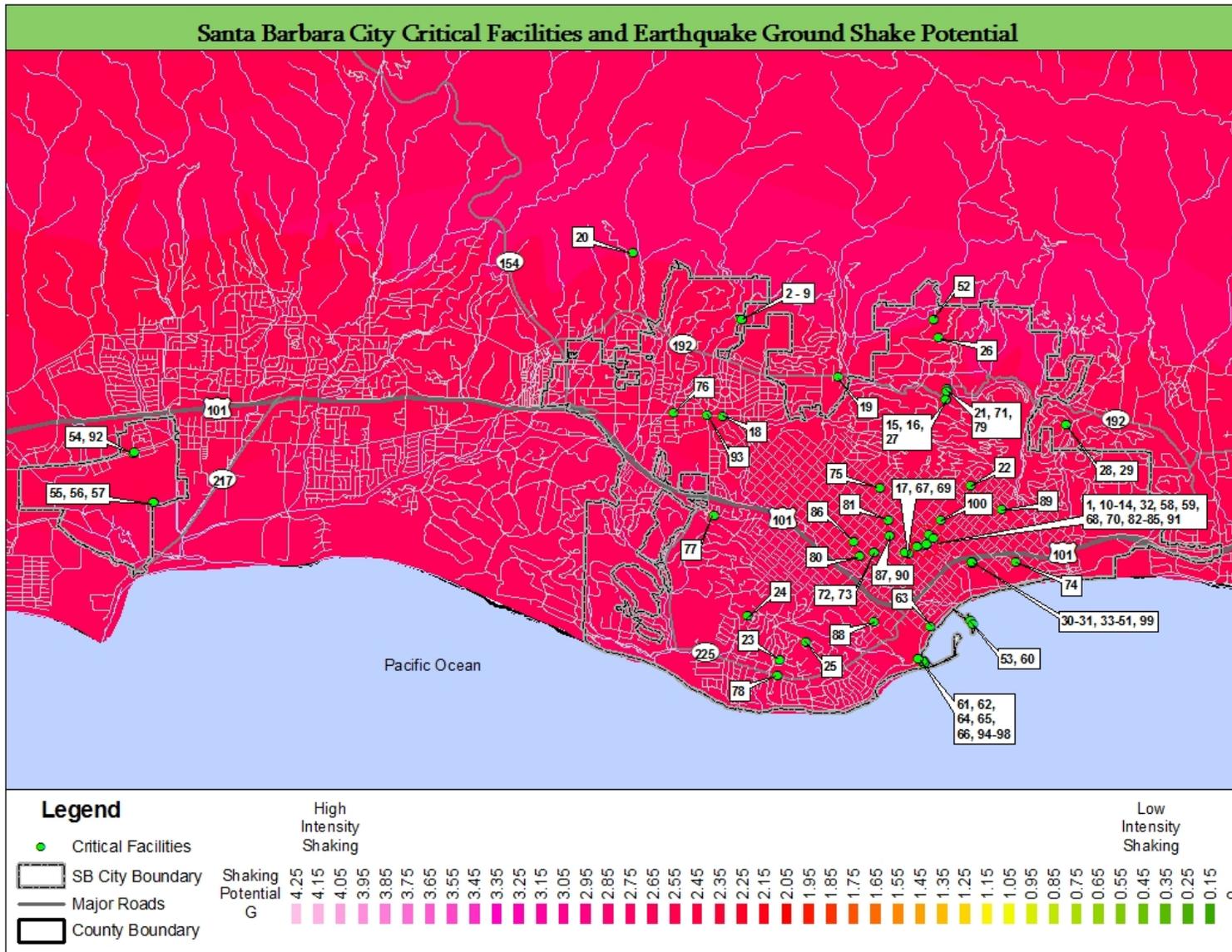
14.5.4 Earthquake Vulnerability

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Groundwater/ Liquefaction Severity	Peak Ground Acceleration
1	Public Works Yard	\$28,859	\$41,483	\$70,342	Moderate/High	2.55
2	HEADHOUSE / OPERATIONS	\$5,383,441	\$2,226,907	\$7,610,348	Low/Low	2.55
3	OPERATIONS ANNEX	\$1,728,609	\$805,333	\$2,533,942	Low/Low	2.55
4	SEDIMENTATION / FLOCCULATION BASINS	\$8,355,812	\$1,073,778	\$9,429,590	Low/Low	2.55
5	EQUALIZATION BASIN	\$1,227,260	\$80,533	\$1,307,793	Low/Low	2.55
6	SOLIDS RECOVERY BASIN	\$1,566,715	\$134,222	\$1,700,937	Low/Low	2.55
7	SCC BOOSTER STATION	\$123,770	\$805,333	\$929,103	Low/Low	2.55
8	RESERVOIR - 5.0 MG	\$2,558,968	\$0	\$2,558,968	Low/Low	2.55
9	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Low/Low	2.55
10	ORTEGA WELL TRMT PLANT	\$120,194	\$1,170,976	\$1,291,170	Moderate/High	2.55
11	ORTEGA WELL TRMT PLANT	\$65,066	\$0	\$65,066	Moderate/High	2.55
12	ORTEGA WELL TRMT PLANT	\$197,512	\$0	\$197,512	Moderate/High	2.55
13	PUBLIC WORKS	\$56,446	\$0	\$56,446	Moderate/High	2.55
14	ORTEGA WELL TRMT PLANT	\$0	\$821,905	\$821,905	Moderate/High	2.55
15	SHEFFIELD TRMT PLANT	\$1,655,085	\$512,674	\$2,167,759	Low/Low	2.55
16	SHEFFIELD TRMT PLANT	\$0	\$145,580	\$145,580	Low/Low	2.55
17	PUBLIC WORKS	\$211,986	\$0	\$211,986	Moderate/High	2.55
18	CLORINATION ROOM	\$18,846	\$24,958	\$43,804	Moderate/Moderate	2.55
19	PUBLIC WORKS	\$0	\$123,448	\$123,448	Moderate/Moderate	2.55
20	TUNNELL RESERVOIR	\$0	\$181,377	\$181,377	Low/Low	2.75
21	EL CIELITO	\$0	\$320,777	\$320,777	Low/Low	2.55
22	HOPE RESERVOIR	\$0	\$138,435	\$138,435	Low/Low	2.55
23	CALLE LAS CALERAS	\$0	\$72,676	\$72,676	Low/Low	2.55
24	ESCONDIDO PUMP STATION	\$0	\$134,440	\$134,440	Low/Low	2.65
25	VIC TRACE	\$0	\$192,852	\$192,852	Low/Low	2.65

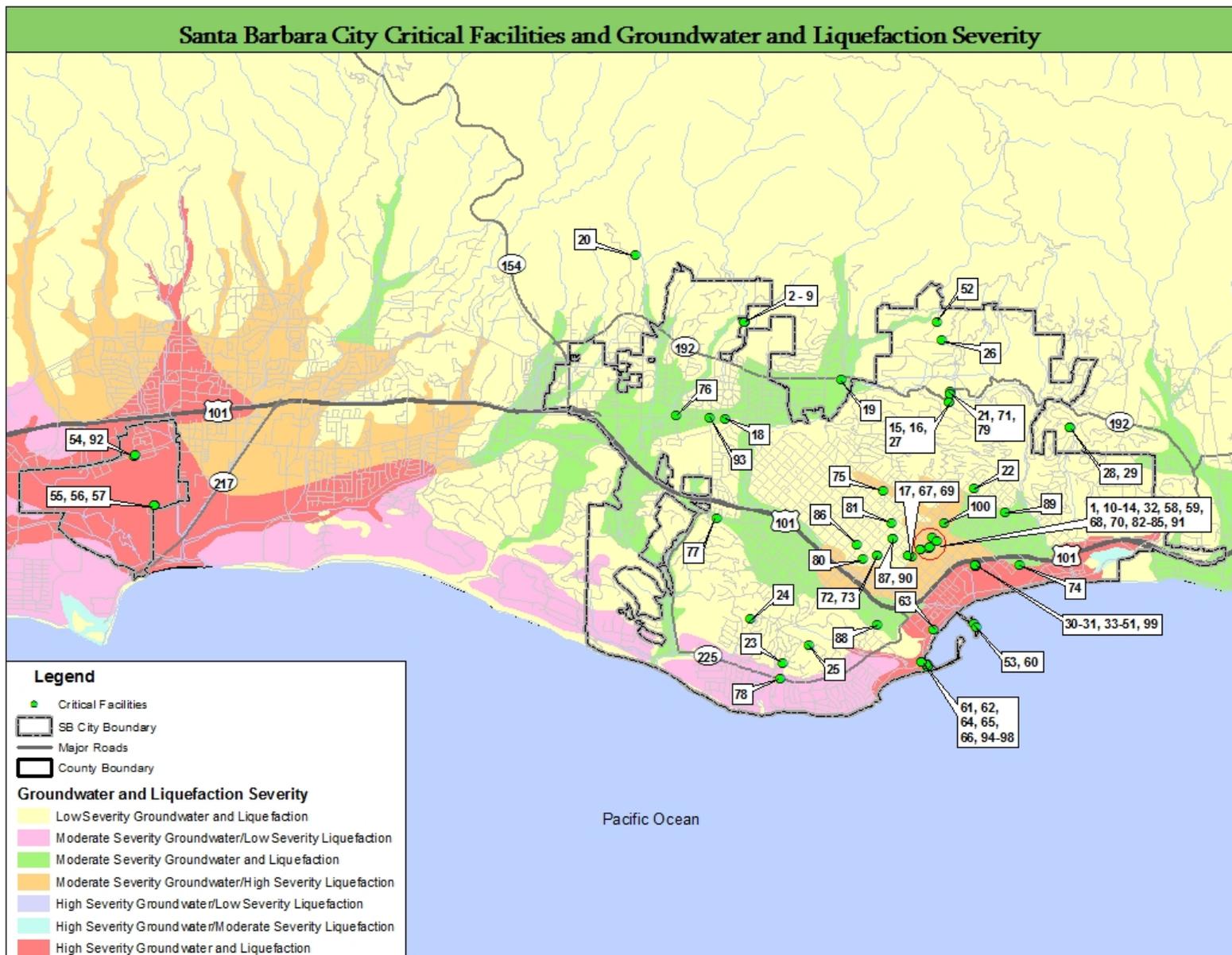
Map ID	Critical Facility	Real Property	Personal Property	Total Value	Groundwater/ Liquefaction Severity	EXHIBIT Ground Acceleration
26	SKOFIELD PUMP STATION	\$0	\$155,235	\$155,235	Low/Low	2.55
27	PUBLIC WORKS	\$132,101	\$264,487	\$396,588	Low/Low	2.55
28	PUBLIC WORKS	\$8,088	\$50,712	\$58,800	Low/Low	2.55
29	BOTHIN PUMP STATION	\$80,075	\$134,306	\$214,381	Low/Low	2.65
30	MAIN DESALINATION PLANT	\$18,800,578	\$0	\$18,800,578	High/High	2.55
31	SCADA / MCC BUILDING	\$70,189	\$80,533	\$150,722	High/High	2.55
32	PUBLIC WORKS YARD	\$0	\$185,413	\$185,413	Moderate/High	2.55
33	ADMINISTRATION BUILDING	\$819,392	\$365,084	\$1,184,476	High/High	2.55
34	LAB BUILDING	\$1,140,569	\$536,889	\$1,677,458	High/High	2.55
35	MAINTENANCE SHOP	\$822,108	\$268,444	\$1,090,552	High/High	2.55
36	FLOTATION & GRAVITY THICKENER TANKS	\$559,735	\$102,009	\$661,744	High/High	2.55
37	DIGESTERS #1, #2 & CONTROL BUILDING	\$4,418,135	\$322,133	\$4,740,268	High/High	2.55
38	COGENERATION PLANT	\$52,224	\$375,822	\$428,046	High/High	2.55
39	SLUDGE HANDLING BUILDING	\$2,945,424	\$2,684,443	\$5,629,867	High/High	2.55
40	SLUDGE HOLDING TANK & CONTROL BUILDING	\$1,472,712	\$214,755	\$1,687,467	High/High	2.55
41	ELECTRICAL SUBSTATION A	\$198,450	\$161,066	\$359,516	High/High	2.55
42	INFLUENT PUMP STATION	\$1,925,911	\$1,342,222	\$3,268,133	High/High	2.55
43	PRIMARY / SECONDARY SEDIMENTATION & AERATION TANKS	\$26,785,600	\$3,221,332	\$30,006,932	High/High	2.55
44	RECLAIM FILTERS	\$920,915	\$107,378	\$1,028,293	High/High	2.55
45	CHLORINE BUILDING & SODIUM HYPOCHLORITE STATION	\$344,678	\$375,822	\$720,500	High/High	2.55
46	CHLORINE CONTACT TANK & BISULFITE FACILITY	\$1,227,260	\$322,133	\$1,549,393	High/High	2.55
47	RECLAIM CHLORINE CONTACT & DISTRIBUTION	\$1,441,795	\$536,889	\$1,978,684	High/High	2.55
48	RECLAIM WATER STORAGE TANK	\$511,794	\$26,844	\$538,638	High/High	2.55
49	OUTFALL MIXING BOX	\$34,468	\$80,533	\$115,001	Low/Low	2.55
50	OUTFALL STRUCTURE	\$2,088,953	\$0	\$2,088,953	Low/Low	2.55
51	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	High/High	2.55
52	Skofield park	\$0	\$75,732	\$75,732	Low/Low	2.55

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Groundwater/ Liquefaction Severity	EXHIBIT Ground Acceleration
53	STEARNS WHARF	\$0	\$65,797	\$65,797	High/High	2.55
54	AIRPORT	\$3,224,298	\$0	\$3,224,298	High/High	2.55
55	AIRPORT	\$23,030	\$64,577	\$87,607	High/High	2.65
56	AIRPORT TERMINAL	\$52,746,000	\$0	\$52,746,000	High/High	2.65
57	NEW AIRLINE TERMINAL	\$33,000,000	\$0	\$33,000,000	High/High	2.65
58	PUBLIC WORKS YARD	\$263,169	\$39,332	\$302,501	Moderate/High	2.55
59	PUBLIC WORKS YARD	\$425,755	\$21,293	\$447,048	Moderate/High	2.55
60	STEARNS WHARF	\$17,565	\$140,644	\$158,209	High/High	2.55
61	HARBOR	\$346,873	\$25,098	\$371,971	High/High	2.55
62	HARBOR	\$260,156	\$66,325	\$326,481	High/High	2.55
63	HARBOR	\$143,289	\$0	\$143,289	High/High	2.55
64	HARBOR	\$177,232	\$0	\$177,232	High/High	2.55
65	Harbor	\$177,232	\$0	\$177,232	High/High	2.55
66	HARBOR	\$398,028	\$0	\$398,028	High/High	2.55
67	Colin Campbell Cooper - Art Collection	\$0	\$4,185,000	\$4,185,000	Low/Low	2.55
68	FINANCE	\$367,922	\$12,864	\$380,786	Moderate/High	2.55
69	CITY HALL	\$302,240	\$128,643	\$430,883	Low/Low	2.55
70	COMM DEVEL	\$2,339,719	\$536,281	\$2,876,000	Moderate/High	2.55
71	FIRE STANWOOD	\$46,062	\$0	\$46,062	Low/Low	2.55
72	FIRE	\$2,270,158	\$257,043	\$2,527,201	Low/Low	2.55
73	FIRE	\$0	\$103,695	\$103,695	Low/Low	2.55
74	FIRE	\$164,235	\$23,258	\$187,493	Moderate/Moderate	2.55
75	FIRE	\$398,103	\$33,492	\$431,595	Moderate/High	2.55
76	FIRE	\$301,897	\$0	\$301,897	Moderate/Moderate	2.55
77	FIRE	\$222,999	\$74,362	\$297,361	Moderate/Moderate	2.65
78	FIRE	\$0	\$30,400	\$30,400	Moderate/Low	2.65
79	FIRE	\$210,527	\$22,231	\$232,758	Low/Low	2.55
80	FIRE	\$0	\$2,088	\$2,088	Low/Low	2.55

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Groundwater/ Liquefaction Severity	EXHIBIT Ground Acceleration
81	Police Department Headquarters	\$5,982,173	\$1,789,158	\$7,771,331	Low/Low	2.55
82	PUBLIC WORKS YARD	\$0	\$15,633	\$15,633	Moderate/High	2.55
83	PUBLIC WORKS YARD	\$0	\$12,567	\$12,567	Moderate/High	2.55
84	PUBLIC WORKS YARD	\$1,411,366	\$328,688	\$1,740,054	Moderate/High	2.55
85	ADMIN WELL CORP. @ PARKS DEPARTMENT	\$8,229	\$59,280	\$67,509	Moderate/High	2.55
86	RECREATION	\$478,013	\$24,680	\$502,693	Low/Low	2.55
87	RECREATION	\$839,248	\$23,560	\$862,808	Low/Low	2.55
88	LOWER WESTSIDE COMM. CTR	\$62,652	\$0	\$62,652	Moderate/Moderate	2.55
89	FRANKLIN COMM CENTER	\$1,157,885	\$26,759	\$1,184,644	Moderate/Moderate	2.55
90	RECREATION	\$3,408,716	\$76,014	\$3,484,730	Low/Low	2.55
91	RECREATION	\$576,799	\$33,842	\$610,641	Moderate/High	2.55
92	Airport	\$10,527	\$72,081	\$82,608	High/High	2.55
93	Public Works	\$140,039	\$377,317	\$517,356	Moderate/Moderate	2.55
94	Marina 1	\$11,475,428	\$0	\$11,475,428	High/High	2.55
95	Marina 2	\$2,157,857	\$0	\$2,157,857	High/High	2.55
96	Marina 3	\$2,280,296	\$0	\$2,280,296	High/High	2.55
97	Marina 4	\$2,137,768	\$0	\$2,137,768	High/High	2.55
98	Navy Pier	\$1,873,745	\$0	\$1,873,745	High/High	2.55
99	Desalination Chemical Site	\$744,190	\$161,066	\$905,256	High/High	2.55
100	Ortega Well	\$295,400	\$0	\$295,400	Moderate/High	2.55
	Exposure	\$222,966,543	\$29,830,971	\$252,797,514	\$200,118,998	2.56
	Count of Facilities Impacted				66	
	% of Facilities Impacted				66%	



Source: Seismic Shaking Hazard, Obtained from California Geological Survey, for more information: <http://www.conservation.ca.gov/cgs/rghm/psha/Pages/index.aspx>, 2002.



Source: Groundwater Liquefaction, Santa Barbara County GIS, available at <http://www.countyofsb.org/itd/gis/default.aspx?id=2802>, July 15, 2010, originally prepared by Moore and Taber in 1974.

14.5.5 Landslide Vulnerability

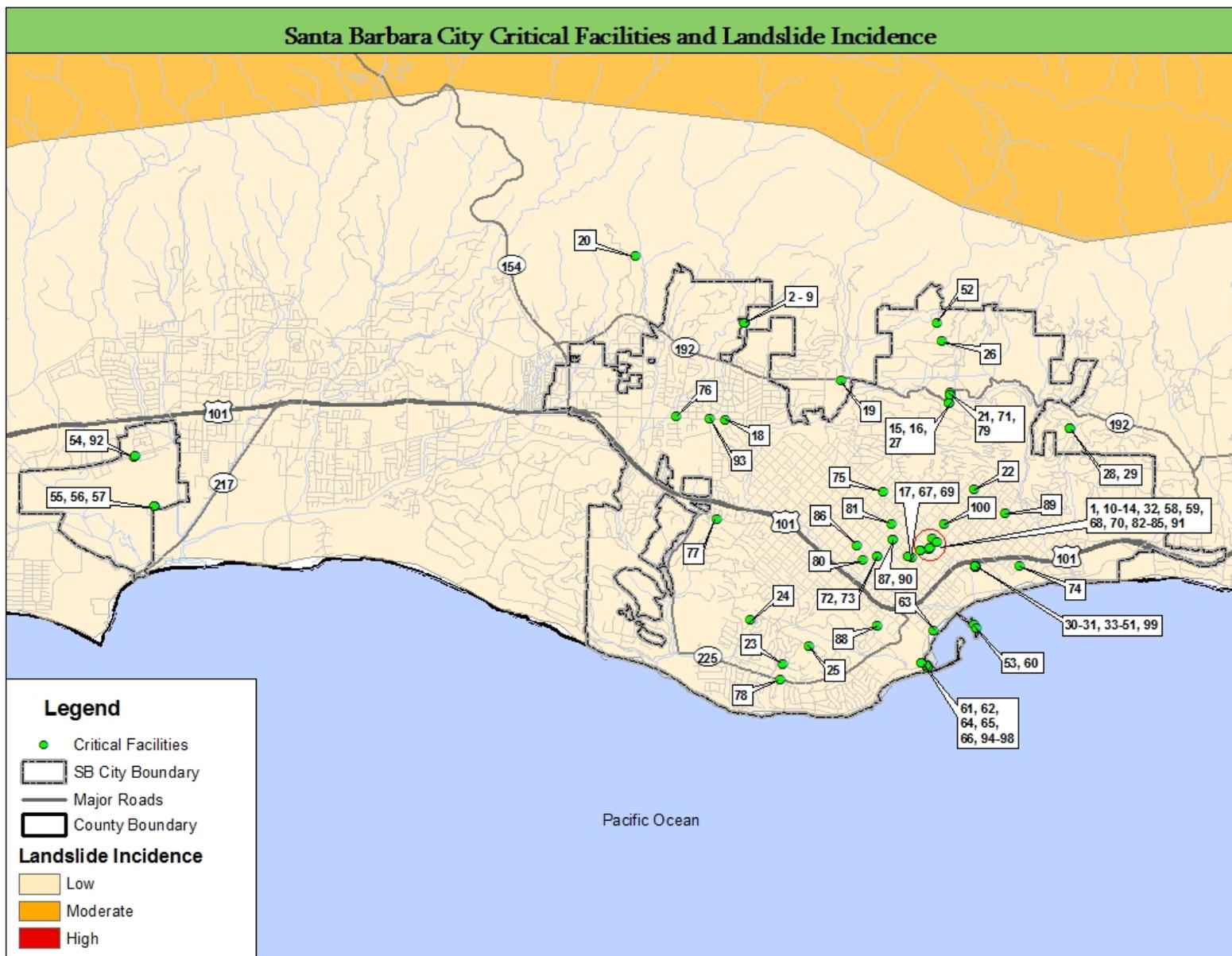
EXHIBIT

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Landslide Incidence
1	Public Works Yard	\$28,859	\$41,483	\$70,342	Low
2	HEADHOUSE / OPERATIONS	\$5,383,441	\$2,226,907	\$7,610,348	Low
3	OPERATIONS ANNEX	\$1,728,609	\$805,333	\$2,533,942	Low
4	SEDIMENTATION / FLOCCULATION BASINS	\$8,355,812	\$1,073,778	\$9,429,590	Low
5	EQUALIZATION BASIN	\$1,227,260	\$80,533	\$1,307,793	Low
6	SOLIDS RECOVERY BASIN	\$1,566,715	\$134,222	\$1,700,937	Low
7	SCC BOOSTER STATION	\$123,770	\$805,333	\$929,103	Low
8	RESERVOIR - 5.0 MG	\$2,558,968	\$0	\$2,558,968	Low
9	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Low
10	ORTEGA WELL TRMT PLANT	\$120,194	\$1,170,976	\$1,291,170	Low
11	ORTEGA WELL TRMT PLANT	\$65,066	\$0	\$65,066	Low
12	ORTEGA WELL TRMT PLANT	\$197,512	\$0	\$197,512	Low
13	PUBLIC WORKS	\$56,446	\$0	\$56,446	Low
14	ORTEGA WELL TRMT PLANT	\$0	\$821,905	\$821,905	Low
15	SHEFFIELD TRMT PLANT	\$1,655,085	\$512,674	\$2,167,759	Low
16	SHEFFIELD TRMT PLANT	\$0	\$145,580	\$145,580	Low
17	PUBLIC WORKS	\$211,986	\$0	\$211,986	Low
18	CLORINATION ROOM	\$18,846	\$24,958	\$43,804	Low
19	PUBLIC WORKS	\$0	\$123,448	\$123,448	Low
20	TUNNELL RESERVOIR	\$0	\$181,377	\$181,377	Low
21	EL CIELITO	\$0	\$320,777	\$320,777	Low
22	HOPE RESERVOIR	\$0	\$138,435	\$138,435	Low
23	CALLE LAS CALERAS	\$0	\$72,676	\$72,676	Low
24	ESCONDIDO PUMP STATION	\$0	\$134,440	\$134,440	Low
25	VIC TRACE	\$0	\$192,852	\$192,852	Low
26	SKOFIELD PUMP STATION	\$0	\$155,235	\$155,235	Low
27	PUBLIC WORKS	\$132,101	\$264,487	\$396,588	Low

Map ID	Critical Facility	Real Property	Personal Property	Total Value	EXHIBIT
					Landslide Incidence
28	PUBLIC WORKS	\$8,088	\$50,712	\$58,800	Low
29	BOTHIN PUMP STATION	\$80,075	\$134,306	\$214,381	Low
30	MAIN DESALINATION PLANT	\$18,800,578	\$0	\$18,800,578	Low
31	SCADA / MCC BUILDING	\$70,189	\$80,533	\$150,722	Low
32	PUBLIC WORKS YARD	\$0	\$185,413	\$185,413	Low
33	ADMINISTRATION BUILDING	\$819,392	\$365,084	\$1,184,476	Low
34	LAB BUILDING	\$1,140,569	\$536,889	\$1,677,458	Low
35	MAINTENANCE SHOP	\$822,108	\$268,444	\$1,090,552	Low
36	FLOTATION & GRAVITY THICKENER TANKS	\$559,735	\$102,009	\$661,744	Low
37	DIGESTERS #1, #2 & CONTROL BUILDING	\$4,418,135	\$322,133	\$4,740,268	Low
38	COGENERATION PLANT	\$52,224	\$375,822	\$428,046	Low
39	SLUDGE HANDLING BUILDING	\$2,945,424	\$2,684,443	\$5,629,867	Low
40	SLUDGE HOLDING TANK & CONTROL BUILDING	\$1,472,712	\$214,755	\$1,687,467	Low
41	ELECTRICAL SUBSTATION A	\$198,450	\$161,066	\$359,516	Low
42	INFLUENT PUMP STATION	\$1,925,911	\$1,342,222	\$3,268,133	Low
43	PRIMARY / SECONDARY SEDIMENTATION & AERATION TANKS	\$26,785,600	\$3,221,332	\$30,006,932	Low
44	RECLAIM FILTERS	\$920,915	\$107,378	\$1,028,293	Low
45	CHLORINE BUILDING & SODIUM HYPOCHLORITE STATION	\$344,678	\$375,822	\$720,500	Low
46	CHLORINE CONTACT TANK & BISULFITE FACILITY	\$1,227,260	\$322,133	\$1,549,393	Low
47	RECLAIM CHLORINE CONTACT & DISTRIBUTION	\$1,441,795	\$536,889	\$1,978,684	Low
48	RECLAIM WATER STORAGE TANK	\$511,794	\$26,844	\$538,638	Low
49	OUTFALL MIXING BOX	\$34,468	\$80,533	\$115,001	Low
50	OUTFALL STRUCTURE	\$2,088,953	\$0	\$2,088,953	Low
51	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Low
52	Skofield park	\$0	\$75,732	\$75,732	Low
53	STEARNS WHARF	\$0	\$65,797	\$65,797	Low
54	AIRPORT	\$3,224,298	\$0	\$3,224,298	Low
55	AIRPORT	\$23,030	\$64,577	\$87,607	Low
56	AIRPORT TERMINAL	\$52,746,000	\$0	\$52,746,000	Low

Map ID	Critical Facility	Real Property	Personal Property	Total Value	EXHIBIT Landslide Incidence
57	NEW AIRLINE TERMINAL	\$33,000,000	\$0	\$33,000,000	Low
58	PUBLIC WORKS YARD	\$263,169	\$39,332	\$302,501	Low
59	PUBLIC WORKS YARD	\$425,755	\$21,293	\$447,048	Low
60	STEARNS WHARF	\$17,565	\$140,644	\$158,209	Low
61	HARBOR	\$346,873	\$25,098	\$371,971	Low
62	HARBOR	\$260,156	\$66,325	\$326,481	Low
63	HARBOR	\$143,289	\$0	\$143,289	Low
64	HARBOR	\$177,232	\$0	\$177,232	Low
65	Harbor	\$177,232	\$0	\$177,232	Low
66	HARBOR	\$398,028	\$0	\$398,028	Low
67	Colin Campbell Cooper - Art Collection	\$0	\$4,185,000	\$4,185,000	Low
68	FINANCE	\$367,922	\$12,864	\$380,786	Low
69	CITY HALL	\$302,240	\$128,643	\$430,883	Low
70	COMM DEVEL	\$2,339,719	\$536,281	\$2,876,000	Low
71	FIRE STANWOOD	\$46,062	\$0	\$46,062	Low
72	FIRE	\$2,270,158	\$257,043	\$2,527,201	Low
73	FIRE	\$0	\$103,695	\$103,695	Low
74	FIRE	\$164,235	\$23,258	\$187,493	Low
75	FIRE	\$398,103	\$33,492	\$431,595	Low
76	FIRE	\$301,897	\$0	\$301,897	Low
77	FIRE	\$222,999	\$74,362	\$297,361	Low
78	FIRE	\$0	\$30,400	\$30,400	Low
79	FIRE	\$210,527	\$22,231	\$232,758	Low
80	FIRE	\$0	\$2,088	\$2,088	Low
81	Police Department Headquarters	\$5,982,173	\$1,789,158	\$7,771,331	Low
82	PUBLIC WORKS YARD	\$0	\$15,633	\$15,633	Low
83	PUBLIC WORKS YARD	\$0	\$12,567	\$12,567	Low
84	PUBLIC WORKS YARD	\$1,411,366	\$328,688	\$1,740,054	Low
85	ADMIN WELL CORP. @ PARKS DEPARTMENT	\$8,229	\$59,280	\$67,509	Low

Map ID	Critical Facility	Real Property	Personal Property	Total Value	EXHIBIT
					Landslide Incidence
86	RECREATION	\$478,013	\$24,680	\$502,693	Low
87	RECREATION	\$839,248	\$23,560	\$862,808	Low
88	LOWER WESTSIDE COMM. CTR	\$62,652	\$0	\$62,652	Low
89	FRANKLIN COMM CENTER	\$1,157,885	\$26,759	\$1,184,644	Low
90	RECREATION	\$3,408,716	\$76,014	\$3,484,730	Low
91	RECREATION	\$576,799	\$33,842	\$610,641	Low
92	Airport	\$10,527	\$72,081	\$82,608	Low
93	Public Works	\$140,039	\$377,317	\$517,356	Low
94	Marina 1	\$11,475,428	\$0	\$11,475,428	Low
95	Marina 2	\$2,157,857	\$0	\$2,157,857	Low
96	Marina 3	\$2,280,296	\$0	\$2,280,296	Low
97	Marina 4	\$2,137,768	\$0	\$2,137,768	Low
98	Navy Pier	\$1,873,745	\$0	\$1,873,745	Low
99	Desalination Chemical Site	\$744,190	\$161,066	\$905,256	Low
100	Ortega Well	\$295,400	\$0	\$295,400	Low
	Exposure	\$222,966,543	\$29,830,971	\$252,797,514	
	Count of Facilities Impacted				0
	% of Facilities Impacted				0%



Source: Landslide Incidence and Susceptibility in the Conterminous US, National Atlas available at <http://www.nationalatlas.gov/atlasftp.html#lsoverp>, September 2002, Prepared by USGS

14.5.6 Dam Failure Vulnerability

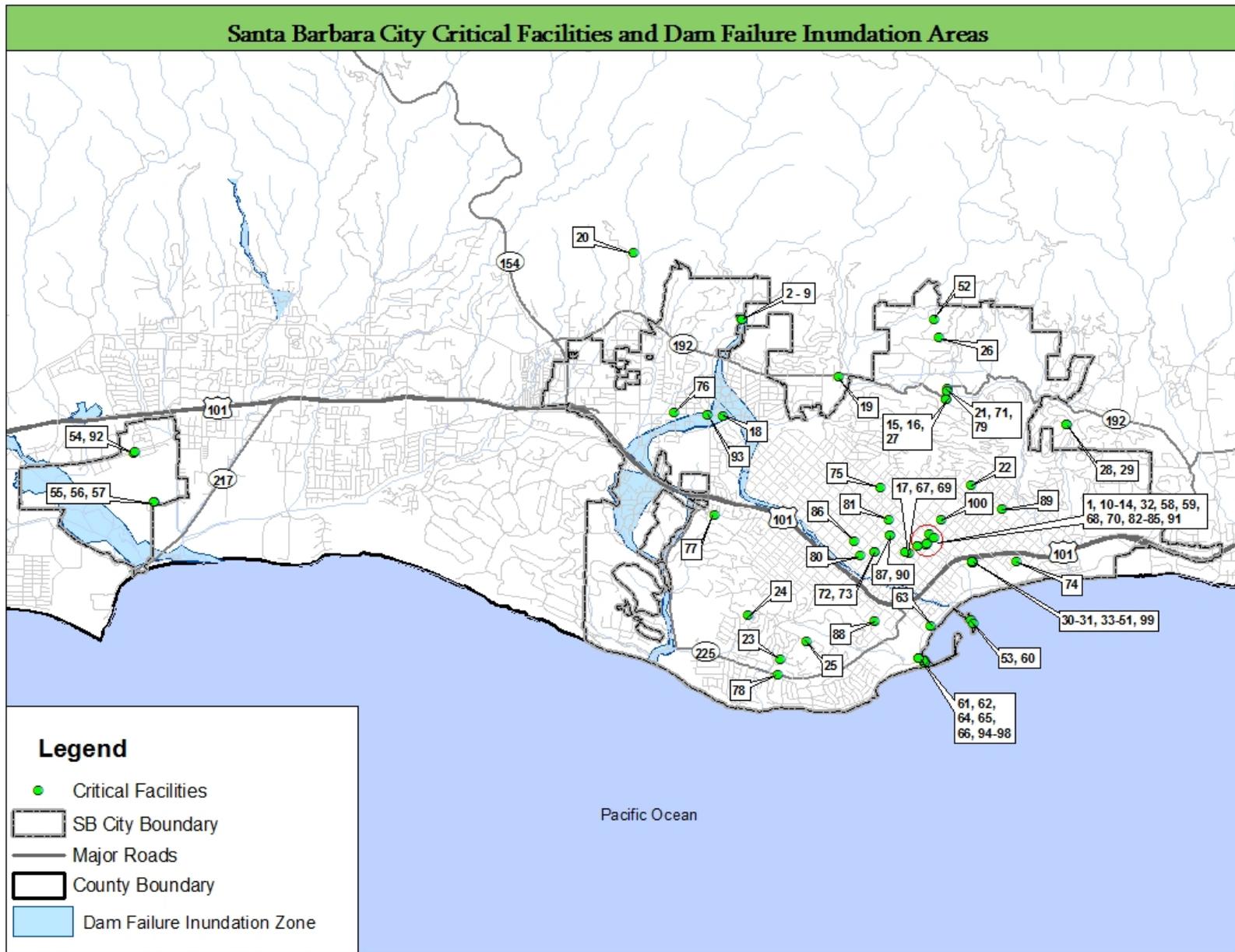
EXHIBIT

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Dam Inundation Zone
1	Public Works Yard	\$28,859	\$41,483	\$70,342	Outside Dam Inundation Zone
2	HEADHOUSE / OPERATIONS	\$5,383,441	\$2,226,907	\$7,610,348	Outside Dam Inundation Zone
3	OPERATIONS ANNEX	\$1,728,609	\$805,333	\$2,533,942	Outside Dam Inundation Zone
4	SEDIMENTATION / FLOCCULATION BASINS	\$8,355,812	\$1,073,778	\$9,429,590	Outside Dam Inundation Zone
5	EQUALIZATION BASIN	\$1,227,260	\$80,533	\$1,307,793	Outside Dam Inundation Zone
6	SOLIDS RECOVERY BASIN	\$1,566,715	\$134,222	\$1,700,937	Outside Dam Inundation Zone
7	SCC BOOSTER STATION	\$123,770	\$805,333	\$929,103	Outside Dam Inundation Zone
8	RESERVOIR - 5.0 MG	\$2,558,968	\$0	\$2,558,968	Outside Dam Inundation Zone
9	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Outside Dam Inundation Zone
10	ORTEGA WELL TRMT PLANT	\$120,194	\$1,170,976	\$1,291,170	Outside Dam Inundation Zone
11	ORTEGA WELL TRMT PLANT	\$65,066	\$0	\$65,066	Outside Dam Inundation Zone
12	ORTEGA WELL TRMT PLANT	\$197,512	\$0	\$197,512	Outside Dam Inundation Zone
13	PUBLIC WORKS	\$56,446	\$0	\$56,446	Outside Dam Inundation Zone
14	ORTEGA WELL TRMT PLANT	\$0	\$821,905	\$821,905	Outside Dam Inundation Zone
15	SHEFFIELD TRMT PLANT	\$1,655,085	\$512,674	\$2,167,759	Outside Dam Inundation Zone
16	SHEFFIELD TRMT PLANT	\$0	\$145,580	\$145,580	Outside Dam Inundation Zone
17	PUBLIC WORKS	\$211,986	\$0	\$211,986	Outside Dam Inundation Zone
18	CLORINATION ROOM	\$18,846	\$24,958	\$43,804	Lauro Dam Inundation Zone
19	PUBLIC WORKS	\$0	\$123,448	\$123,448	Outside Dam Inundation Zone
20	TUNNELL RESERVOIR	\$0	\$181,377	\$181,377	Outside Dam Inundation Zone
21	EL CIELITO	\$0	\$320,777	\$320,777	Outside Dam Inundation Zone
22	HOPE RESERVOIR	\$0	\$138,435	\$138,435	Outside Dam Inundation Zone
23	CALLE LAS CALERAS	\$0	\$72,676	\$72,676	Outside Dam Inundation Zone
24	ESCONDIDO PUMP STATION	\$0	\$134,440	\$134,440	Outside Dam Inundation Zone
25	VIC TRACE	\$0	\$192,852	\$192,852	Outside Dam Inundation Zone
26	SKOFIELD PUMP STATION	\$0	\$155,235	\$155,235	Outside Dam Inundation Zone
27	PUBLIC WORKS	\$132,101	\$264,487	\$396,588	Outside Dam Inundation Zone

Map ID	Critical Facility	Real Property	Personal Property	Total Value	EXHIBIT
					Dam Inundation Zone
28	PUBLIC WORKS	\$8,088	\$50,712	\$58,800	Outside Dam Inundation Zone
29	BOTHIN PUMP STATION	\$80,075	\$134,306	\$214,381	Outside Dam Inundation Zone
30	MAIN DESALINATION PLANT	\$18,800,578	\$0	\$18,800,578	Outside Dam Inundation Zone
31	SCADA / MCC BUILDING	\$70,189	\$80,533	\$150,722	Outside Dam Inundation Zone
32	PUBLIC WORKS YARD	\$0	\$185,413	\$185,413	Outside Dam Inundation Zone
33	ADMINISTRATION BUILDING	\$819,392	\$365,084	\$1,184,476	Outside Dam Inundation Zone
34	LAB BUILDING	\$1,140,569	\$536,889	\$1,677,458	Outside Dam Inundation Zone
35	MAINTENANCE SHOP	\$822,108	\$268,444	\$1,090,552	Outside Dam Inundation Zone
36	FLOTATION & GRAVITY THICKENER TANKS	\$559,735	\$102,009	\$661,744	Outside Dam Inundation Zone
37	DIGESTERS #1, #2 & CONTROL BUILDING	\$4,418,135	\$322,133	\$4,740,268	Outside Dam Inundation Zone
38	COGENERATION PLANT	\$52,224	\$375,822	\$428,046	Outside Dam Inundation Zone
39	SLUDGE HANDLING BUILDING	\$2,945,424	\$2,684,443	\$5,629,867	Outside Dam Inundation Zone
40	SLUDGE HOLDING TANK & CONTROL BUILDING	\$1,472,712	\$214,755	\$1,687,467	Outside Dam Inundation Zone
41	ELECTRICAL SUBSTATION A	\$198,450	\$161,066	\$359,516	Outside Dam Inundation Zone
42	INFLUENT PUMP STATION	\$1,925,911	\$1,342,222	\$3,268,133	Outside Dam Inundation Zone
43	PRIMARY / SECONDARY SEDIMENTATION & AERATION TANKS	\$26,785,600	\$3,221,332	\$30,006,932	Outside Dam Inundation Zone
44	RECLAIM FILTERS	\$920,915	\$107,378	\$1,028,293	Outside Dam Inundation Zone
45	CHLORINE BUILDING & SODIUM HYPOCHLORITE STATION	\$344,678	\$375,822	\$720,500	Outside Dam Inundation Zone
46	CHLORINE CONTACT TANK & BISULFITE FACILITY	\$1,227,260	\$322,133	\$1,549,393	Outside Dam Inundation Zone
47	RECLAIM CHLORINE CONTACT & DISTRIBUTION	\$1,441,795	\$536,889	\$1,978,684	Outside Dam Inundation Zone
48	RECLAIM WATER STORAGE TANK	\$511,794	\$26,844	\$538,638	Outside Dam Inundation Zone
49	OUTFALL MIXING BOX	\$34,468	\$80,533	\$115,001	Outside Dam Inundation Zone
50	OUTFALL STRUCTURE	\$2,088,953	\$0	\$2,088,953	Outside Dam Inundation Zone
51	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Outside Dam Inundation Zone
52	Skofield park	\$0	\$75,732	\$75,732	Outside Dam Inundation Zone
53	STEARNS WHARF	\$0	\$65,797	\$65,797	Outside Dam Inundation Zone
54	AIRPORT	\$3,224,298	\$0	\$3,224,298	Outside Dam Inundation Zone
55	AIRPORT	\$23,030	\$64,577	\$87,607	Outside Dam Inundation Zone

Map ID	Critical Facility	Real Property	Personal Property	Total Value	EXHIBIT
					Dam Inundation Zone
56	AIRPORT TERMINAL	\$52,746,000	\$0	\$52,746,000	Outside Dam Inundation Zone
57	NEW AIRLINE TERMINAL	\$33,000,000	\$0	\$33,000,000	Outside Dam Inundation Zone
58	PUBLIC WORKS YARD	\$263,169	\$39,332	\$302,501	Outside Dam Inundation Zone
59	PUBLIC WORKS YARD	\$425,755	\$21,293	\$447,048	Outside Dam Inundation Zone
60	STEARNS WHARF	\$17,565	\$140,644	\$158,209	Outside Dam Inundation Zone
61	HARBOR	\$346,873	\$25,098	\$371,971	Outside Dam Inundation Zone
62	HARBOR	\$260,156	\$66,325	\$326,481	Outside Dam Inundation Zone
63	HARBOR	\$143,289	\$0	\$143,289	Outside Dam Inundation Zone
64	HARBOR	\$177,232	\$0	\$177,232	Outside Dam Inundation Zone
65	Harbor	\$177,232	\$0	\$177,232	Outside Dam Inundation Zone
66	HARBOR	\$398,028	\$0	\$398,028	Outside Dam Inundation Zone
67	Colin Campbell Cooper - Art Collection	\$0	\$4,185,000	\$4,185,000	Outside Dam Inundation Zone
68	FINANCE	\$367,922	\$12,864	\$380,786	Outside Dam Inundation Zone
69	CITY HALL	\$302,240	\$128,643	\$430,883	Outside Dam Inundation Zone
70	COMM DEVEL	\$2,339,719	\$536,281	\$2,876,000	Outside Dam Inundation Zone
71	FIRE STANWOOD	\$46,062	\$0	\$46,062	Outside Dam Inundation Zone
72	FIRE	\$2,270,158	\$257,043	\$2,527,201	Outside Dam Inundation Zone
73	FIRE	\$0	\$103,695	\$103,695	Outside Dam Inundation Zone
74	FIRE	\$164,235	\$23,258	\$187,493	Outside Dam Inundation Zone
75	FIRE	\$398,103	\$33,492	\$431,595	Outside Dam Inundation Zone
76	FIRE	\$301,897	\$0	\$301,897	Outside Dam Inundation Zone
77	FIRE	\$222,999	\$74,362	\$297,361	Outside Dam Inundation Zone
78	FIRE	\$0	\$30,400	\$30,400	Outside Dam Inundation Zone
79	FIRE	\$210,527	\$22,231	\$232,758	Outside Dam Inundation Zone
80	FIRE	\$0	\$2,088	\$2,088	Outside Dam Inundation Zone
81	Police Department Headquarters	\$5,982,173	\$1,789,158	\$7,771,331	Outside Dam Inundation Zone
82	PUBLIC WORKS YARD	\$0	\$15,633	\$15,633	Outside Dam Inundation Zone
83	PUBLIC WORKS YARD	\$0	\$12,567	\$12,567	Outside Dam Inundation Zone
84	PUBLIC WORKS YARD	\$1,411,366	\$328,688	\$1,740,054	Outside Dam Inundation Zone

Map ID	Critical Facility	Real Property	Personal Property	Total Value	EXHIBIT
					Dam Inundation Zone
85	ADMIN WELL CORP. @ PARKS DEPARTMENT	\$8,229	\$59,280	\$67,509	Outside Dam Inundation Zone
86	RECREATION	\$478,013	\$24,680	\$502,693	Outside Dam Inundation Zone
87	RECREATION	\$839,248	\$23,560	\$862,808	Outside Dam Inundation Zone
88	LOWER WESTSIDE COMM. CTR	\$62,652	\$0	\$62,652	Outside Dam Inundation Zone
89	FRANKLIN COMM CENTER	\$1,157,885	\$26,759	\$1,184,644	Outside Dam Inundation Zone
90	RECREATION	\$3,408,716	\$76,014	\$3,484,730	Outside Dam Inundation Zone
91	RECREATION	\$576,799	\$33,842	\$610,641	Outside Dam Inundation Zone
92	Airport	\$10,527	\$72,081	\$82,608	Outside Dam Inundation Zone
93	Public Works	\$140,039	\$377,317	\$517,356	Lauro Dam Inundation Zone
94	Marina 1	\$11,475,428	\$0	\$11,475,428	Outside Dam Inundation Zone
95	Marina 2	\$2,157,857	\$0	\$2,157,857	Outside Dam Inundation Zone
96	Marina 3	\$2,280,296	\$0	\$2,280,296	Outside Dam Inundation Zone
97	Marina 4	\$2,137,768	\$0	\$2,137,768	Outside Dam Inundation Zone
98	Navy Pier	\$1,873,745	\$0	\$1,873,745	Outside Dam Inundation Zone
99	Desalination Chemical Site	\$744,190	\$161,066	\$905,256	Outside Dam Inundation Zone
100	Ortega Well	\$295,400	\$0	\$295,400	Outside Dam Inundation Zone
	Exposure	\$222,966,543	\$29,830,971	\$252,797,514	\$561,160
	Count of Facilities Impacted				2
	% of Facilities Impacted				2%



Source: Santa Barbara County Flood Control and Water Conservation District

14.5.7 Tsunami Vulnerability

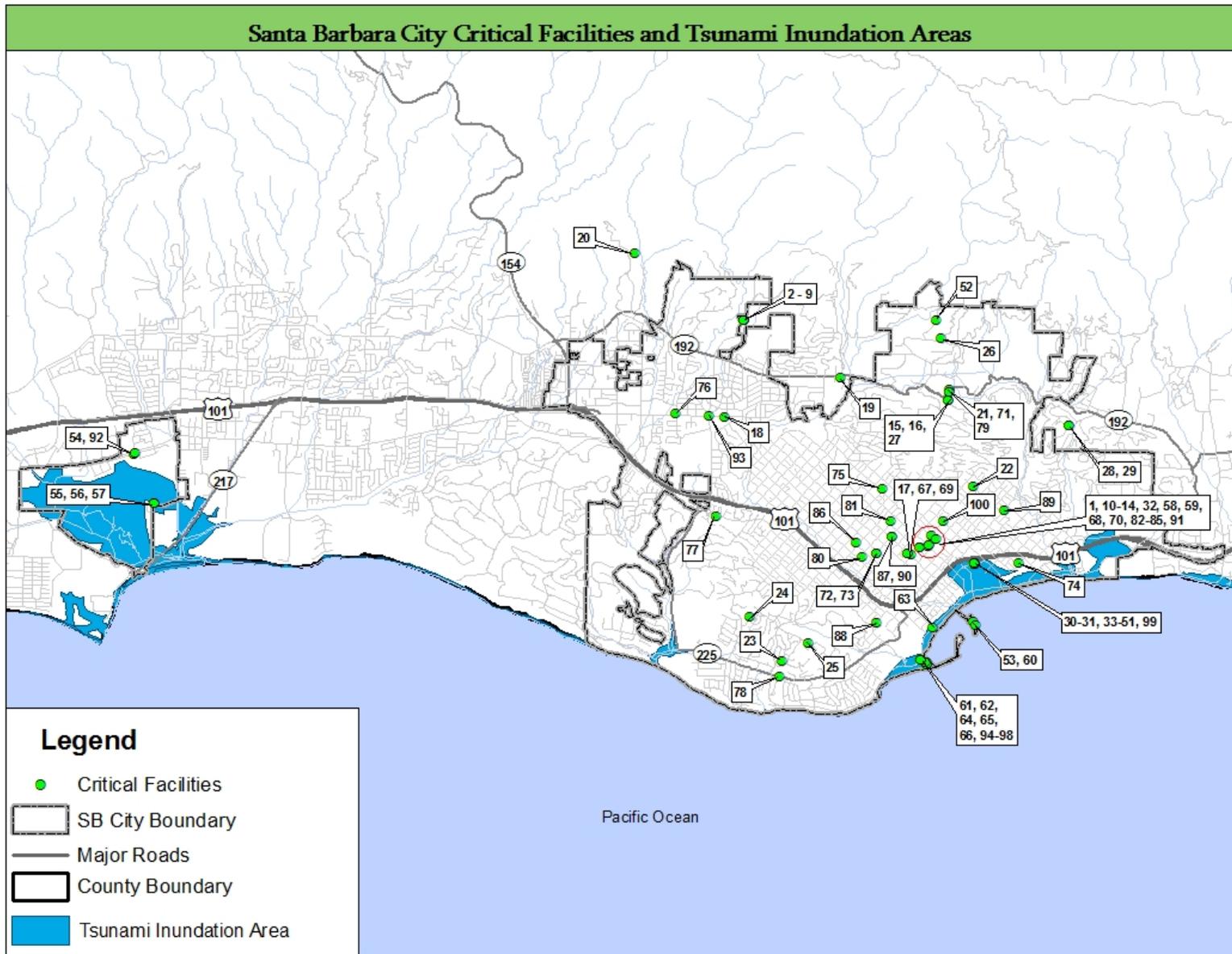
EXHIBIT

Map ID	Critical Facility	Real Property	Personal Property	Total Value	Tsunami Inundation Area
1	Public Works Yard	\$28,859	\$41,483	\$70,342	Outside Tsunami Inundation Area
2	HEADHOUSE / OPERATIONS	\$5,383,441	\$2,226,907	\$7,610,348	Outside Tsunami Inundation Area
3	OPERATIONS ANNEX	\$1,728,609	\$805,333	\$2,533,942	Outside Tsunami Inundation Area
4	SEDIMENTATION / FLOCCULATION BASINS	\$8,355,812	\$1,073,778	\$9,429,590	Outside Tsunami Inundation Area
5	EQUALIZATION BASIN	\$1,227,260	\$80,533	\$1,307,793	Outside Tsunami Inundation Area
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7	SCC BOOSTER STATION	\$123,770	\$805,333	\$929,103	Outside Tsunami Inundation Area
8	RESERVOIR - 5.0 MG	\$2,558,968	\$0	\$2,558,968	Outside Tsunami Inundation Area
9	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Outside Tsunami Inundation Area
10	ORTEGA WELL TRMT PLANT	\$120,194	\$1,170,976	\$1,291,170	Outside Tsunami Inundation Area
11	ORTEGA WELL TRMT PLANT	\$65,066	\$0	\$65,066	Outside Tsunami Inundation Area
12	ORTEGA WELL TRMT PLANT	\$197,512	\$0	\$197,512	Outside Tsunami Inundation Area
13	PUBLIC WORKS	\$56,446	\$0	\$56,446	Outside Tsunami Inundation Area
14	ORTEGA WELL TRMT PLANT	\$0	\$821,905	\$821,905	Outside Tsunami Inundation Area
15	SHEFFIELD TRMT PLANT	\$1,655,085	\$512,674	\$2,167,759	Outside Tsunami Inundation Area
16	SHEFFIELD TRMT PLANT	\$0	\$145,580	\$145,580	Outside Tsunami Inundation Area
17	PUBLIC WORKS	\$211,986	\$0	\$211,986	Outside Tsunami Inundation Area
18	CLORINATION ROOM	\$18,846	\$24,958	\$43,804	Outside Tsunami Inundation Area
19	PUBLIC WORKS	\$0	\$123,448	\$123,448	Outside Tsunami Inundation Area
20	TUNNELL RESERVOIR	\$0	\$181,377	\$181,377	Outside Tsunami Inundation Area
21	EL CIELITO	\$0	\$320,777	\$320,777	Outside Tsunami Inundation Area
22	HOPE RESERVOIR	\$0	\$138,435	\$138,435	Outside Tsunami Inundation Area
23	CALLE LAS CALERAS	\$0	\$72,676	\$72,676	Outside Tsunami Inundation Area
24	ESCONDIDO PUMP STATION	\$0	\$134,440	\$134,440	Outside Tsunami Inundation Area
25	VIC TRACE	\$0	\$192,852	\$192,852	Outside Tsunami Inundation Area
26	SKOFIELD PUMP STATION	\$0	\$155,235	\$155,235	Outside Tsunami Inundation Area
27	PUBLIC WORKS	\$132,101	\$264,487	\$396,588	Outside Tsunami Inundation Area

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29	BOTHIN PUMP STATION	\$80,075	\$134,306	\$214,381	Outside Tsunami Inundation Area
30	MAIN DESALINATION PLANT	\$18,800,578	\$0	\$18,800,578	Within Tsunami Inundation Area
31	SCADA / MCC BUILDING	\$70,189	\$80,533	\$150,722	Within Tsunami Inundation Area
32	PUBLIC WORKS YARD	\$0	\$185,413	\$185,413	Outside Tsunami Inundation Area
33	ADMINISTRATION BUILDING	\$819,392	\$365,084	\$1,184,476	Within Tsunami Inundation Area
34	LAB BUILDING	\$1,140,569	\$536,889	\$1,677,458	Within Tsunami Inundation Area
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45	CHLORINE BUILDING & SODIUM HYPOCHLORITE STATION	\$344,678	\$375,822	\$720,500	Within Tsunami Inundation Area
46	CHLORINE CONTACT TANK & BISULFITE FACILITY	\$1,227,260	\$322,133	\$1,549,393	Within Tsunami Inundation Area
47	RECLAIM CHLORINE CONTACT & DISTRIBUTION	\$1,441,795	\$536,889	\$1,978,684	Within Tsunami Inundation Area
48	RECLAIM WATER STORAGE TANK	\$511,794	\$26,844	\$538,638	Within Tsunami Inundation Area
49	OUTFALL MIXING BOX	\$34,468	\$80,533	\$115,001	Within Tsunami Inundation Area
50	OUTFALL STRUCTURE	\$2,088,953	\$0	\$2,088,953	Within Tsunami Inundation Area
51	UNDERGROUND PROCESS PIPE T/O PLANT	\$0	\$0	\$0	Within Tsunami Inundation Area
52	Skofield park	\$0	\$75,732	\$75,732	Outside Tsunami Inundation Area
53	STEARNS WHARF	\$0	\$65,797	\$65,797	Outside Tsunami Inundation Area
54	AIRPORT	\$3,224,298	\$0	\$3,224,298	Outside Tsunami Inundation Area
55	AIRPORT	\$23,030	\$64,577	\$87,607	Within Tsunami Inundation Area

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58	PUBLIC WORKS YARD	\$263,169	\$39,332	\$302,501	Outside Tsunami Inundation Area
59	PUBLIC WORKS YARD	\$425,755	\$21,293	\$447,048	Outside Tsunami Inundation Area
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66	HARBOR	\$398,028	\$0	\$398,028	Within Tsunami Inundation Area
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72	FIRE	\$2,270,158	\$257,043	\$2,527,201	Outside Tsunami Inundation Area
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74	FIRE	\$164,235	\$23,258	\$187,493	Outside Tsunami Inundation Area
75	FIRE	\$398,103	\$33,492	\$431,595	Outside Tsunami Inundation Area
76	FIRE	\$301,897	\$0	\$301,897	Outside Tsunami Inundation Area
77	FIRE	\$222,999	\$74,362	\$297,361	Outside Tsunami Inundation Area
78	FIRE	\$0	\$30,400	\$30,400	Outside Tsunami Inundation Area
79	FIRE	\$210,527	\$22,231	\$232,758	Outside Tsunami Inundation Area
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81	Police Department Headquarters	\$5,982,173	\$1,789,158	\$7,771,331	Outside Tsunami Inundation Area
82	PUBLIC WORKS YARD	\$0	\$15,633	\$15,633	Outside Tsunami Inundation Area
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					Tsunami Inundation Area
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86	RECREATION	\$478,013	\$24,680	\$502,693	Outside Tsunami Inundation Area
87	RECREATION	\$839,248	\$23,560	\$862,808	Outside Tsunami Inundation Area
88	LOWER WESTSIDE COMM. CTR	\$62,652	\$0	\$62,652	Outside Tsunami Inundation Area
89	FRANKLIN COMM CENTER	\$1,157,885	\$26,759	\$1,184,644	Outside Tsunami Inundation Area
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94	Marina 1	\$11,475,428	\$0	\$11,475,428	Within Tsunami Inundation Area
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96	Marina 3	\$2,280,296	\$0	\$2,280,296	Within Tsunami Inundation Area
97	Marina 4	\$2,137,768	\$0	\$2,137,768	Within Tsunami Inundation Area
98	Navy Pier	\$1,873,745	\$0	\$1,873,745	Within Tsunami Inundation Area
99	Desalination Chemical Site	\$744,190	\$161,066	\$905,256	Within Tsunami Inundation Area
100	Ortega Well	\$295,400	\$0	\$295,400	Outside Tsunami Inundation Area
	Exposure	\$222,966,543	\$29,830,971	\$252,797,514	\$186,258,811
	Count of Facilities Impacted				36
	% of Facilities Impacted				36%



Source: Tsunami Runup Limits, Santa Barbara County GIS available at http://www.countyofsb.org/itd/gis/default.aspx?id=2802&ekmense=e2f22c9a_486_496_btnlink, September 2009.

14.6 MITIGATION STRATEGY

In preparation of the 2011 update of this plan, the City's Local Planning Team made minor revisions to the Countywide goals and objectives to better reflect the needs for the City. This section contains the City's updated and most current mitigation strategy as of July 2011.

14.6.1 Mitigation Priorities

The City's LPT accepted and agreed to the following Goals and Objectives.

Goal 1: Promote disaster-resistant future development.
<i>Objective 1.A: Facilitate the development or updating of the Comprehensive Plan, City's General Plans and zoning ordinances to limit (or ensure safe) development in hazard areas.</i>
<i>Objective 1.B: Facilitate the adoption of building codes and development regulations that protect existing assets and require disaster resistant design for new development in hazard areas.</i>
<i>Objective 1.C: Facilitate consistent enforcement of the comprehensive plan, zoning ordinances, and building codes.</i>
<i>Objective 1.D: Address identified data limitations regarding the lack of information about new development and build-out potential in high hazard areas.</i>
<i>Objective 1.E: Educate the professional community on design and construction techniques that will minimize damage from the identified hazards.</i>
Notes: This goal focuses on the programmatic/policy approaches to reducing risk to future new development. Building Codes are updated on a regular basis in California. The MAC agreed the objectives for this goal are ongoing to ensure that the best and most recent building and fire codes are adopted in each of the participating jurisdictions. Both the 2010 Building and Fire codes were adopted by the City of Santa Barbara in January 2011.
Goal 2: Building support capacity and commitment for existing assets, including people, critical facilities/infrastructure, and public facilities, to become less vulnerable to hazards.
<i>Objective 2.A: Increase awareness and knowledge of hazard mitigation principles and practice among local officials.</i>
<i>Objective 2.B: Promote programs to enable citizens and business owners to sufficiently prepare for and appropriately react to disasters.</i>
<i>Objective 2.C: Address data limitations identified in Hazard Profiling and Risk Assessment.</i>
<i>Objective 2.D: Decrease the vulnerability of public infrastructure including facilities,</i>

<i>roadways and utilities.</i>
<i>Objective 2.E: Protect existing structures with the highest relative vulnerability to the effects of identified hazards through structural mitigation projects.</i>
Notes: This goal focuses on the programmatic and structural approaches to reducing risk to existing development
Goal 3: Enhance hazard mitigation coordination and communication.
<i>Objective 3.A: Educate the public to increase awareness of hazards, potential impact, and opportunities for mitigation actions.</i>
<i>Objective 3.B: Monitor and publicize the effectiveness of mitigation actions implemented citywide.</i>
<i>Objective 3.C: Participate in initiatives that have mutual hazard mitigation benefits for the City, County and Special Districts.</i>
<i>Objective 3.D: Encourage other organizations, within the public, private, and non-profit sectors, to incorporate hazard mitigation activities into their existing programs and plans.</i>
<i>Objective 3.E: Continue partnerships between the County and local governments to identify, prioritize, and implement mitigation actions.</i>
<i>Objectives 3.F: Continuously improve the City's capability and efficiency at administering pre-and post-disaster mitigation programs, including providing technical support to special districts.</i>
<i>Objective 3.G: Support coordinated permitting activities process and consistent enforcement.</i>
Note: This goal focuses on communication and coordination required for successful mitigation of risk.

14.6.2 Mitigation Progress

The City's Local Planning Team reviewed the mitigation actions listed in the 2004 plan to determine the status of each action. This following table includes only the actions that have been completed or were underway as of June 2011.

Ultimately, all of these projects will be completed and are no longer necessary for consideration by the LPT regarding implementation approaches. Mitigation actions identified for future implementation are presented in the following section.

Table 14-10 Completed and In-Progress Mitigation Actions

2004 Plan Action #	Mitigation Action Description	Status	Completion Date	Comments
GEN 1	Stearns Wharf Emergency Generator	Completed	2008	
GEN 3	Computerize Messaging and Display Functions in Emergency Operations Center	Completed	2008	
GEN 4	Citywide GIS	Completed	2008	
FLD 1	Verhelle Bridge Replacement	Completed	2008	
FLD 2	Westside Storm Drain, Phase 2	Completed	2008	
FLD 3	Improvement of Airport Storm Drain Networks 1, 2, 4, 5, 6, and 8	Completed		
FLD 8	Force Main Removal and Replacement	Completed		
WDF 1	Wildland Fire Plan	Completed	2005	
WDF 2	Park Space Vegetative Fuel Management	Completed		
LSD-3	Honda Valley Park Access Road Creek Crossing	Completed	2005	
LSD-6	Honda Valley Erosion Improvements	Completed	2005	
LSD-8	Municipal Golf Course Reclaimed Water Reservoir Soil Stabilization	Completed	2004	
T/CS-3	Obtain National Weather Service "Storm Ready" Designation	Completed	8/25/2009	The City of Santa Barbara obtained StormReady designation from the National Weather Service in August of 2009. The City is working on gaining its TsunamiReady designation at this time.
FLD 5	Sycamore Creek Channel at Highway 101	In Progress	10/2012	Environmental Review in progress; construction to begin the summer of 2012
FLD 6	Sycamore Creek Channel Improvements	In Progress	10/2013	Public Works applied for a DRI grant, which was approved and PW is waiting for funding. Bridge at Punta Gorda potentially funded by a grant, the rest of the channel is unfunded
FLD 7	Develop and Implement Andree Clark Bird Refuge Management and Sedimentation Plan-Vegetation Management and Restoration Plan	In Progress	2017	Construction being conducted in increments – part of five year plan
FLD 9	Lower Mission Creek	In Progress	2015	Permitting in process, bridges at Cabrillo and Mason to be completed in 2015, however remaining work remains unfunded

Table 14-10 Completed and In-Progress Mitigation Actions				
2004 Plan Action #	Mitigation Action Description	Status	Completion Date	Comments
FLD 13	Firestone Road Storm Drain Installation, From Cass Place to Burns Place	In Progress		
T/CS -1	Breakwater Cap Rehabilitation/Reinforcement Plan	In Progress	2020	One extension out of five completed, currently waiting on funding
T/CS -2	Tsunami Warning System	In Progress	01/2012	Signs have gone before the City's Sign Committee and have been approved. Will be working with other City Departments to put up signs in designated areas of the inundation area

The following table presents mitigation actions identified in the 2004 plan that have not been completed and are being removed from consideration. The rationale is explained for each project in the comments column.

Table 14-11 Deleted Mitigation Actions				
2004 Plan Action #	Mitigation Action Description	Status	Completion Date	Comments
GEN 2	Stearns Wharf Pedestrian Walkway Expansion	Deleted		Cost and feasibility
FLD 11	Stabilize Creek Banks	Deleted		Too broad and site specific – will reassess all creeks in 2012
FLD 14	Municipal Tennis Stadium Facility Flood Mitigation Plan	Deleted		Due to no funding sources
EQ -1	Seismic Retrofit of Single Family Dwellings	Deleted		Due to no funding sources

14.6.3 Mitigation Approach

The City of Santa Barbara Local Hazard Mitigation Planning Team (LHMPT) set the Mitigation Action priorities as a Team. The prioritization process was done by identifying the projects that involved life, property, and the environment. The LHMPT also considered emergency response and access and key City infrastructure. The prioritization score shows the order of priority from 1 to 16 with 1 being the highest priority project. The LHMPT ranked action number 2011-11 High Fire Area Roadways as the top priority project.

The following table presents mitigation actions identified in the 2004 plan that were deferred and those that have been added to this plan by the LHMPT in August 2011. The projects that were deferred were given new action numbers in the format of 2011 - # to allow all the current actions to be numbered. The priority given to the project is identified in the right hand column "Prioritization". As actions are added in

future updates they will be numbered in similar format to allow for tracking the year each action was added to the list (e.g. 2012 - #). The actions below and their status will be tracked and updated as appropriate by the City's Office of Emergency Services and the City Emergency Managers Task Team.

Table 14-12 Future Mitigation Actions				
Mitigation Action #	Mitigation Action Description	Status	Comments	Prioritization
2011-1	Pedregosa Storm Drain	Deferred	Previously FLD-4 from 2004 – construction will significantly reduce flooding in the Mission Creek area around Pedregosa	15
2011-2	Replacement Storm Drain Outfall (Airport)	Deferred	Previously FLD- 10 from 2004 – This project is planned but not budgeted. Significant reduction in flooding on Hollister Avenue	8
2011-3	Flood Wall Construction (Airport)	Deferred	Previously FLD- 12 from 2004 – Eliminate frequent water intrusion into nearby buildings	10
2011-4	Honda Valley Hillside Stabilization in location of High Pressure Gas Line Serving City	Deferred	Previously LSD-4 from 2004- High pressure gas line serving the City is location in an areas of Honda Valley where stabilization of soil is needed	11
2011-5	Hidden Valley Park Slope Stability	Deferred	Previously LSD-2 from 2004 – Reduce risk to life and property from slides and flooding.	12
2011-6	Stevens Park Eastern Access Erosion Remediation	Deferred	Previously LSD-5 from 2004 – Benefit to secure life and property and the preservation of an effective and ecologically sound creek system.	6
2011-7	Francheschi Park/Mission Ridge Hillside geotechnical stabilization of retaining wall	Deferred	NEW –Previously LSD-1 moved from in-progress to deferred due to lack of funding – retaining wall is crucial to evacuation and emergency response.	14
2011-8	Bluff Retreat Management at Shoreline Park	Deferred	NEW-Previously LSD-7 moved from in-progress to deferred due to lack of funding – This project is on-going	16

Table 14-12 Future Mitigation Actions

Mitigation Action #	Mitigation Action Description	Status	Comments	Prioritization
			due to continuous bluff erosion.	
2011-9	Rebuild 1000 Steps	Deferred	NEW-Previously CE-1 moved from in-progress to deferred due to lack of funding – coastal erosion to beach access.	14
2011-10	Police Department Remodel	NEW	Police building assessed by outside architectural firm as seismically unsound.	3
2011-11	High Fire Area Roadways	NEW	Erosions and landslides due to steep slopes and unreinforced retaining walls will hamper evacuation and emergency response	1
2011-12	Laguna Pump Station	NEW	If the pump station is not replaced and/or repaired there will be massive closures in the downtown area.	2
2011-13	Replace deluge system on Stearns Wharf	NEW	This is life safety equipment is for fire fighting on Stearns Wharf, which is an historical site in the Waterfront area.	9
2011-14	Backup generator for Waterfront Department Operating Center	NEW	Upgraded power needed for Harbor Patrol and Waterfront DOC.	4
2011-15	Waterfront Facility seismic upgrades	NEW	Current Harbor facilities are early 60s' type construction that would not withstand an large earthquake.	7
2011-16	Mesa Lane Coastal Access	NEW	Coastal erosion has already damaged a good portion of this coastal access.	13

14.6.4 Implementation Plan

Mitigation Action # 2011 – 1		Deferred FLD-4 from 2004
Project Description: Pedregosa Storm Drain		
This is a cooperatively funded project of the County Flood Control and the City to solve drainage problem along Pedregosa Avenue to De la Vina Street. This is scheduled to be constructed next year. The affected area is from Mission Creek to Sheridan Avenue vicinity.		
Applicable Hazards		
<p><u>Significant</u></p> <p><input checked="" type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
Existing and Potential Resources: Santa Barbara County Flood Control District Benefits Assessments/Streets Capital Fund - estimated \$700,000		
Responsible Department: Santa Barbara County Flood Control - Tom Fayram, Deputy Public Works Director		
Target Completion Date: ongoing.		
Additional Comments / Status Report: Construction will significantly reduce flooding.		

Mitigation Action # 2011 – 2		Deferred FLD-10 from 2004
Project Description: Replacement Storm Drain Outfall		
Replace steel pipe culvert at Carneros Creek and improve associated drainage channels. As recommended in Santa Barbara Airport “Master Drainage Plan”. This will assist in eliminating over bank flooding along Hollister Ave near Carneros Way up to a 10 year storm event		
Applicable Hazards		
<u>Significant</u>	<u>Moderate</u>	<u>Limited</u>
<input checked="" type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<input type="checkbox"/> Landslide / Coastal Erosion	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami
Existing and Potential Resources: Federal Aviation Administration Grant Funds, FEMA, and Airport Revenue. Design approximately 15,000, Construction approximately 95,000.		
Responsible Department: Owen Thomas Supervising Engineer City of Santa Barbara Airport Department		
Target Completion Date: ongoing.		
Additional Comments / Status Report: This Project is planned but not budgeted. Targeted to complete in 5 Years Planning/Permitting and Design approximately 9 months. Construction time estimated at approximately 60 days. Significant reduction in flooding of Hollister Ave (main through fare) eliminating this traffic hazard for up to 10-year storm event and traffic.		

Mitigation Action # 2011 – 3		Deferred FLD-12 from 2004
Project Description: Flood Wall Construction - Around buildings 223, 304, 314, and 315 to protect these structures from flooding.		
Applicable Hazards		
<p><u>Significant</u></p> <p><input checked="" type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
<p>Existing and Potential Resources: Airport revenue and/or FEMA funds.</p> <p>Design and Construction cost of Storm walls - approximately \$120,000</p>		
<p>Responsible Department: Owen Thomas Supervising Engineer</p> <p>City of Santa Barbara Airport Department</p>		
<p>Target Completion Date: ongoing.</p>		
<p>Additional Comments / Status Report:</p> <p>Eliminate frequent water intrusion into buildings subsequent clean up costs due to storm events, many of which are less than 10 year events.</p>		

Mitigation Action # 2011 – 4

Deferred LSD-4 from 2004

Project Description: Honda Valley Hillside Stabilization in location of High Pressure Gas line Serving the City

An area near a roadway and private property where high pressure gas lines are buried erodes frequently due to runoff and the steepness of the slope. This necessitates stabilization of the continually eroding hillside containing the gas line. An engineering consultant would prepare plans for slope stabilization and native revegetation, and infrastructure relocation if necessary.

- Identify Funding
- Prepare scope of work
- Hire consultation firm to design job
- Acquire all necessary permits.
- Write Specifications
- Bid construction
- Construct project

Applicable Hazards

Significant

- Flooding (including coastal surge)
- Wildfire
- Agriculture (pests and disease)
- Earthquake

Moderate

- Landslide / Coastal Erosion

Limited

- Dam Failure
- Tsunami

Existing and Potential Resources: to be determined

Responsible Department: City of Santa Barbara Parks and Recreation Department working with City of Santa Barbara Public Works and the Gas Company

Target Completion Date: ongoing.

Additional Comments / Status Report: The benefits of public safety and a secure utility delivery would outweigh the likely fiscal costs of planning and implementation of a slope stabilization project.

Mitigation Action # 2011 – 5		Deferred LSD-2 from 2004
Project Description: Hidden Valley Park Slope Stability		
At numerous locations throughout the park, slope stability problems are reoccurring along steep creek banks causing public safety hazards from slides and flooding, as well as stability issues on private and public property that lines the park. Potential hazards to park users and public and private economic losses would be reduces if the slopes were stabilized.		
<ul style="list-style-type: none">• Identify Funding• Hire consultation firm to design job• Acquire all necessary permits.• Write Specifications• Bid construction• Construct project		
Applicable Hazards		
<u>Significant</u>	<u>Moderate</u>	<u>Limited</u>
<input type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Landslide / Coastal Erosion	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami
Existing and Potential Resources: FEMA		
Responsible Department: City of Santa Barbara Parks and Recreation working with County of Santa Barbara Flood Control, and City of Santa Barbara Creeks Division.		
Target Completion Date: ongoing.		
Additional Comments / Status Report: Reduced risk to life and property from slides and flooding would outweigh likely fiscal costs.		

Mitigation Action # 2011 – 6		Deferred LSD-5 from 2004
<p>Project Description: Stevens Park Eastern Access Erosion Remediation</p> <p>The sole emergency access point to the majority of Stevens Park is subject to severe erosion, undercutting, potential slope failure and substantial sedimentation into San Rogue Creek from storm damage and poor drainage. In order to reduce the hazard to life and property from slides and flooding and to maintain a functional flood control system the area must be repaired by means of bank stabilization, revegetation, and appropriate drainage control.</p> <ul style="list-style-type: none"> • Identify Funding • Prepare scope of work • Hire consultation firm to design job • Acquire all necessary permits. • Write Specifications • Bid construction • Construct project 		
Applicable Hazards		
<p><u>Significant</u></p> <p><input type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input checked="" type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
<p>Existing and Potential Resources: to be determined</p>		
<p>Responsible Department: City of Santa Barbara Parks and Recreation Department</p>		
<p>Target Completion Date: ongoing.</p>		
<p>Additional Comments / Status Report: The benefit of secure life and property and the preservation of an effective and ecologically sound creek system would outweigh the likely fiscal costs.</p>		

Mitigation Action # 2011 – 7		Deferred LSD-1 from 2004
Project Description: Francheschi Park/Mission Ridge Hillside geotechnical stabilization of retaining wall Improve storm drain infrastructure improvements.		
Applicable Hazards		
<p><u>Significant</u></p> <p><input type="checkbox"/> Flooding (including coastal surge)</p> <p><input checked="" type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input checked="" type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
Existing and Potential Resources: No Resources		
Responsible Department: Parks & Recreation and Community Development		
Target Completion Date: Undetermined		
<p>Additional Comments / Status Report:</p> <p>Retaining wall is crucial to ingress and egress in the area; especially for evacuation and emergency response</p>		

Mitigation Action # 2011 – 8		Deferred LSD-7 from 2004
<p>Project Description: Bluff Retreat Management at Shoreline Park</p> <p>Since the late 90's the Park's bluff has been subject to numerous slides. Management of sidewalks and parkway needs to be addressed.</p>		
Applicable Hazards		
<p><u>Significant</u></p> <p><input checked="" type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input checked="" type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
<p>Existing and Potential Resources: Currently an unfunded project</p>		
<p>Responsible Department: Parks & Recreation</p>		
<p>Target Completion Date: Undetermined</p>		
<p>Additional Comments / Status Report:</p> <p>Currently the erosion to the park continues and will continue into the future. Keeping the management of sidewalks and vegetation in the area is an on-going issue.</p>		

Mitigation Action # 2011 – 9		Deferred CE-1 from 2004
Project Description: Rebuild 1000 Steps Coastal erosion to the access on the beach has been on-going. The steps need to be rebuilt for safety of coastal access.		
Applicable Hazards		
<u>Significant</u> <input checked="" type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<u>Moderate</u> <input checked="" type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Tsunami
Existing and Potential Resources: Currently an unfunded project		
Responsible Department: Parks & Recreation and Public Works		
Target Completion Date: Undetermined		
Additional Comments / Status Report:		

Mitigation Action # 2011 – 10		NEW
Project Description: Police Department		
Police Building has been assessed by outside architectural firm and has been determined that the building needs seismic renovation.		
Applicable Hazards		
<p><u>Significant</u></p> <p><input type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input checked="" type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
Existing and Potential Resources: Redevelopment Funds and a voter Bond		
Responsible Department: Police Department and Community Development		
Target Completion Date: 2017		
Additional Comments / Status Report:		
Concept designs have been submitted. The Communication Center, housed on the first floor (basement) of the Police Department is in the process of be relocated due to the safety issues. Completion date for the building is dependent on the approval of the voter for the bond measure.		

Mitigation Action # 2011 – 11		NEW
Project Description: High Fire Area Road		
<ul style="list-style-type: none"> • Many steep slopes in the high fire areas are subject to erosion and has already failed in areas in past flooding events • Gravity/unreinforced retaining walls subject to land slide and earthquake 		
Applicable Hazards		
<p><u>Significant</u></p> <p><input type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input checked="" type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input checked="" type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
Existing and Potential Resources: Currently an unfunded project		
Responsible Department: Public Works		
Target Completion Date: Undetermined		
<p>Additional Comments / Status Report:</p> <p>Erosions and landslides will hamper emergency responders from access these high fire areas and will drastically slow down calls times if these roads are hampered.</p>		

Mitigation Action # 2011 – 12		NEW
Project Description: Laguna Pump Station Replace and repair pump station		
Applicable Hazards		
<u>Significant</u> <input type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input checked="" type="checkbox"/> Earthquake	<u>Moderate</u> <input type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami
Existing and Potential Resources: Currently an unfunded project		
Responsible Department: Public Works		
Target Completion Date: Undetermined		
Additional Comments / Status Report: If pump station goes out, the downtown area will have massive closure between Anacapa and Quenientos Street and Ortega and Canon Perdido Street. It will also cause upstream flooding and coastal erosion.		

Mitigation Action # 2011 – 13 **NEW**

Project Description: Replace deluge system on Stearns Wharf

In the past Stearns Wharf, which is an historical site, has suffered three massive fires. The current deluge system is not adequate if there is another fire.

Applicable Hazards

<u>Significant</u>	<u>Moderate</u>	<u>Limited</u>
<input type="checkbox"/> Flooding (including coastal surge) <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<input type="checkbox"/> Landslide / Coastal Erosion	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami

Existing and Potential Resources: Currently an unfunded project; however is part of the Capital Improvement Projects (CIP)

Responsible Department: Waterfront

Target Completion Date: Undetermined

Additional Comments / Status Report:

This is life essential equipment for the wharf

Mitigation Action # 2011 – 14		NEW
Project Description: Backup generator for Waterfront Department Operating Center (DOC) Upgrade power for Harbor Patrol and Department’s DOC		
Applicable Hazards		
<u>Significant</u> <input checked="" type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input checked="" type="checkbox"/> Earthquake	<u>Moderate</u> <input type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Tsunami
Existing and Potential Resources: Waterfront Reserves		
Responsible Department: Waterfront		
Target Completion Date: 2013		
Additional Comments / Status Report: Planning design work is currently being generated		

Mitigation Action # 2011 – 15		NEW
<p>Project Description: Seismic Upgrades to City Facilities in the Harbor</p> <p>Current Harbor facilities are old early 60s type construction – seismic renovation needed for safety</p>		
Applicable Hazards		
<p><u>Significant</u></p> <p><input type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input checked="" type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
<p>Existing and Potential Resources: Currently an unfunded project</p>		
<p>Responsible Department: Waterfront</p>		
<p>Target Completion Date: Undetermined</p>		
<p>Additional Comments / Status Report:</p>		

Mitigation Action # 2011 – 16		NEW
Project Description: Mesa Lane Coastal Access Coastal Erosion has damaged a good portion of the access to the beach.		
Applicable Hazards		
<u>Significant</u> <input checked="" type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<u>Moderate</u> <input checked="" type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Tsunami
Existing and Potential Resources: Currently an unfunded project		
Responsible Department: Parks & Recreation		
Target Completion Date: Undetermined		
Additional Comments / Status Report: A significant storms could element this beach access		

14.7 PLAN MAINTENANCE

Since the last Hazard Mitigation Plan written for the City in 2004, there has not been an official monitoring or maintenance program set in place. The City has not received any hazard mitigation grant funds in that time. This section sets the intention for the City to monitor, evaluate, and update this plan on a regular basis.

The City of Santa Barbara Office of Emergency Services will be responsible for ensuring that this annex is monitored on an on-going basis. The City currently conducts quarterly Emergency Management Task Team (EMTT) meetings that will be the venue for revisiting the LHMP. Bi-annually, the LHMP Annex will be on the EMTT agenda for review and update. Any updates or revisions will be communicated the County. The City will continue to participate in the countywide Mitigation Advisory Committee and attend the annual meeting organized by the County Office of Emergency Management to discuss any items updated/added for future revisions of this plan.

Major disasters affecting the City of Santa Barbara's community, legal changes, notices from Santa Barbara County (lead agency for the County-wide Plan), and other significant events may trigger revisions to this plan or a convening of the Local Planning Team. The City of Santa Barbara local planning team, in collaboration with Santa Barbara County, will determine how often and when the plan should be updated. In order to remain eligible for mitigation grant funding from FEMA, the City is committed to revising the plan at a minimum of every five years.

The City's Emergency Services Manager will contact the county four years after this plan is approved to ensure that the county plans to undertake the plan update process. The jurisdictions within Santa Barbara County should continue to work together on updating this multi-jurisdictional plan.

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

14.7.1 Point of Contact

Comments or suggestions regarding this plan may be submitted at any time to Yolanda McGlinchey, Emergency Services Manager.

Contact information: ymcglinchey@santabarbaraca.gov, 805.564.5711
Santa Barbara City Fire
Office of Emergency Services
121 W. Carrillo Street
Santa Barbara, CA 93101

14.8 ATTACHMENTS

14.8.1 Santa Barbara City Attachment 1: Meeting Documentation

This attachment includes documentation of the meetings conducted within Santa Maria's Local Planning Group separately from the County Mitigation Advisory Committee.



City of Santa Barbara
Fire Department

Memorandum

DATE: November 1, 2010

TO: Executive Management

CC: Joe Poire, Fire Marshal
Emergency Managers Task Team

FROM: Yolanda McGlinchey, Emergency Services Manager

SUBJECT: Local Hazard Mitigation Plan Update

The County Office of Emergency Services has received notice from FEMA that funding for a Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) has been approved. The City of Santa Barbara has agreed to participate in the revision process for this plan. It is the understanding that the City of Santa Barbara shall engage in the following planning process, including, but not limited to:

- Identification of hazards unique to the jurisdiction and not addressed in the master planning document;
- The conduct of a vulnerability analysis and an identification of risks, where they differ from the general planning area;
- The formulation of mitigation goals responsive to public input and development of mitigation actions complementary to those goals. A range of actions must be identified specific for each jurisdiction;
- Demonstration that there has been proactively offered an opportunity for participation in the planning process by all community stakeholders (examples of participation include relevant involvement in any planning process, attending meetings, contributing research, data, or other information, commenting on drafts of the plan, etc.);
- Documentation of an effective process to maintain and implement the plan; and
- Formal adoption of the Multi-jurisdictional Hazard Mitigation Plan by the jurisdiction's governing body (each jurisdiction must officially adopt the plan).

Attached is the Data Collection Checklist that was provided by the consultant that will be working with each jurisdiction. I have taken the checklist and identified Departments/Divisions that need to be a part of the planning process. All time spent on this project by staff will be coded with Project Number # 2211. This will assist in keeping track of our in-kind costs for staff and mileage during this plan revision.

Our first meeting with the consultant was on Tuesday, October 26, 2010, which included the following information:

The deadline date to have the Multi-Jurisdictional Local Hazard Mitigation Plan completed is June 1, 2011. Each jurisdiction will be responsible for the following:

- Selecting a representative to be a part of the Mitigation Action Committee (Emergency Services Manager will represent the City at these meetings)
- Prioritize Hazards within the City
- Each jurisdiction is responsible to supply the consultant with the following:
 - City's General Plan Safety Element
 - Redevelopment Plan
 - Capital Improvements Plan
 - Critical Facilities (GIS shapefile)(Use of these plans will assist in creating mitigation projects for the City)
- Each jurisdiction must adopt by Council the plan as a revision
- Create a way to track public input; as well as open public forums
- All work on the planning process must be coded for time spent on planning, and mileage, which will work for the jurisdictions in-kind contribution. (All meetings and correspondence will be documented by the Emergency Services Manager.)
- Review and update previous mitigation projects and provide status to the consultant
- Create a planning group that identifies all mitigation issues within the jurisdiction (See Data Collection Checklist below)

This project will take staff time to complete. I would like to plan an initial meeting with the Planning Team you assign, for Wednesday, December 1, 2010 at 10:00 a.m. until 11:30 a.m. This meeting will review the project schedule, milestones and clarify project requirements.

Please check the Data Collection Checklist below and provide a staff name for each of the sections from your Department/Division, as appropriate, by Thursday, November 11, 2010.

If you have any questions regarding this project please do not hesitate to contact me at 805-564-5711.

/ym

cc: Richard Abrams, Emergency Manager
County Office of Emergency Services (by e-mail)
Corinne Bartshire, Consultant
Dewberry & Davis (by e-mail)

✓ DATA COLLECTION CHECKLIST

PLANNING, ZONING, ENVIRONMENTAL OR LAND USE DEPARTMENTS

Dept/Division	Information needed for revision of LHMP	Assigned Staff
Planning	A. Future Development / Land Use / Economic Development Plans B. Redevelopment or Housing Plans	
Building & Safety	Historical Preservation Plans	
Zoning	Zoning District Maps	
Zoning and/or Environmental Resources	A. Flood Insurance Rate Maps (FIRM's) or Floodplain Delineation Maps, Watershed Boundaries, Water Bodies B. National Flood Insurance Program (NFIP) Floodplain Management or Community Rating System (CRS) Plans C. Technical Studies and Reports on Floods and Other Natural Hazards (Including the Community's Flood Insurance Study (FIS), if Available)	
Information Systems	Geographic Information System (GIS) data	
Waterfront/Harbor	Future Development / Land Use / Economic Development Plans	
Airport	Future Development / Economic Development Plans	
EMERGENCY MANAGEMENT DEPARTMENTS		
Emergency Management	A. A List of Dates, Locations and Magnitude of Previous Hazard Events (Including the Types and Extent of Damages Caused by the Events) and Photographs B. Emergency Management Plans - (Emergency Response, Recovery, Preparedness, Evacuation and Sheltering, and Other Plans)	Yolanda McGlinchey
Emergency Management/ Finance	Disaster Assistance Obtained From State and Federal Sources; Documentation of Insurance and FEMA / State assistance claims / reimbursements	Yolanda McGlinchey, OES Staff Name Here, Finance
Emergency Management	Current or planned mitigation efforts	Yolanda McGlinchey, Fire Staff Name Here, Fire Staff Name Here, PW Staff Name Here, Harbor Staff Name Here, Airport

✓ DATA COLLECTION CHECKLIST		
PLANNING, ZONING, ENVIRONMENTAL OR LAND USE DEPARTMENTS		
Dept/Division	Information needed for revision of LHMP	Assigned Staff
Emergency Management	National Flood Insurance Program (NFIP) Data: a) Total Number of Community Insurance Policies, b) Identification of Repetitive Loss Properties, and c) Associated Dollar Amount Losses and Number of Events	Yolanda McGlinchey, Fire County Flood Control
ECONOMIC DEVELOPMENT, TRANSPORTATION, AND PUBLIC WORKS DEPARTMENTS		
Finance	Tourist and Local Economic Data	
Transportation	Transportation Plans	
Public Works	Capital Improvement Plans	
Public Works	Storm Water Management Plans	
OTHER		
	Any documents or information pertinent to hazard mitigation	
	Self Regulation – Any codes, regulations, policies, etc. that deal with building construction, renovation, planning, etc.	

Bartshire, Corinne

From: McGlinchey, Yolanda L. [YMcGlinchey@SantaBarbaraCA.gov]
Sent: Monday, December 13, 2010 4:42 PM
To: Badger, Rob; Bartshire, Corinne; Escobar, Santos; Estrella, George; Fulmer, Rick; Hansen, Christopher; Kato, Danny; Kelly, Pat; Kronman, Mick; Ledbetter, John; Lincoln, Tracy; Nelson, Scott; Poire, Joe; Rapp, Nancy; Richard Abrams; Weiss, Bettie
Cc: DiMizio, Andy; Liechti, Ron
Subject: Meeting notes from 12/09/2010
Attachments: 12092010 - Initial Planning meeting r2.doc

Good Afternoon Team:

We had our initial Local Hazard Mitigation Planning Team meeting on Thursday December 9, 2010. I want to thank those that were able to make this initial meeting. I do want to apologize for not inviting a representative from Parks & Recreation and Building & Safety to this meeting. I have attached the notes below from our meeting and am available to answer any questions that I can concerning this meeting.

<<12092010 - Initial Planning meeting r2.doc>>

I have created a Team Page site with a shared documents section for the Team. One of the first assignments is to complete is the Mitigation Action Status that were created in 2004/5 Local Hazard Mitigation Plan. When you look at the excel spread sheet you can see there were several Airport and Parks and Recreation projects that need to be reported on. Please follow the link http://moss/Departments/Fire/OES/LHMP/Shared%20Documents/6_MitigationActionStatus%20-%20PW.xls and you will see that we did some work already on this spreadsheet. This document is due to the Consultant by **Wednesday December 22, 2010**. Please call me and I can walk through the spreadsheet with you if needed; but it is pretty self-explanatory.

Also, for Building and Safety, there is a spreadsheet that needs to capture all of the Critical Facilities within the City. I've attached a link on the type of information that is needed by the Consultant http://moss/Departments/Fire/OES/LHMP/Shared%20Documents/CriticalFacilities_Template.xls

The overall Team Site is located at <http://moss/Departments/Fire/OES/LHMP/default.aspx>. The site will include any announcements from the County and / or Consultant. The site also includes a Document Section, under Documents there are folders for Team Agenda and Notes, and a Calendar with upcoming meetings. You will also find links to the Consultants, Dewberry & Associates, website and the County's Multi-Jurisdictional Hazard Mitigation Plan - 2005. I will continue to update this site as needed.

Lastly, in our meeting I said I would send out what the contractor needs as soon as possible, these are:

- o City's Redevelopment Plan,
- o 5-Year Capital Improvement Plan (currently being revised and will go before Council in 01/2011), and
- o Critical Facilities

As always, if you have any questions or need further clarification please do not hesitate to contact me at ext. 5711.

Thank you all in advance for your time spent on this project. As a reminder please do not forgot to code any time you work on this project to 2211, Mitigation Planning.

See example below...

Microsoft Excel - 102310-110510

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Sheet1 / Sheet2 / Sheet3 /

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“You have no right to anything you have not pursued, for the proof of desire is in the pursuit.”
Mike Murdock

Santa Barbara City Hazard Mitigation Plan Update

LHMP Planning Meeting #1

December 9, 2010 - 1:00pm
City EOC – Station 1




Meeting Objectives

- Plan Update Requirements / Prerequisites
 - Planning Process
 - Mitigation Strategies
 - Risk Assessment
 - Critical Facilities
 - Review Past Mitigation Action Status
 - Plans Maintenance
- City's Goals & Objectives - 2005
- Next Steps
- Adjourn and determine next Planning meeting




Plan Update Prerequisites / Requirements

- **Prerequisites**
 - Adoption - Each participating jurisdiction must provide resolution of adoption
 - Attend multi agency meeting with Consultant
- **Requirements**
 - Planning Process
 - Documentation
 - Public involvement
 - Describe opportunities for neighboring communities, agencies, businesses, academia, non-profits, etc (extended stakeholders)
 - Existing plans, studies, & reports (included in Capabilities Assessment)




Plan Update Requirements

Requirements (cont)

Risk Assessment

- Review Hazard Ranking
- Need to make sure that all Hazards are identified
- Previous occurrences
- Probability of future events
- Assess Vulnerability
- Critical Facilities
- Land use and development trends
- Review 2005 LHMP Mitigation Strategy
 - Identified actions as: completed, in progress, deferred, or deleted & state reasoning.
 - Identify new mitigation actions (based on updated risk assessment)




Plan Update Requirements

Requirements (cont)

- Plan Maintenance Process
 - Monitoring, Evaluating, and Updating the Plan
 - Method and schedule for monitoring, evaluating, and updating the plan
 - Identify completed, deleted, or deferred mitigation actions as a benchmark for progress;
 - Incorporation into Existing Planning Mechanisms
 - Continued Public Involvement




City's Goals & Objectives - 2005

- **Goal 1.** Promote Disaster-resistant future development.
- **Goal 2.** Increase public understanding and support for effective hazard mitigation.
- **Goal 3.** Improve hazard mitigation coordination and communication with Federal, State, County and local government
- **Goal 4.** Develop a commitment to decrease vulnerability to hazards and increase the ability to appropriately respond
- **Goal 5.** Reduce the possibility of damage and losses to people, existing assets, including critical facilities/infrastructure, and public facilities, due to: Floods, Wildfire, Earthquakes, Landslides/Coastal Erosion, Tsunami/Coastal Storm, Dam Failure




Goals & Objectives (County)

- **Goal 1.** Promote Disaster-resistant future development.
- **Goal 2.** Increase public understanding and support for effective hazard mitigation.
- **Goal 3.** Build and support capacity and commitment to become less vulnerable to hazards.
- **Goal 4.** Enhance hazard mitigation coordination and communication with federal, state, local and tribal governments.
- **Goal 5.** Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and County-owned facilities, due to: Floods, Wildfire, Earthquakes, Landslides/Coastal Erosion, Coastal Storm/Tsunami, Dam Failure




It's The City's Plan

The City's responsibility

- Participate in the Team
- Make the final decisions
- Make sure that the plan is feasible and meets our needs

The Consultant -

- Facilitate the process
- Lend technical expertise and consultation
- Do the heavy lifting and dirty work




Next Steps

- **Update City specific risk assessments**
 - Dewberry to develop drafts for review
- **Update capabilities assessments**
 - Dewberry to develop surveys and information request
- **Update Mitigation Strategy**
 - Dewberry to develop drafts for review
 - Discuss collaboratively at MAC Meeting #2
- **Public Participation**
 - Online survey / public meetings
 - Solicit Input from Extended Stakeholders




**Santa Barbara County Operational Area
2011 Hazard Mitigation Plan Update
Meeting Log**

Agenda & Notes

City of Santa Barbara

Date: Thursday December 9, 2010

Time: 10:00 a.m. – 11:00 a.m.

Team Coordinator: Yoli McGlinchey, Emergency Services Mgr.

Attendees:

Rob Badger, Information Systems
Andrew DiMizio, Fire Chief
John Ledbetter, Principle Planner

Joe Poire, Division Chief –Prevention
Mick Kronman, Waterfront Ops
Pat Kelly, City Engineer/Asst. PW Dir.

Discussion Topics:

- **Plan Update Prerequisites / Requirements**
- **Planning Process**
- **Risk Assessment**
- **Mitigation Strategies**
- **City's Goals and Objectives – 2005**
- **Next Steps**
- **Adjournment**

Meeting Outcomes:

Plan Update Prerequisites / Requirements

As a prerequisite OES will work on the Resolution adopting the Revised LHMP that needs to be done when the Draft plan is submitted

Yoli reviewed with the Team the following requirement:

- **FEMA** requires that there be a narrative on the planning process, including who participated on the Team, public involvement is a huge part of the planning process and it needs to be well documented, as well as documenting how outside agencies are involved in the planning process. There also needs to be documentation on how the Team reviewed and analyzed each section of the plan. Including the process for which the LHMP is incorporated into existing City plans.

- **Risk Assessment**

There was discussion regarding the types of risk assessment associated with the City. Yoli said that the Consultant will need to have shape files that show the Hazard areas within the City. Yoli gave out a copy of the Consultants FTP site, username and password, so that the files can be uploaded. John Ledbetter said he would contact the Consultant and copy both Yoli and County OES. John stated that hazard maps have already been created.

Chief DiMizio wanted to know if the Consultant needed information on hazards such as transportation, hazardous materials, or utilities. Yoli said she would ask the Consultant and

County OES then advise the Team. Pat Kelly suggested that all materials requested by the Consultant be delivered then let the Consultant will tell us what is still needed. The Team felt this was a good idea.

Yoli shared that the City also needs to identify critical facilities, however, since Building and Safety was not in attendance Yoli will need to contact them separately regarding this issue. The critical facilities will also need to be part of the shape files that are given to the consultant. The shape files will need to identify types and numbers of existing buildings located in the hazard area, as well as, types and numbers of future buildings located in hazard areas. Also, the Consultant will need to have any land use and development trends within the City.

- **Mitigation Strategies**

Yoli reviewed the Mitigation Action Checklist from 2005, which is due to the consultant by **Wednesday December 22, 2010**. The Team worked on most of the list, but Yoli will be sending it out the departments that were not present at this meeting.

There was also discussion on the plan maintenance process. Joe Poire asked if the Action Items from the original Plan were tracked. Yoli said no, it wasn't the case during the original planning process; however, it is what will be done for the revised Plan. As part of the requirement, the City needs to have a process in place for reviewing and updating the plan before the next revision in five years.

City Goals & Objectives

Yoli shared with the Team the Goals that were created in 2005. Then she showed the County current Goals and Objectives. It was decided to keep the same goals and develop new objectives.

Next Steps

Yoli reminded the Team that as part of the direction for revising the Plan, the Team needs to participate in the creation of the Plan. This would include attending as many meetings as possible, including making sure the plan is feasible to the City's needs.

As a note, the Consultant will develop drafts for review, develop surveys and information requests, assist with online surveys / public meetings, and solicit input from extended stakeholders.

OES will be developing a Team Site on SharePoint to place all information on that pertains to the planning process. This will assist with documentation and assist with getting input from other department staff.

There was also discussion regarding public participation using the City's Website. As one suggestion OES would put the draft plan on their website and add a generic e-mail for comments. Yoli also said that OES could use Facebook to get public comments. There was a question about getting the information out to the public. Yoli said that there would be many media releases, as well as, radio interviews. 1240 AM has agreed to have Yoli on to interview her about the plan. Also, OES will work with County OES and other agencies to put a link to the City's plan on their site. We will also be working with the Consultant to have public forums.

As an Action Item, Yoli said that there are several items that the Consultant needs electronically, these include: the City's Redevelopment Plan, 5-Year Capital Improvement Plan, and Critical Facilities list. Pat Kelly stated that the 5-Year Capital Improvement Plan will be adopted by the City Council in the middle of January 2011.

**NOTE: Notes not in order of discussion...*

Bartshire, Corinne

From: McGlinchey, Yolanda L. [YMcGlinchey@SantaBarbaraCA.gov]
Sent: Friday, March 25, 2011 2:36 PM
To: Badger, Rob; Bartshire, Corinne; Escobar, Santos; Estrella, George; Fulmer, Rick; Hansen, Christopher; Kato, Danny; Kelly, Pat; Kronman, Mick; Ledbetter, John; Lincoln, Tracy; Nelson, Scott; Poire, Joe; Richard Abrams; Weiss, Bettie; Zachary, Jill
Subject: Notes from Second Planning Meeting-Including Assignments
Attachments: 030911- 2nd Planning Meeting.doc

I've attached the notes from our 2nd Planning Meeting. Unfortunately, the participation was limited so we were not able to go through the documents that are needed by the Consultant. I've placed all the materials on the SharePoint site with due dates for each document in the Title. Listed below are the materials that you or one of staff need to review.

<<030911- 2nd Planning Meeting.doc>>

I am on vacation next week but will be periodically checking my e-mails in case you have any questions.

The documents are:

Due Apr 8th - City's Goals and Objectives, you will need to review both the County and City Goals and let me know if you have any comments or revisions

Due Apr 11th - Critical Facilities - File name: 2010-06-23 Scheduel with values by Program - The consultant wants to know if we want to add all the critical facilities on this list or do we want to delete some

Due Apr 11th - County Hazard Ranking - Do we want to keep the same ranking - with or without Agriculture

Due Apr 15th - Review Department Responsibilitieis - Plan - Capabilities - The are by department so please forward as you see appropriate. I'll make sure the Library get's a copy for them to review. Make any changes necessary.

Due Apr 30 - I will plan a meeting before this to start looking at previous and future projects.

Again, thank you all for you valuable assistance in getting these documents completed in a timely manner so that there is no delay in what the Consultant needs to complete.

NOTE: Ignore the 2011 SB County Hazard Mitigation Plan Survey that has now been completed. Also, Scott I can't delete it, can you help?

Thanks again!

<http://moss/Departments/Fire/OES/LHMP/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fDepartments%2fFire%2fOES%2fLHMP%2fShared%20Documents%2fDated%20Team%20Materials&FolderCTID=&View=%7bC75952F8%2d12F9%2d411D%2dB47C%2dFE0164A7D685%7d>

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*"If we all did the things we are really capable of doing, we would literally astound ourselves...."
 Thomas Edison*

**Santa Barbara County Operational Area
2011 Hazard Mitigation Plan Update
Meeting Log**

Agenda & Notes

City of Santa Barbara

Date: Wednesday March 9, 2011

Time: 1:30 p.m. – 3:00 p.m.

Team Coordinator: Yoli McGlinchey, Emergency Services Mgr.

Attendees:

Rob Badger, Information Systems	Scott Nelson, Information Systems
Danny Kato, Community Development	Santos Escobar, Parks & Recreation
Richard Abrams, County OES	

Discussion Topics:

- **Modifications to the Hazard Ranking**
- **Comments on the revised County Goals/Objectives for 2011**
- **City Goals/Objectives for 2011**
- **Comments on the draft public survey**
- **Adjournment**

Meeting Outcomes:

There was a light attendance by the Planning Team, so Yoli reviewed some of the materials that are still needed by the consultant. Yoli let the attendees know that she will be putting all the documentation on the SharePoint site and sending all the materials out to the full Team that will include due dates.

Below is a synopsis of the meeting below.

Modifications to the Hazard Ranking

Yoli reviewed the County Hazard Rankings and asked if there were any keeping the same ranking that the County had identified. Due to the limited number of participants Yoli will be sending the Hazard Ranking to the rest of the Planning Team to get their input. However, participants at this meeting so no real big issues in keeping the same rankings.

There was some discussion regarding the Golf Course and parks and if these would be considered a part of the agricultural hazards in ranking. Richard said he would check with the consultant and get an answer. The other option would be to delete the Agricultural from the City Hazard Ranking.

NOTE: Received an e-mail from both Richard Abrams and the consultant. The consultant said that if the City wanted to consider the golf course as an asset, it would have to validate it within the plan. This may be something to discuss via e-mail

Yoli will be sending out the Hazard Rankings to the rest of the Planning Team.

Comments on the revised County Goals/Objectives for 2011

Yoli reviewed the County's updated goals using 2004 as a comparison. In the previous goals and objectives the hazards were identified separately, however, the goals and objectives are now more all –risk. Yoli will send the revised County Goals and Objectives for review by the Team.

City Goals/Objectives for 2011

The City's 2004 Goals/Objectives were review by the Team present but there is a need to have the entire Team look at them. Yoli will also put these on the SharePoint site to get comments or revisions.

The next steps will be to review our projects from 2004 and determine if the ones deferred need to be placed into the current plan as projects. The Team will have to look at other mitigation projects that can be included in the plan. Then the Team will need to prioritize the projects and actions to be taken. Then a maintenance plan will need to be developed to review the plan bi-annually. Yoli suggested that this could be done by the Emergency Manager's Task Team during one of their quarterly meetings.

Comments on the draft public survey

Dewberry Consultant created a draft public survey that the Team reviewed. It will also be sent out to the team for review and comment. Yoli would like to have comments back by Wednesday March 16th so that it can be forwarded to the Consultant. *NOTE, as of Monday March 21st only three comments were returned to Yoli. The only comment was the length of the survey. No report was sent to the Consultant. Also note, that the survey is on on-line on the Fire and OES website and will be put on the City's main website within the next week.*

Adjournment

The meeting was adjourned at 2:45 p.m. Next meeting will be determined.

**NOTE: Notes not in order of discussion...*

Bartshire, Corinne

From: McGlinchey, Yolanda L. [YMcGlinchey@SantaBarbaraCA.gov]
Sent: Tuesday, July 05, 2011 10:12 AM
To: Bartshire, Corinne; Doolittle, Tom; Escobar, Santos; Estrella, George; Fulmer, Rick; Hansen, Christopher; Kato, Danny; Kelly, Pat; Kronman, Mick; Ledbetter, John; Lincoln, Tracy; Martel, Armando; Nelson, Scott; Poire, Joe; Richard Abrams; Shelton, Barbara; Weiss, Bettie; Zachary, Jill
Subject: Notes from 6/27 meeting and corresponding documents
Attachments: 062711 - LHMP Planning meeting notes.docx
Importance: High

From our meeting on the 27th, I spoke with Dewberry on Friday 7/11 and incorporated their comments into our notes as appropriate.

In the link below is the City's draft plan where I have made some suggested modification after each Department's section. The County draft Section 4 and 7 are also in the folder to assist you with your portion of the plan. Review all the of the City's draft plan and corresponding materials with by July 20th. I will put out a meeting request for that date so we can sit down and discuss any changes still needed to our City's document. Also, it is important, if you are not able to make the meeting on the 20th that you assign one of your staff familiar with your portion of the plan. As a note, I have placed all our agendas and meeting notes on the SharePoint site from previous meetings.

For those that were not able to make our last meeting on the 27th, listed below are a few highlights that should assist you. Also, read the notes attached to this e-mail for further information.

1. In section 4 of the County's draft plan there is a format they used to address mitigation measures for each department/division. I added suggested verbiage to the City's plan, beginning on page 14-5. For your review, the County's plan department/division descriptions begin on page 4-8. This could assist you in getting your section completed.
2. Review the City's and County's Mitigation Priorities. Dewberry stated that there were differences between the City and County's Goals and Objectives. However, the Committees thought was that it had adopted that Mitigation Priorities that were prioritized by the County. Please review both City and County Goals and objective and give me feedback.
 - a. City – Page 14-47
 - b. County – Section 7, Page 1
3. Mitigation Action sheets needs to be reviewed by Airport, Public Works, and Parks & Recreation – beginning on page 14-52 of the City's draft plan.
4. All departments need to review the Completed and In-Progress Mitigation Actions, page 14-49. Determine if you want to keep any of the deleted projects. If so, we will need to change deleted to deferred on the list and a Mitigation Action Sheet will need to be filled out; Dewberry can send us a template.
5. All departments need to look at mitigation projects for their department and determine which one(s) can be placed into the City's draft plan. Remember that we do have to justify the possible funding for each project. In speaking with Dewberry, since the LHMP is a living document, projects can be changed or added.

<http://moss/Departments/Fire/OES/LHMP/Documents/Forms/All%20Documents.aspx?RootFolder=%2fDepartments%2fFire%2fOES%2fLHMP%2fDocuments%2f070511%20LHMP%20Plan%20Documents&FolderCTID=&View=%7bAAF5C4EC%2d839%2d44BC%2d8BAD%2d53282EEDE91D%7d>

I know that this all seems very daunting but we are almost to the end and you have a done a great job! However, you can request a meeting with me and we can work on your section together if you are having difficulties.

As a note, I've placed the County's draft LHMP plan onto the SharePoint Site for you to review.

Please remember to code your timesheet, 2211 – Hazard Mitigation Planning, so that we can fulfill our in-kind obligation.

Thank you for all your hard work during this process.

Yolanda (Yoli) McGlinchey
Emergency Services Manager
City of Santa Barbara Fire Dept./OES
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805-564-5730 (fax)
ymcglinchey@santabarbaraca.gov
www.santabarbaraca.gov/oes

"We make a living by what we get, but we make a life by what we give."

~ Winston Churchill

**Santa Barbara County Operational Area
2011 Hazard Mitigation Plan Update
Meeting Log**

Agenda & Notes

City of Santa Barbara

Date: Monday June 27, 2011

Time: 10:30 a.m. – 12:00 p.m.

Team Coordinator: Yoli McGlinchey, Emergency Services Mgr.

Attendees:

Andrew DiMizio, Fire Chief	John Ledbetter, Community Development
Joe Poire, Fire Marshal	Mick Kronman, Waterfront/Harbor
Tom Doolittle, Administrative Svcs	Rick Fulmer, Public Works
Tracy Lincoln, Airport	Yoli McGlinchey, Fire/OES

Discussion Topics:

1. Review the draft portion of the **Santa Barbara City Annex** to the plan. Community Development has already submitted their portion of the draft.
 - a. An acknowledgement was made for all the work that Community Development staff had done on getting comments and changes done. Yoli used the comments to review the draft plan with the Local Planning Team (LPT). Listed below are comments that the LPT reviewed:
 - i. There was a question regarding the use of the 2005-2009 American Community Survey. John Ledbetter said that this would be appropriate since the 2010 census had not yet been released. *Action Item: Yoli will delete the comment before submittal to Dewberry.*
 - ii. Structural Hazards – pg. 14-19 - Comment b20 – reference the URM project that was done in the 80s / 90s – *Action Item: Building and Safety needs to update this portion.*
 - iii. Other updates under Flooding, pg. 14-21, include Mission Creek project and Goleta Slough 100 year flood project at the Airport.
 - iv. There were issues with reference numbers in the document that were not relevant to this plan, but possibly the 2004 plan. *Action Item: Yoli will check with Dewberry. Yoli did check with Dewberry on 7/1/11 and the reference numbers are from 2004, so Yoli went through and replaced with an “x”*
 - b. Yoli let the Team know that all comments and changes would be submitted to Dewberry. Yoli needs clarification with Dewberry on the following:

- i. Under City Department description, does Dewberry need a comprehensive profile of the department or should it be scaled down. Note, Yoli was able to open the County's draft plan, with the assistance of IS, and will be reviewing the County's plan to check its content for County department descriptions. *Action Item: Yoli will be sending out Section 4 of the County's draft plan to have a reference for the departments.*
 - ii. Where should threat assessment and department mitigation plans be listed? The LPT made some assumptions as to where it should be placed, but Yoli will review the County plan and talked with Dewberry. *Action Item: Yoli spoke with Dewberry on 7/1/11, and the consultant stated that City department needs to identify how risk is identity in their department/division. Yoli will attach the County Draft Section 4, Capability Assessment the week of 7/4/11, with instructions. In the County's plan; each County department/division identified their response for their role in natural disaster mitigation. Yoli will work on the Plan and add the verbiage to be consistent with the County's Plan.*
 - iii. In regards to Hazard Ranking, there was a question on why HazMat wasn't part of the list. Yoli said she would check with the County and get back to the Team. *Yoli spoke with Dewberry on 7/1/11, the consultant stated that Hazardous Materials could be identified in the plan but their needs to be verbiage on how the responsible department mitigates incidents such as spills, etc.*
- c. Other items discussed:
- i. Maps – there was a question as to whether the maps in the draft documents were consistent with the City's maps. *Action Item: John Ledbetter will check with Adam on the maps. Yoli said she would make sure that Adam had the current Tsunami Inundation map from USC and CGS. – Will be completed on 7/5/11.*
 - ii. Section 14.2.2. – Public Involvement – Yoli said that she would be responsible for this section. *To be completed on 7/5/11*
 - iii. Other departments that still need to review their sections and revise as necessary are City Administrator's Office (*Yoli will send to Linda for Updates*), Police Department, Public Works and Waterfront Department (*Yoli will send Mick K. the Waterfront portion for review and revision as needed*) *Yoli will be sending another revision out to all the departments for input by 7/14/11*
2. **Mitigation Strategies** – New projects - How are we going to implement and prioritize the projects.
- a. Section 14.6.1 – Comment from Dewberry was that the City's Mitigation Priorities were different from the County's, however; these were the goals decided upon by the LPT. *Action Item: Yoli will send out a comparison between the City and County goals and see what the significant difference are and have the LPT determine if we need to review the goals and objectives again.*

3. Review on **Plan Maintenance** of the plan.

- a. Section 14.7 – Plan Maintenance – Yoli reviewed with the LPT that in 2004 there was no process for maintaining the plan. However, since the Emergency Managers Task Team meets quarterly, this Plan will be a part of the agenda for quick review and updates as needed. Yoli will also be attending annual MAC meetings with the County. *Action Item: Yoli will be responsible for revising this section by 7/7/11 before it goes to Dewberry.*

4. Next Steps – what is still needed?

- a. Deferred and/or New Projects need to be identified –
 - i. Did we want to keep the Deferred Projects on the Mitigation Action List for this Plan.
 - Dewberry created Mitigation Action sheets for the following:
 - a. FLD 4 - Pedregosa Storm Drain
 - b. FLD 10 – Replacement Storm Drain Outfall
 - c. FLD 12 - Flood Wall Construction
 - d. LSD 4 – Honda Valley Hillside
 - e. LSD 2 – Hidden Valley Park Slope Stability
 - f. LSD 5 – Stevens Park Eastern Access Erosion Remediation
 - Yoli wanted to know if anyone had given any input regarding these documents, but no one was sure. *Action Items: Yoli will discuss these with Dewberry and send the responsible department the Mitigation Action Sheets for input. Yoli spoke with Dewberry on 7/1/11 and confirmed the City needs to review the sheets and make comments as needed. Yoli will send out sheets to the responsible department.*
 - Did we want any of the deleted projects put back on the list? If so, then we need to have some documentation. *Action Item: Yoli will check with Dewberry and confirm what is needed. See below...*
 - There was discussion on the types of new projects to be placed on the list. Yoli said that each department needs to look at their CIP and decide which, if any, mitigation projects can be placed on the list. Then the LPT will need to prioritize that list. There was a question regarding projects not on the list; and if projects listed on the Mitigation Action List would need to go before Council? Yoli said that if we keep to the identified projects in the CIP, we can always revise the list during the plan maintenance process. *Action Item: Yoli will check with Dewberry on the accuracy of her statement. Yoli spoke with Dewberry on 7/1/11 and the consultant confirmed that deleted projects could be placed back onto the Mitigation Action List. The LPT would need to look at the deleted list and place the projects as deferred in the draft City plan. However, if they are re categorize as*

deferred the responsible department will need to complete a Mitigation Action Sheet for each project. Also, we will want to keep our projects in line with the City's CIP. This however can be changed in the future as projects come up during our plan maintenance meetings.

**Santa Barbara County Operational Area
2011 Hazard Mitigation Plan Update
Meeting Log**

Agenda & Notes

City of Santa Barbara

Date: Monday July 20, 2011

Time: 9:30 a.m. – 11:00 a.m.

Team Coordinator: Yoli McGlinchey, Emergency Services Mgr.

Attendees:

John Ledbetter, Community Development
George Estrella, Building Official
Richard Abrams, County OEM

Santos Escabor, Parks Supervisor
Rick Fulmer, Public Works
Armando Martel, Police

Discussion Topics:

1. Review Final Draft portion of the Santa Barbara City annex

- a. Not all LPT members were present, but the participants in this meeting reviewed the plan. However, wanted to take some time with staff to review.
Action Item: Yoli will send the plan out again to the LPT to review with staff. All corrections to the plan need to be submitted before the next meeting tentatively set for August 31, 2011.
- b. **Mitigation Strategies** – New Projects? How are we going to implement and prioritize the projects (held over from 6/27)
 - i. It was unclear what projects still needed to be added. Yoli discussed with the Team that any and all projects that are mitigation related needed to be in the plan; especially if they are already listed in the Capital Improvement Plan for the City. Also, if there are deleted plans that need to be put on the list, then the team needs to change them from deleted to deferred, which would include an explanation.
 - ii. Two projects were added and discussed. The first project is the retainer walls in the high fire area that could restrict ingress and egress during a major incident. Also, the Police Department building was also discussed and it was agreed upon that this needed to be added as a project mainly because it is vital to the infrastructure of the city. Yoli said that she would send these two new projects out to the team for input. Then at the meeting on August 31st, the LPT will go over every projects. *Action Item: Yoli will resubmit the mitigation actions to the LTP for further review. Then set a meeting for the August 31st.*

c. **Next Steps:**

- i. Yoli will be submitting the draft plan, without the Mitigation Actions, to the Consultant. Once, suggested revisions are received back from the Consultant, Yoli will forward the draft plan once more for input; or to answer questions from the consultant.
- ii. At the August 31st meeting, the LPT will review all comments and all mitigation actions, including prioritizing the list.

Bartshire, Corinne

From: McGlinchey, Yolanda L. [YMcGlinchey@SantaBarbaraCA.gov]
Sent: Wednesday, August 03, 2011 2:51 PM
To: Bartshire, Corinne; Doolittle, Tom; Escobar, Santos; Estrella, George; Fulmer, Rick; Hansen, Christopher; Kato, Danny; Kelly, Pat; Kronman, Mick; Ledbetter, John; Lincoln, Tracy; Martel, Armando; Poire, Joe; Richard Abrams; Shelton, Barbara; Weiss, Bettie; Zachary, Jill
Subject: Mitigation Actions
Attachments: Mitigation Actions.docx

Hello Team:

I spoke with our Consultant yesterday and we are almost towards the finish. The one part of the project that is due is the Mitigation Action Progress, which lists our completed, deleted and deferred projects. As in previous e-mails I have asked for input for these projects. One of the question was whether we wanted to take any of the deleted projects and reassign them as deferred. We also need to set priorities for any projects we list in our plan.

At our last meeting two projects we suggested one being the remodeling of the Police Department and the replace of City owned retaining walls in the high fire area. I've placed those two projects in the list. I am not sure who would take the lead on these projects or where funding is available.

I have also listed a few more items that need to be addressed:

- The consultant will be sending me the survey results we received in the City. I will then send them out to you to review and see if there are any issues, hot topics, etc. that we may need to identify in our plan.
- There was a questions regarding maps in the plan verse City maps. If we want to change any of the maps in the plan please let me know and we can send those to the consultant. If the maps are fine, just let me know. There was a lot of comments in the draft documents regarding maps and the consultant just needs to know who we want to handle those.
- Lastly, I thought we had grants pending on the completion of the plan, mostly for the watersheds. If so we need to incorporate those into the plan. Pat I believe Brian D'Amour was working with FEMA on these?

I will be setting one last meeting in two weeks to finish up the Mitigation Actions/Projects and I will definitely need staff from Community Development, Public Works, Parks & Recreation, Airport , Fire and Police.

I will set the date soon, please review the attached document and send any comments to me or be ready to brief the team when meet.

Thanks again for all you do!

Yoli

**Santa Barbara County Operational Area
2011 Hazard Mitigation Plan Update
Meeting Log**

Agenda & Notes

City of Santa Barbara

Date: Wednesday August 31, 2011

Time: 9:00 a.m. – 11:30 a.m.

Team Coordinator: Yoli McGlinchey, Emergency Services Mgr.

Attendees:

John Ledbetter, Community Development
George Estrella, Building Official
Pat Kelly, Public Works
Jill Zachary, Parks & Recreation

Mick Kronman, Waterfront
Rick Fulmer, Public Works
Armando Martel, Police
Scott Riedman, Waterfront

Discussion Topics:

1. Mitigation Actions – Review of 2004 Projects and Proposed New Projects

- a. The LPT review all Mitigation Actions and revised the following (see attached for updated Mitigation Actions matrix and project sheets):
 - i.* FLD 5, in progress added comment
 - ii.* FLD 6, in progress added comment
 - iii.* FLD7, in progress, revised description and added comments
 - iv.* FLD 9, in progress added comment
 - v.* FLD 11, changed in progress to deleted – the description was too vague, but will reassess in 2012
 - vi.* LSD 1, changed in progress to deferred – added comment, made a new project
 - vii.* LSD 7, changed from in progress to deferred – revised description, added comment, made a new project
 - viii.* CE 1, changed from in progress to deferred – added comment, made a new project
 - ix.* T/CS 1, in progress added comment
- b. New Mitigation Actions Projects include (see attached Mitigation Action Matrix for more information):
 - i.* Pedregosa Storm Drain (FLD 4)
 - ii.* Replacement Storm Drain Outfall (FLD 10)

- iii.* Flood Wall Construction – Around buildings 223, 304, 314 and 315 (FLD 12)
- iv.* Honda Valley Hillside Stabilization in location of high pressure Gasl line serving the City (LSD 4)
- v.* Hidden Valley Park Slope Stability (LSD 2)
- vi.* Stevens Park Eastern Access Erosion Remediation (LSD 5)
- vii.* Francheschi Park/Mission Ridge Hillside geotechnical stabilization of retaining wall (LSD 1)
- viii.* Bluff Retreat Management at Shoreline (LSD 7)
- ix.* Rebuild 1000 steps (CE 1)
- x.* Police Department Remodel – new
- xi.* High Fire Area Roadways – new
- xii.* Laguna Pump Station – new
- xiii.* Replace deluge system on Stearns Wharf – new
- xiv.* Backup generator for Waterfront Department Operating Center – new
- xv.* Waterfront facility seismic upgrades –new
- xvi.* Mesa Lane costal access – new

2. Prioritizing of Projects

- a. The LPT was given the choice to use the STAPLE/E method for prioritizing the Mitigation Action Project List. The Team determined to use the method of determining priority that included determining the projects in accordance with the objectives of life, property, and environment. The LPT took their time listed all the projects and then prioritizing the list by the objectives.

3. Draft Plan Review – Comments from Consultant

- a. The LPT reviewed all comments made by the Consultant in the draft plan. Community Development had already addressed some of the issues before the meeting. Most of the comments were either deleted or revised as necessary. Yoli stated that she would make all corrections and send the draft plan and Mitigation Action to the Consultant by the end of the week.

Table XX.X Completed and In-Progress Mitigation Actions

2004 Plan Action #	Mitigation Action Description	Status	Completion Date	Comments	Prioritization
GEN 1	Stearns Wharf Emergency Generator	Completed	2008		0
GEN 3	Computerize Messaging and Display Functions in Emergency Operations Center	Completed	2008		0
GEN 4	Citywide GIS	Completed	2008		0
FLD 1	Verhelle Bridge Replacement	Completed	2008		0
FLD 2	Westside Storm Drain, Phase 2	Completed	2008		0
FLD 3	Improvement of Airport Storm Drain Networks 1, 2, 4, 5, 6, and 8	Completed			0
FLD 8	Force Main Removal and Replacement	Completed			0
WDF 1	Wildland Fire Plan	Completed	2005		0
WDF 2	Park Space Vegetative Fuel Management	Completed			0
LSD-3	Honda Valley Park Access Road Creek Crossing	Completed	2005		0
LSD-6	Honda Valley Erosion Improvements	Completed	2005		0
LSD-8	Municipal Golf Course Reclaimed Water Reservoir Soil Stabilization	Completed	2004		0
T/CS-3	Obtain National Weather Service "Storm Ready" Designation	Completed	8/25/2009	The City of Santa Barbara obtained StormReady designation from the National Weather Service is August of 2009. The City is working on gaining its TsunamiReady designation at this time.	0
FLD 5	Sycamore Creek Channel at Highway 101	In Progress	10/2012	Environmental Review in progress; construction to begin the summer of 2012	0
FLD 6	Sycamore Creek Channel Improvements	In Progress	10/2013	Public Works applied for a DRI grant, which was approved and PW is waiting for funding. Bridge at Punta Gorda potentially funded by a grant, the rest of the channel is unfunded	0

Table XX.X Completed and In-Progress Mitigation Actions

2004 Plan Action #	Mitigation Action Description	Status	Completion Date	Comments	Prioritization
FLD 7	Develop and Implement Andree Clark Bird Refuge Management and Sedimentation Plan-Vegetation Management and Restoration Plan	In Progress	2017	Construction being conducted in increments – part of five year plan	0
FLD 9	Lower Mission Creek	In Progress	2015	Permitting in process, bridges at Cabrillo and Mason to be completed in 2015, however remaining work remains unfunded	0
FLD 11	Stabilize Creek Banks	In Progress Deleted		Too broad and site specific – will reassess all creeks in 2012	0
FLD 13	Firestone Road Storm Drain Installation, From Cass Place to Burns Place	In Progress			0
LSD-1	Francheschi Park/Mission Ridge Hillside Geotechnical Stabilization	In Progress Deferred		Moved to Deferred and put on Mitigation Action Form due to the fact that this is an unfunded	0
LSD-7	Vegetation Establishment and Erosion Control at Shoreline Park	In Progress Deferred		Moved to Deferred and put on Mitigation Action Form with redefined verbiage by LPT – this is an unfunded project	0
CE-1	Rebuild 1000 Steps Coastal Access Way	In Progress Deferred		Moved to Deferred and put on Mitigation Action Form due to this project being unfunded	0
T/CS -1	Breakwater Cap Rehabilitation/Reinforcement Plan	In Progress	2020	One extension out of five completed, currently waiting on funding	0
T/CS -2	Tsunami Warning System	In Progress	01/2012	Signs have gone before the City's Sign Committee and have been approved. Will be working with other City Departments to put up signs in designated areas of the inundation area	0

The City of Santa Barbara Local Hazard Mitigation Planning Team (LHMPT) set the Mitigation Action priorities as a Team. The prioritization process was done by identifying the projects that involved life, property, and the environment. The LHMPT also considered emergency response and access and key City infrastructure.

The following table presents mitigation actions identified in the 2004 plan that were deferred and those that have been added to this plan by the LHMPT in August 2011. The projects that were deferred were given new action numbers in the format of 2011 - # to allow all the current actions to be numbered. The priority given to the project is identified in the right hand column "Prioritization". As actions are added in future updates they will be numbered in similar format to allow for tracking the year each action was added to the list (e.g. 2012 - #). The actions below and their status will be tracked and updated as appropriate by the City's Office of Emergency Services and the City Emergency Managers Task Team.

Mitigation Approach

Mitigation Action #	Mitigation Action Description	Status	Comments	Prioritization
2011-1	Pedregosa Storm Drain	Deferred	Previously FLD-4 from 2004 – construction will significantly reduce flooding in the Mission Creek area around Pedregosa	15
2011-2	Replacement Storm Drain Outfall (Airport)	Deferred	Previously FLD- 10 from 2004 – This project is planned but not budgeted. Significant reduction in flooding on Hollister Avenue	8
2011-3	Flood Wall Construction (Airport)	Deferred	Previously FLD- 12 from 2004 – Eliminate frequent water intrusion into nearby buildings	10
2011-4	Honda Valley Hillside Stabilization in location of High Pressure Gas Line Serving City	Deferred	Previously LSD-4 from 2004- High pressure gas line serving the City is located in an area of Honda Valley where stabilization of soil is needed	11
2011-5	Hidden Valley Park Slope Stability	Deferred	Previously LSD-2 from 2004 – Reduce risk to life and property from slides and flooding.	12

Mitigation Action #	Mitigation Action Description	Status	Comments	Prioritization
2011-6	Stevens Park Eastern Access Erosion Remediation	Deferred	Previously LSD-5 from 2004 – Benefit to secure life and property and the preservation of an effective and ecologically sound creek system.	6
2011-7	Francheschi Park/Mission Ridge Hillside geotechnical stabilization of retaining wall	Deferred	NEW –Previously LSD-1 moved from in-progress to deferred due to lack of funding – retaining wall is crucial to evacuation and emergency response.	14
2011-8	Bluff Retreat Management at Shoreline Park	Deferred	NEW-Previously LSD-7 moved from in-progress to deferred due to lack of funding – This project is ongoing due to continuous bluff erosion.	16
2011-9	Rebuild 1000 Steps	Deferred	NEW-Previously CE-1 moved from in-progress to deferred due to lack of funding – coastal erosion to beach access.	14
2011-10	Police Department Remodel	NEW	Police building assessed by outside architectural firm as seismically unsound.	3
2011-11	High Fire Area Roadways	NEW	Erosions and landslides due to steep slopes and unreinforced retaining walls will hamper evacuation and emergency response	1
2011-12	Laguna Pump Station	NEW	If the pump station is not replaced and/or repaired there will be massive closures in the downtown area.	2
2011-13	Replace deluge system on Stearns Wharf	NEW	This is life safety equipment is for fire fighting on Stearns Wharf, which is an historical site in the Waterfront area.	9

Mitigation Action #	Mitigation Action Description	Status	Comments	Prioritization
2011-14	Backup generator for Waterfront Department Operating Center	NEW	Upgraded power needed for Harbor Patrol and Waterfront DOC.	4
2011-15	Waterfront Facility seismic upgrades	NEW	Current Harbor facilities are early 60s' type construction that would not withstand an large earthquake.	7
2011-16	Mesa Lane Coastal Access	NEW	Coastal erosion has already damaged a good portion of this coastal access.	13

Implementation Plan

Mitigation Action # 2011 – 1		Deferred FLD-4 from 2004
<p>Project Description: Pedregosa Storm Drain</p> <p>This is a cooperatively funded project of the County Flood Control and the City to solve drainage problem along Pedregosa Avenue to De la Vina Street. This is scheduled to be constructed next year. The affected area is from Mission Creek to Sheridan Avenue vicinity.</p>		
Applicable Hazards		
<p><u>Significant</u></p> <p><input checked="" type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
<p>Existing and Potential Resources: Santa Barbara County Flood Control District Benefits Assessments/Streets Capital Fund - estimated \$700,000</p>		
<p>Responsible Department: Santa Barbara County Flood Control - Tom Fayram, Deputy Public Works Director</p>		
<p>Target Completion Date: ongoing.</p>		
<p>Additional Comments / Status Report:</p> <p>Construction will significantly reduce flooding.</p>		

Mitigation Action # 2011 – 2		Deferred FLD-10 from 2004
<p>Project Description: Replacement Storm Drain Outfall</p> <p>Replace steel pipe culvert at Carneros Creek and improve associated drainage channels. As recommended in Santa Barbara Airport “Master Drainage Plan”. This will assist in eliminating over bank flooding along Hollister Ave near Carneros Way up to a 10 year storm event</p>		
Applicable Hazards		
<p><u>Significant</u></p> <p><input checked="" type="checkbox"/> Flooding (including coastal surge)</p> <p><input type="checkbox"/> Wildfire</p> <p><input type="checkbox"/> Agriculture (pests and disease)</p> <p><input type="checkbox"/> Earthquake</p>	<p><u>Moderate</u></p> <p><input type="checkbox"/> Landslide / Coastal Erosion</p>	<p><u>Limited</u></p> <p><input type="checkbox"/> Dam Failure</p> <p><input type="checkbox"/> Tsunami</p>
<p>Existing and Potential Resources: Federal Aviation Administration Grant Funds, FEMA, and Airport Revenue. Design approximately 15,000, Construction approximately 95,000.</p>		
<p>Responsible Department: Owen Thomas Supervising Engineer City of Santa Barbara Airport Department</p>		
<p>Target Completion Date: ongoing.</p>		
<p>Additional Comments / Status Report: This Project is planned but not budgeted. Targeted to complete in 5 Years Planning/Permitting and Design approximately 9 months. Construction time estimated at approximately 60 days.</p> <p>Significant reduction in flooding of Hollister Ave (main through fare) eliminating this traffic hazard for up to 10-year storm event and traffic.</p>		

Mitigation Action # 2011 – 3		Deferred FLD-12 from 2004
Project Description: Flood Wall Construction - Around buildings 223, 304, 314, and 315 to protect these structures from flooding.		
Applicable Hazards		
<u>Significant</u>	<u>Moderate</u>	<u>Limited</u>
<input checked="" type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<input type="checkbox"/> Landslide / Coastal Erosion	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami
Existing and Potential Resources: Airport revenue and/or FEMA funds. Design and Construction cost of Storm walls - approximately \$120,000		
Responsible Department: Owen Thomas Supervising Engineer City of Santa Barbara Airport Department		
Target Completion Date: ongoing.		
Additional Comments / Status Report: Eliminate frequent water intrusion into buildings subsequent clean up costs due to storm events, many of which are less than 10 year events.		

Mitigation Action # 2011 – 4

Deferred LSD-4 from 2004

Project Description: Honda Valley Hillside Stabilization in location of High Pressure Gas line Serving the City

An area near a roadway and private property where high pressure gas lines are buried erodes frequently due to runoff and the steepness of the slope. This necessitates stabilization of the continually eroding hillside containing the gas line. An engineering consultant would prepare plans for slope stabilization and native revegetation, and infrastructure relocation if necessary.

- Identify Funding
- Prepare scope of work
- Hire consultation firm to design job
- Acquire all necessary permits.
- Write Specifications
- Bid construction
- Construct project

Applicable Hazards

Significant

- Flooding (including coastal surge)
- Wildfire
- Agriculture (pests and disease)
- Earthquake

Moderate

- Landslide / Coastal Erosion

Limited

- Dam Failure
- Tsunami

Existing and Potential Resources: to be determined

Responsible Department: City of Santa Barbara Parks and Recreation Department working with City of Santa Barbara Public Works and the Gas Company

Target Completion Date: ongoing.

Additional Comments / Status Report: The benefits of public safety and a secure utility delivery would outweigh the likely fiscal costs of planning and implementation of a slope stabilization project.

Mitigation Action # 2011 – 5

Deferred LSD-2 from 2004

Project Description: Hidden Valley Park Slope Stability

At numerous locations throughout the park, slope stability problems are reoccurring along steep creek banks causing public safety hazards from slides and flooding, as well as stability issues on private and public property that lines the park. Potential hazards to park users and public and private economic losses would be reduces if the slopes were stabilized.

- Identify Funding
- Hire consultation firm to design job
- Acquire all necessary permits.
- Write Specifications
- Bid construction
- Construct project

Applicable Hazards

Significant

- Flooding (including coastal surge)
- Wildfire
- Agriculture (pests and disease)
- Earthquake

Moderate

- Landslide / Coastal Erosion

Limited

- Dam Failure
- Tsunami

Existing and Potential Resources: FEMA

Responsible Department: City of Santa Barbara Parks and Recreation working with County of Santa Barbara Flood Control, and City of Santa Barbara Creeks Division.

Target Completion Date: ongoing.

Additional Comments / Status Report: Reduced risk to life and property from slides and flooding would outweigh likely fiscal costs.

Mitigation Action # 2011 – 6

Deferred LSD-5 from 2004

Project Description: Stevens Park Eastern Access Erosion Remediation

The sole emergency access point to the majority of Stevens Park is subject to severe erosion, undercutting, potential slope failure and substantial sedimentation into San Rogue Creek from storm damage and poor drainage. In order to reduce the hazard to life and property from slides and flooding and to maintain a functional flood control system the area must be repaired by means of bank stabilization, revegetation, and appropriate drainage control.

- Identify Funding
- Prepare scope of work
- Hire consultation firm to design job
- Acquire all necessary permits.
- Write Specifications
- Bid construction
- Construct project

Applicable Hazards

<u>Significant</u>	<u>Moderate</u>	<u>Limited</u>
<input type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Landslide / Coastal Erosion	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami

Existing and Potential Resources: to be determined

Responsible Department: City of Santa Barbara Parks and Recreation Department

Target Completion Date: ongoing.

Additional Comments / Status Report: The benefit of secure life and property and the preservation of an effective and ecologically sound creek system would outweigh the likely fiscal costs.

Mitigation Action # 2011 – 7		Deferred LSD-1 from 2004
Project Description: Francheschi Park/Mission Ridge Hillside geotechnical stabilization of retaining wall Improve storm drain infrastructure improvements.		
Applicable Hazards		
<u>Significant</u> <input type="checkbox"/> Flooding (including coastal surge) <input checked="" type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<u>Moderate</u> <input checked="" type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami
Existing and Potential Resources: No Resources		
Responsible Department: Parks & Recreation and Community Development		
Target Completion Date: Undetermined		
Additional Comments / Status Report: Retaining wall is crucial to ingress and egress in the area; especially for evacuation and emergency response		

Mitigation Action # 2011 – 8

Deferred LSD-7 from 2004

Project Description: Bluff Retreat Management at Shoreline Park

Since the late 90's the Park's bluff has been subject to numerous slides. Management of sidewalks and parkway needs to be addressed.

Applicable Hazards

Significant

- Flooding (including coastal surge)
- Wildfire
- Agriculture (pests and disease)
- Earthquake

Moderate

- Landslide / Coastal Erosion

Limited

- Dam Failure
- Tsunami

Existing and Potential Resources: Currently an unfunded project

Responsible Department: Parks & Recreation

Target Completion Date: Undetermined

Additional Comments / Status Report:

Currently the erosion to the park continues and will continue into the future. Keeping the management of sidewalks and vegetation in the area is an on-going issue.

Mitigation Action # 2011 – 9

Deferred CE-1 from 2004

Project Description: Rebuild 1000 Steps

Coastal erosion to the access on the beach has been on-going. The steps need to be rebuilt for safety of coastal access.

Applicable Hazards

Significant

- Flooding (including coastal surge)
- Wildfire
- Agriculture (pests and disease)
- Earthquake

Moderate

- Landslide / Coastal Erosion

Limited

- Dam Failure
- Tsunami

Existing and Potential Resources: Currently an unfunded project

Responsible Department: Parks & Recreation and Public Works

Target Completion Date: Undetermined

Additional Comments / Status Report:

Mitigation Action # 2011 – 10		NEW
Project Description: Police Department		
Police Building has been assessed by outside architectural firm and has been determined that the building needs seismic renovation.		
Applicable Hazards		
<u>Significant</u> <input type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input checked="" type="checkbox"/> Earthquake	<u>Moderate</u> <input type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami
Existing and Potential Resources: Redevelopment Funds and a voter Bond		
Responsible Department: Police Department and Community Development		
Target Completion Date: 2017		
Additional Comments / Status Report:		
Concept designs have been submitted. The Communication Center, housed on the first floor (basement) of the Police Department is in the process of be relocated due to the safety issues. Completion date for the building is dependent on the approval of the voter for the bond measure.		

Mitigation Action # 2011 – 11 **NEW**

Project Description: High Fire Area Road

- Many steep slopes in the high fire areas are subject to erosion and has already failed in areas in past flooding events
- Gravity/unreinforced retaining walls subject to land slide and earthquake

Applicable Hazards

<u>Significant</u>	<u>Moderate</u>	<u>Limited</u>
<input type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input checked="" type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Landslide / Coastal Erosion	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami

Existing and Potential Resources: Currently an unfunded project

Responsible Department: Public Works

Target Completion Date: Undetermined

Additional Comments / Status Report:

Erosions and landslides will hamper emergency responders from access these high fire areas and will drastically slow down calls times if these roads are hampered.

Mitigation Action # 2011 – 12		NEW
Project Description: Laguna Pump Station Replace and repair pump station		
Applicable Hazards		
<u>Significant</u> <input type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input checked="" type="checkbox"/> Earthquake	<u>Moderate</u> <input type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami
Existing and Potential Resources: Currently an unfunded project		
Responsible Department: Public Works		
Target Completion Date: Undetermined		
Additional Comments / Status Report: If pump station goes out, the downtown area will have massive closure between Anacapa and Quenientos Street and Ortega and Canon Perdido Street. It will also cause upstream flooding and coastal erosion.		

Mitigation Action # 2011 – 13

NEW

Project Description: Replace deluge system on Stearns Wharf

In the past Stearns Wharf, which is an historical site, has suffered three massive fires. The current deluge system is not adequate if there is another fire.

Applicable Hazards

Significant

- Flooding (including coastal surge)
- Fire
- Agriculture (pests and disease)
- Earthquake

Moderate

- Landslide / Coastal Erosion

Limited

- Dam Failure
- Tsunami

Existing and Potential Resources: Currently an unfunded project; however is part of the Capital Improvement Projects (CIP)

Responsible Department: Waterfront

Target Completion Date: Undetermined

Additional Comments / Status Report:

This is life essential equipment for the wharf

Mitigation Action # 2011 – 14		NEW
Project Description: Backup generator for Waterfront Department Operating Center (DOC) Upgrade power for Harbor Patrol and Department's DOC		
Applicable Hazards		
<u>Significant</u> <input checked="" type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input checked="" type="checkbox"/> Earthquake	<u>Moderate</u> <input type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Tsunami
Existing and Potential Resources: Waterfront Reserves		
Responsible Department: Waterfront		
Target Completion Date: 2013		
Additional Comments / Status Report: Planning design work is currently being generated		

Mitigation Action # 2011 – 15		NEW
Project Description: Seismic Upgrades to City Facilities in the Harbor Current Harbor facilities are old early 60s type construction – seismic renovation needed for safety		
Applicable Hazards		
<u>Significant</u> <input type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input checked="" type="checkbox"/> Earthquake	<u>Moderate</u> <input type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input type="checkbox"/> Tsunami
Existing and Potential Resources: Currently an unfunded project		
Responsible Department: Waterfront		
Target Completion Date: Undetermined		
Additional Comments / Status Report:		

Mitigation Action # 2011 – 16		NEW
Project Description: Mesa Lane Coastal Access Coastal Erosion has damaged a good portion of the access to the beach.		
Applicable Hazards		
<u>Significant</u> <input checked="" type="checkbox"/> Flooding (including coastal surge) <input type="checkbox"/> Wildfire <input type="checkbox"/> Agriculture (pests and disease) <input type="checkbox"/> Earthquake	<u>Moderate</u> <input checked="" type="checkbox"/> Landslide / Coastal Erosion	<u>Limited</u> <input type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Tsunami
Existing and Potential Resources: Currently an unfunded project		
Responsible Department: Parks & Recreation		
Target Completion Date: Undetermined		
Additional Comments / Status Report: A significant storms could element this beach access		

14.8.2 Santa Barbara City Attachment 2: Outreach Materials

This attachment includes website postings, press releases, and newspaper articles demonstrating the City's efforts to engage public and interested stakeholders in the mitigation planning process.



NEWS RELEASE

City of Santa Barbara
Fire Department

Contact: Yolanda McGlinchey
Phone: 805-965-5254
Fax: 805-564-5730
ymcglinchey@santabarbaraca.gov

FOR IMMEDIATE RELEASE
3/25/2011

SANTA BARBARA COUNTY UPDATES HAZARD MITIGATION PLAN *City of Santa Barbara Residents Asked for Input*

SANTA BARBARA, CA – 3/25/11 – Is your home or office building susceptible to damage from earthquakes, wildfires, or floods? Do you want to help increase the likelihood that you can recover from disasters and prevent future damage from these and other natural hazards? Your participation can make our communities more resilient.

With a grant from the Federal Emergency Management Agency (FEMA), the Santa Barbara County Office of Emergency Services is coordinating local efforts to update the County's Hazard Mitigation Plan. This plan identifies natural hazards throughout Santa Barbara County. The plan includes the City of Santa Barbara and presents an assessment of critical facilities vulnerable to these hazards. The plan lists potential actions needed to reduce risk and future damage.

The City of Santa Barbara welcomes citizen participation to ensure development of a strong mitigation strategy. A public survey has been made available online, in the future drafts of the plan will be posted for review, and ultimately the plan will be presented to the City Council. The survey can be found at either one of the following websites: www.santabarbaraca.gov/oes or <http://www.santabarbaraca.gov/Government/Departments/Fire/>

Although the plan enables the County and cities to be eligible for various assistance grants, the plans value really lies in the identification of hazards and helps emergency managers and residents better prepare for disasters. The current hazard mitigation plan is available online at the County [OES web site](#).

Be a part of the solution by filling out the survey. The survey will also give you an opportunity to participate via e-mail.

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City of Santa Barbara



Get Ready Santa Barbara! Stay informed in 2011

Volume 4, Issue 2

April 2011

In this Issue:

- Fact or Myth—Earthquakes—Continued on Page 2
- Disaster Quiz
- Disaster Facts
 - Japan Earthquake
- Current City OES News

NOTE: The Resilience Section will return next month

Upcoming Issue in May 2011



What is AFN? Is it “A Fantastic Nebulae”, “A Fan Natic”?? What is it and how or does it affect me?

Find out by reading next month OES newsletter, you may be surprised at what you learn.

2011 Upcoming Topics

April
Fact or Myths
Earthquakes

May
What is AFN?

June
Fact or Myth
Fire

July
How to survive
the Summer

August
Public Health
Emergencies

September
Fact or Myth
Terrorism

Fact or Myth: Earthquakes

Have you ever heard someone say, “This feels like earthquake weather” or “California will one day fall into the ocean” or maybe even, “Big earthquakes only happen early in the morning”. Maybe these passages are new to you? However, those of us who have grown up in California, commonly known as “Earthquake Country”, have heard these expressions many times. We may have even cited one or two. Since the beginning of time earthquakes have contributed to the make up of our planet. Santa Barbara’s beautiful coastline and mountain range were created by great pushes on the earth surface over thousands of years. But what are earthquakes really, how do they happen, can they be predicted? These are only some of the questions asked. Some of us may have never been through a large earthquake. But those of us who have been in the middle of them, know the eerie feeling you get when the earth beneath your feet begins to move.

So lets see what the experts at the US Geographical Survey (USGS) have to say about our axioms above, the answer may or may not surprise you.

Is there such a thing as earthquake weather? USGS—In the 4th Century B.C., Aristotle proposed that earthquakes were caused by winds trapped in subterranean caves. Small tremors were thought to have been caused by air pushing on the cavern roofs, and large ones by the air breaking the surface. This theory led to a belief in earthquake weather, that because a large amount of air was trapped underground, the weather would be hot and calm before an earthquake. A later theory stated that earthquakes occurred in calm, cloudy conditions, and were usually preceded by strong winds, fireballs, and meteors. **There is no such thing as “earthquake weather”.** Statistically, there is approximately an equal distribution of earthquakes in cold weather, hot weather, rainy weather, etc. Very large low-pressure changes associated with major storm systems (typhoons, hurricanes, etc) are known to trigger episodes of fault slip (slow earthquakes) in the Earth’s crust and may also play a role in triggering some damaging earthquakes. However, the numbers are small and are not statistically significant

Will California fall into the ocean? USGS—**No.** The San Andreas Fault System, which crosses California from the Salton Sea in the south to Cape Mendocino in the north, is the boundary between the Pacific Plate and North American Plate. The Pacific Plate is moving northwest with respect to the North American Plate at approximately 46 millimeters per year (the rate your fingernails grow). The strike-slip earthquakes on the San Andreas Fault are a result of this plate motion. The plates are moving horizontally past one another, so California is not going to fall into the ocean. However, Los Angeles and San Francisco will one day be adjacent to one another! In about a million years!!!!



Disaster Trivia—Earthquakes

Every month we will have a series of disaster related trivia questions. Check your disaster IQ, before you check the answers at the bottom.

- Which is the worst place to be during an earthquake?
 - In the open air
 - Under a table
 - In a green house
 - In a doorway
- Which US State is the least likely to have an earthquake?
 - Washington
 - Utah
 - Alaska
 - Colorado
- The “Ring of Fire” includes which of the following locations?
 - Mt. Pinatubo, Philippines
 - Anchorage, Alaska
 - San Francisco, CA
 - All of the above
- An earthquake measuring 3.5 on the Richter Scale is likely to produce what effect?
 - People on the top floor of a building will feel it and probably no one else
 - Windows and furniture will rattle
 - Weak structures and walls will fall
 - Shock waves will be visible on the ground

Continued on Page 2

1 . 2 . 3 . 4 . a

Fact or Myth: Earthquakes

(cont)

Big earthquakes happen early in the morning? - USGS— No. Earthquakes are equally as likely to occur at any time of the day or month or year. The factors that vary between the time of the day, month, or year do not affect the forces in the earth that cause earthquakes.

So how are earthquakes recorded, measured and how is the magnitude determined. USGS says that earthquakes are recorded by a seismographic network. Each seismic station in the network measures the movement of the ground at the site. The slip of one block of rock over another in an earthquake releases energy that makes the ground vibrate. That vibration pushes the adjoining piece of ground and causes it to vibrate, and thus the energy travels out from the earthquake in a wave.

There are many different ways to measure different aspects of an earthquake.

Magnitude is the most common measure of an earthquake's size. It is a measure of the size of the earthquake source and is the same number no matter where you are or what the shaking feels like.

The Richter scale measures the largest wiggle on the recording, but other magnitude scales measure different parts of the earthquake.

Intensity is a measure of the shaking and damage caused by the earthquake, and this value changes from location to location.

Magnitude / Intensity Comparison

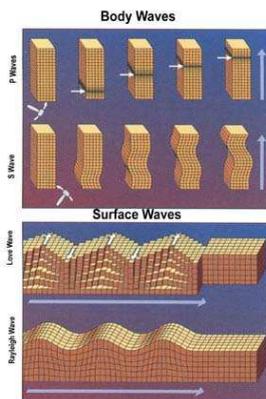
The following table gives intensities that are typically observed at locations near the epicenter of earthquakes of different magnitudes.

Magnitude	Typical Maximum Modified Mercalli Intensity	Abbreviated Modified Mercalli Intensity Scale
1.0 - 3.0	I	I. Not felt except by a very few under especially favorable conditions. II. Felt only by a few persons, especially on upper floors of buildings. III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck.
3.0 - 3.9	II - III	IV. Felt indoors by many, outdoors by few during the day. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
4.0 - 4.9	IV - V	V. Felt by nearly everyone. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
5.0 - 5.9	VI - VII	VI. Felt by all. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
6.0 - 6.9	VII - IX	VII. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
7.0 and higher	VIII or higher	

To learn more go to the USGS site at <http://earthquake.usgs.gov/learn/topics/>



1994 Northridge Earthquake



Disaster Facts

March 11, 2011 Japan Earthquake

2011 Tōhoku earthquake and tsunami (東日本大震災,) was caused by a 9.0-magnitude undersea megathrust earthquake off the coast of Japan that occurred on Friday, March 11, 2011. Some facts include:

- On April 1, 2011, the Japanese government officially named the disaster the "Great Eastern Japan Earthquake".
- The earthquake triggered extremely destructive tsunami waves of up to 37.9 meters (124 ft) that struck Japan minutes after the quake, in some cases traveling up to 10 km (6 mi) inland, with smaller waves.
- Tsunami warnings were issued and evacuations ordered along Japan's Pacific coast and at least 20 other countries, including the entire Pacific coast of the Americas.
- The earthquake moved Honshu 2.4 m (7.9 ft) east and shifted the Earth on its axis by almost 10 cm (3.9 in).
- Over 125,000 buildings damaged or destroyed.
- Around 4.4 million households in northeastern Japan were left without electricity and 1.5 million without water.
- Many electrical generators were taken down, and at least three nuclear reactors suffered explosions due to hydrogen gas that had built up within their outer containment buildings after cooling system failure.

Remember, the further we get from the last earthquake, the closer we get to the next. ARE YOU PREPARED? ARE YOU READY SANTA BARBARA?

For more facts on Japan earthquake go to: <http://earthquake-report.com/2011/03/29/japan-earthquake-most-complete-summary-of-the-fire-and-police-damage-statistics/>

City of Santa Barbara Office of Emergency Services



OES is on the web!

<http://www.santabarbaraca.gov/OES>

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Originally Created by: Lindsay Barker, MPH

Current City News

The County's Multi-Jurisdictional Hazard Mitigation Plan Revision Survey

Santa Barbara City is updated its portion of the plan and needs your input!

Participate in the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan update by completing the survey below. Your feedback on the identification of hazards in our area and your opinions regarding emergency preparation and priorities are very important to the completion of this planning process.

http://www.surveymonkey.com/s/SantaBarbaraCounty_LHMP2011_English

El Condado de Mitigación de Riesgos Múltiples jurisdiccionales Revisión del Plan de Estudio

http://www.surveymonkey.com/s/SantaBarbaraCounty_LHMP2011_Spanish

For more information contact the City's Office of Emergency Services.

14.8.3 References

Redevelopment Agency's Implementation Plan 2010-2014

http://www.santabarbaraca.gov/NR/rdonlyres/D0871A47-9484-493B-A600-25F2CD395A6A/0/Implementation_Plan_20102014.pdf

Emergency Operations Plan

<http://www.santabarbaraca.gov/NR/rdonlyres/BEA32DB8-89D2-4B4A-BB09-4C34CA429569/0/EOPsmaller.pdf>