#### MONTECITO FIRE PROTECTION DISTRICT

#### Agenda for the Regular Meeting of the Board of Directors

Montecito Fire Protection District Headquarters 595 San Ysidro Road Santa Barbara, California

June 24, 2019 at 2:00 p.m.

Agenda items may be taken out of the order shown.

- 1. Public comment: Any person may address the Board at this time on any non-agenda matter that is within the subject matter jurisdiction of the Montecito Fire Protection District. (30 minutes total time allotted for this discussion.)
- 2. That the Board appoint Kevin Taylor as the Fire Chief and that the Board approve and authorize the Board President to execute the Fire Chief Employment Agreement between the Montecito Fire Protection District and Kevin Taylor.
- 3. Administer Oath of Office for new Fire Chief.
- 4. Receive update regarding Microgrid from Craig Lewis of Clean Coalition. (Strategic Plan Goal 9.1)
- 5. Consider approval of Resolution 2019-03, adopting the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan and the Montecito Fire Protection District 2018 Hazard Mitigation Annex. (Strategic Plan Goal 2)
  - a. Staff report presented by Fire Marshal Aaron Briner.
- 6. Runoff election for Regular Special District Member on Santa Barbara LAFCO.
- That the Board of Directors approve and authorize the President to execute Side Letter Agreement clarifying Section 31 of the Memorandum of Understanding between the Montecito Firefighter's Association and the Montecito Fire Protection District regarding retirement. (Strategic Plan Goal 7.3)
  - a. Staff report presented by Accountant Araceli Nahas.
- That the Board of Directors approve and authorize the President to execute Side Letter Agreement clarifying Section 32 of the Memorandum of Understanding between the Members of Staff and the Montecito Fire Protection District regarding retirement. (Strategic Plan Goal 7.3)

- a. Staff report presented by Accountant Araceli Nahas.
- 9. Report from the Finance Committee. (Strategic Plan Goal 9.1)
  - a. Consider recommendation to approve May 2019 financial statements.
  - b. Review PARS Post-Employment Benefits Trust Program statement for April 2019.
  - c. Consider recommendation to approve Resolution 2019-04, Amending Final Budget for FY 2018-19.
  - d. Consider recommendation to approve Resolution 2019-05, Adoption of the Preliminary Budget for FY 2019-20.
- 10. Approval of the Publicly Available Pay Schedule, effective July 1, 2019, as required by CalPERS.
- 11. Approval of Minutes of the May 13, 2019 Special Meeting.
- 12. Approval of Minutes of the May 23, 2019 Special Meeting.
- 13. Fire Chief's report.
- 14. Board of Director's report.
- 15. Suggestions from Directors for items other than regular agenda items to be included for the July 22, 2019 Regular Board meeting.

#### Adjournment

This agenda posted pursuant to the provisions of the Government Code commencing at Section 54950. The date of the posting is June 20, 2019.

Chip Hickman, Fire Chief

Reg Pg. 3

# Agenda Item #2

#### FIRE CHIEF EMPLOYMENT AGREEMENT

THIS FIRE CHIEF EMPLOYMENT AGREEMENT ("Agreement") is made and entered into in the County of Santa Barbara, State of California this 24th day of June, 2019, by and between the Montecito Fire Protection District ("District") and Kevin Taylor ("Taylor").

WHEREAS, District desires to enter into this Agreement with Taylor to establish the terms and condition of Taylor's employment as Fire Chief for the District; and

WHEREAS, Taylor desires to enter in this Agreement and represents that Taylor has the qualifications and experience necessary to perform the duties of Fire Chief for the District.

NOW, THEREFORE, District and Taylor hereby agree as follows:

#### I. <u>DUTIES</u>

The District hereby agrees to employ Taylor as District's Fire Chief and Taylor agrees to perform the functions and duties of the position of Fire Chief and to perform such other legally permissible and proper duties and functions as the District may from time to time assign. The District recognizes the Fire Chief's position as a safety position for purposes of employment and retirement.

#### II <u>TERM OF AGREEMENT</u>

The initial term of this Agreement shall be from July 1, 2019, through June 30, 2024. Effective July 1, 2024, this Agreement may be extended upon the written agreement of District and Taylor.

#### III. HOURS OF WORK

Subject to Taylor's inability to work due to sickness, injury, noticed periods of vacation, holiday or executive leave, at all times during the term of this Agreement or any extension thereof, Taylor will arrange to be available to perform the duties of the Fire Chief during the regular business hours of the District, and also at such other times as the District may from time to time reasonably request. It is understood and agreed that Taylor shall not be entitled to any compensation other than that provided for in this Agreement for services which may be rendered by him outside of the District's regular business hours or on Saturdays, Sundays, or holidays.

#### IV. <u>ANNUAL EVALUATION</u>

The District shall review and evaluate the performance of Taylor during the month of June during the term of this Agreement or any extension thereof. The review and evaluation shall be in accordance with specific criteria developed jointly by the District and Taylor.

#### V. <u>TERMINATION OF AGREEMENT</u>

#### A. Termination for Convenience:

1. District may terminate this Agreement at any time for convenience upon thirty days written notice to Taylor. During the notice period, at District's discretion, Taylor may be placed on paid administrative leave. Upon termination of the Agreement pursuant to this provision, Taylor shall be paid the lesser of the remaining unexpired term of the Agreement or six months of his then current salary as severance consistent with the requirement of Government Code sections 53260 et seq.

2. Taylor may terminate this Agreement at any time for convenience upon 30 days written notice to District. Upon terminating this Agreement pursuant to this provision, Taylor will be entitled to receive all accrued salary and vacation accrued to which Taylor is entitled pursuant to this Agreement as of the date of termination.

3. Termination for convenience shall be determined by a four fifths vote of the District's Board.

B. Termination for Cause:

1. The District may terminate this Agreement for cause upon the occurrence of any of the following:

- (i) Taylor's conviction of a crime involving an abuse of office.
- (ii) Taylor's conviction of a felony.
- (iii) Taylor's material breach of this Agreement.

(iv) Taylor's gross negligence or willful failure to carry out the duties of District Fire Chief.

2. At District's discretion, Taylor may be placed on paid administrative leave pending any District investigation.

3. Any salary provided to Taylor and any defense costs incurred by the District on behalf of Taylor shall be fully reimbursed to the District by Taylor in the event of the following:

(a) Taylor is convicted of a crime involving an abuse of his office.

(b) For purposes of this section. "abuse of office" shall mean as follows:

(i) An abuse of public authority, including, but not limited to, waste, fraud, and violation of the law under color of authority.

(ii) A crime against public justice, including, but not limited to, a crime described in Title 5 (commencing with Section 67), Title 6 (commencing with Section 85), or Title 7 (commencing with Section 92) of Part 1 of the Penal Code.

4. Upon termination for cause, Taylor will not be entitled to receive any compensation or benefits under this Agreement except for accrued salary and vacation that Taylor is entitled pursuant to this Agreement as of the date of the termination for cause.

5. Termination for cause under this Agreement shall require only a majority vote of the Board.

#### VI. <u>SALARY</u>

A. District agrees to pay Taylor \$22,712 per month as base salary beginning July 1, 2019, through June 30, 2020.

B. Beginning July 1, 2020, and every July 1, during the term of this Agreement, Taylor's base salary shall be increased by the same percentage increase provided by the District to the District's Firefighters Association.

C. The District shall provide Taylor with payment for overhead assignments and assistance for hire in other jurisdictions as provided to Staff employees in the MOU between the District and the Staff.

#### VII. LONGEVITY INCENTIVE

The District shall provide Taylor with longevity incentive pay as is provided to all regular employees in the MOU between the District and the Staff. Taylor's date of hire for the sole purpose of calculating longevity incentive pay shall be January 3, 1993.

#### VIII. <u>RETIREMENT</u>

The District shall provide Taylor with retirement benefits as are provided to all safety employees in the MOU between the District and the Staff.

#### IX. <u>DEFFERRED COMPENSATION</u>

The District shall provide Taylor with a deferred compensation contribution in the amount provided to all regular employees in the MOU between the District and the Staff.

#### X. <u>RETIREMENT NOTICE</u>

Taylor agrees to provide the District with written notice of his intent to retire from District service at least 180 days prior to the date of his intended retirement.

#### XI. <u>HEALTH INSURANCE</u>

The District shall provide Taylor with such health insurance benefits as are provided to all regular employees in the Memorandum of Understanding and any amendment thereto ("MOU") between the District and the Members of Staff ("Staff").

#### XII. <u>LIFE INSURANCE</u>

The District shall provide Taylor with the same life insurance benefits as are provided to all regular employees in the MOU between the District and the Staff.

#### XIII. PHYSICAL EXAMINATIONS

Taylor will submit to an annual physical examination at the District's request and expense.

#### XIV. HOLIDAYS

The District observes the following paid holidays:

New Year's Day	Columbus Day
Martin Luther King's Birthday	Veteran's Day
President's Day	Thanksgiving Day
Memorial Day	Christmas Day
Independence Day	Two Floating Holiday Per Year
Labor Day	

If the above holidays fall on Saturday, the preceding Friday will be a holiday. If any of the above holidays fall on Sunday, the succeeding Monday will be a holiday.

#### XV. <u>VACATION</u>

The District shall provide Taylor with vacation benefits consistent with the vacation benefits provided to the District's Chief Officers in the MOU between the District and the Staff.

#### XVI. <u>SICK LEAVE</u>

The District shall provide Taylor with sick leave as are provided to all regular employees in the MOU the District and the Staff.

#### XVII. UNIFORM ALLOWANCE

Taylor will be provided with a \$1,000 per year uniform allowance for the replacement, maintenance, and repair of required District uniforms.

#### XVIII. CONTINUING EDUCATION AND PROFESSIONAL ASSOCIATIONS

The District recognizes the need for and encourages Taylor to participate in continuing education classes relevant to the fire industry and to associate himself with industry-related professional organizations. To that end, the District authorizes Taylor to maintain membership in such professional organizations at District's expense and to participate in the educational seminars and meetings of said organizations, both inside and outside the District, to the extent that the District may authorize and approve such expenditures in its annual budget.

#### XIX. DISTRICT VEHICLE

District agrees to provide Taylor with a District vehicle for fulfilling District duties and for use off duty to assure availability for emergency response.

#### XX. <u>EXECUTIVE LEAVE</u>

Taylor shall be entitled to executive leave of up to 5 days per year. Said leave shall be taken in the calendar year granted as time off and may not be carried over to any succeeding year. No compensation shall be paid for executive leave that remains unused at the end of any calendar year and any unused executive leave shall terminate at the end of the calendar year during which it was provided.

#### XXI. <u>MILITARY, FAMILY CARE AND MEDICAL, BEREAVEMENT AND</u> <u>CATASTROPHIC LEAVE POLICIES</u>

The District shall provide Taylor with Military Leave, Family Care and Medical Leave, Bereavement Leave and Catastrophic Leave as is provided to all regular employees in the MOU between the District and the Staff

#### XXII. <u>RESIDENCE REQUIREMENT</u>

The District and Taylor acknowledge that in cases of emergency Taylor may be required to respond to the District within a limited period of time. The District and Taylor further acknowledge that such emergencies may occur during non-regular business hours. To insure that Taylor will be able to reasonably respond to such emergencies, the District requires that Taylor reside at a location that is within 30 minutes of the District's jurisdiction.

#### XXIII. <u>PHYSICAL FITNESS</u>

The District recognizes the position of Fire Chief as a safety position and expects the Fire Chief to be capable of taking command and engaging in fire ground activities if necessary. Accordingly, the District permits Taylor to exercise on duty when time and schedule permits. The exercise period shall not interfere with Taylor's duties and responsibilities and will be foregone if such duties exist.

#### XXIV. INDEMNIFICATION

The District shall indemnify, defend, and hold Taylor harmless against any and all claims, demands, actions, suits, expenses and losses, including reasonable attorney's fees, arising out of any act or omission of Taylor arising out of the performance of his duties as Fire Chief, except as may result from the gross negligence or willful misconduct of Taylor ("Covered Claim"). The parties agree that this paragraph is to be construed consistent with Government Code section 825. In the event of any such Covered Claim, Taylor shall promptly, but no later than 30 days after receiving notice that such a claim may be made, notify the District that such a Covered Claim has been or may be asserted against him. The District may, at the District's option; either provide for legal representation of Taylor through counsel of its choice or may choose to reimburse Taylor for legal fees and costs incurred as a result of any Covered Claim. Reimbursement for Covered Claims will be paid as they are incurred so Taylor is protected from undue financial hardship. In the event that the District will do so at District's expense.

#### XXV. <u>SEVERABILITY</u>

It is the intention of the parties that this Agreement be fully enforceable and that its provisions be enforced to the extent permissible by law. If any provision of this Agreement is held to be invalid or unenforceable for any reason, the remainder of this Agreement shall remain in full force and effect and the remainder of this Agreement shall be construed to the fullest extent possible to give effect to its provisions.

#### XXVI. ENTIRE AGREEMENT

This Agreement represents the entire agreement between the parties on this subject matter and supersedes all prior understandings and agreements between them. It may only be modified by them by a writing signed by Taylor and by an authorized representative of the District.

#### XXVII. INDEPENDENT ADVICE

Each of the parties hereto has participated in the preparation of this Agreement, and each has had the opportunity to discuss this Agreement with counsel of their choice, and each agrees to and executes this Agreement based upon such independent advice. IN WITNESS WHEREOF, the parties have read and understand, and thereby execute this Agreement on this \_\_\_\_ day of June, 2019.

#### MONTECITO FIRE PROTECTION DISTRICT

#### **KEVIN TAYLOR**

Sylvia Easton, Board President

Kevin Taylor

# Agenda Item #5



## **STAFF REPORT**

Prepared for:	Montecito Fire Protection District Board of Directors
Prepared by:	Aaron Briner, Fire Marshal
Date:	June 23, 2019
Topic:	Local Hazard Mitigation Plan Annex

#### Summary

The Thomas Fire and subsequent debris flow significantly altered the landscape that the Montecito Fire Protection District serves. These changed conditions have resulted in many challenges as well as opportunities as it relates to Fire Prevention. One of these opportunities includes the increased availability of grant funds for prevention-related projects throughout the District. In order to be eligible to receive grant funds, the District must have an approved Hazard Mitigation Plan. The Montecito Fire Protection District does not currently have a Hazard Mitigation Plan, but CalOES and FEMA created an opportunity for the District to join Santa Barbara County's Multi-Jurisdictional Hazard Mitigation Plan through an Annex process.

#### Background

The federal Disaster Management Act of 2000 requires every local, county and state government to have an approved Hazard Mitigation Plan in order to be eligible for pre- and post-disaster grants and funding. Agencies are expected to update the plans every five years. The Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan (LHMP) was approved on September 26, 2017. The District is able to join this LHMP through an Annex process.

Without an approved Hazard Mitigation Plan, local governments are ineligible for FEMA mitigation programs and assistance, including the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, Flood Mitigation Assistance Program, and public assistance for repetitively damaged facilities following a disaster.

#### Discussion

In July 2018, Risk Management Professionals, Inc. was contracted by the District for the development of the HMP Annex. While District personnel and Risk Management Professionals had lead responsibility for the development of the District's annex, neighboring communities, agencies, and other interested stakeholders were invited to participate and review the annex during each phase of the document development.

This multi-jurisdictional group and Risk Management Professionals, Inc. worked to update the plan. The steering committee was made up of District personnel; members of the Santa Barbara County Fire and Sheriff's Departments; OEM; and local government employees from neighboring jurisdictions.

The District HMP Annex focuses on potential impacts of man-made and natural hazards and provides direction and guidance on implementing hazard mitigation actions on a hazard-level, probability and cost-priority basis.

District staff will work to ensure the mitigation actions in the plan are implemented and will review the HMP and associated action items annually. Resulting revisions will be incorporated in the next update of the plan.

The District received a letter (attached) from FEMA on May 8, 2019 indicating preliminary approval of the amended Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan (attached) and Annex (attached). The District's Annex does not replace the LHMP nor does it restart the timeline for the five-year update requirement, it simply adds Montecito Fire Protection District to the approved LHMP. Prior to September 26, 2022, Santa Barbara County and all participating jurisdictions are required to review and revise the LHMP to reflect any changes in risk threat priorities and mitigation efforts and resubmit an updated plan for approval.

#### Conclusion

Staff recommends that the Board:

- 1. Adopt the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan and the Annex
- 2. Authorize staff to submit proof of adoption to FEMA in order to secure final approval

#### **Strategic Plan Reference**

Goal #2 - Contain our Risks

#### **RESOLUTION NO. 2019-03**

#### RESOLUTION OF THE BOARD OF DIRECTORS OF THE MONTECITO FIRE PROTECTION DISTRICT ADOPTING THE SANTA BARBARA COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN AND THE MONTECITO FIRE PROTECTION DISTRICT 2018 HAZARD MITIGATION ANNEX

**WHEREAS,** the Federal Disaster Mitigation Act of 2000 ("Act"), as described in 44 C.F.R. § 201.6, mandates local governments to submit and maintain a Federal Emergency Management Agency ("FEMA") approved local hazard mitigation plan; and

**WHEREAS,** on September 26, 2017 FEMA approved the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan ("Plan"), which identifies risk assessment and mitigation strategies to reduce the impacts of natural, technological, or intentional disasters on the public and local government in Santa Barbara County; and

**WHEREAS,** the Plan has been amended to include the Montecito Fire Protection District ("District") as an official planning participant; and

**WHEREAS,** the District has developed a Hazard Mitigation Plan Annex ("Annex") by building off the baseline understanding of hazards as defined in the Plan, determining ways to reduce those risks, and prioritizing those recommendations for implementation within the service area of the District; and

WHEREAS, on May 8, 2019, FEMA preliminarily approved the Annex; and

**WHEREAS,** pursuant to 44 C.F.R. § 201.6(c)(5), the governing body of the District must formally adopt the Plan and the Annex in order to ensure the District's continued eligibility for project grants under FEMA's Hazard Mitigation Assistance programs.

**NOW, THEREFORE, BE IT RESOLVED** that the Governing Board of the Montecito Fire Protection District hereby approves and adopts the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan and the Montecito Fire Protection District Hazard Mitigation Annex in accordance with the Act.

PASSED AND ADOPTED this 24th day of June, 2019, by the following vote:

AYES:

NOES:

ABSENT:

President of the Board of Directors MONTECITO FIRE PROTECTION DISTRICT

#### ATTEST:

Secretary

County of Santa Barbara City of Buellton City of Carpinteria City of Goleta City of Guadalupe City of Lompoc City of Santa Barbara City of Santa Maria City of Solvang



Submitted to CalOES and FEMA by Santa Barbara County Office of Emergency Management Robert Lewin, 805.681.5526, rlewin@sbcoem.org

Prepared with the assistance of Andrew Petrow, 818.294.5472, petrowa@msn.com

## TABLE OF CONTENTS

Section 1	Introduction1-1
Section 2	Plan Purpose and Authority2-2
Section 3	Planning Process
3.1 C	Overview
3.2 N	Aitigation Advisory Committee (MAC)
3.2.1	MAC Members
3.2.2	Overview of MAC Meetings
3.3 C	County Local Planning Team
3.3.1	Local Planning Team Planning Process
3.3.2	Local Planning Team Members
3.3.3	Overview of Local Planning Team Meeting3-14
3.4 P	Public Outreach
3.4.1	Informing the Community of the HMP Update process
3.4.2	Ongoing Public Outreach
Section 4	County Capability Assessment
4.1 S	anta Barbara County - Introduction4-1
4.1.1	Economy4-2
4.1.2	Employment4-2
4.1.3	Climate4-2
4.1.4	Physical Features4-2
4.1.5	Infrastructure
4.1.6	Land Use-Unincorporated County
4.2 A	Administrative and Technical Capacity4-10
4.2.1	The Roles of County Departments in Hazard Mitigation4-10
4.2.2	Relevant Governance
4.2.3	Summary of Capabilities4-31
4.3 F	iscal Resources4-32
Section 5	Hazards Assessment
5.1 C	Overview
5.2 N	Aitigation Advisory Committee Hazard Assessment
5.2.1	Hazard Identification5-1

5.2.2	Hazard Screening/Prioritization	5-2
5.3 Loc	al Planning Team Hazard Assessment	5-3
5.3.1	Hazard Identification	5-4
5.3.2	Hazard Screening/Prioritization	5-4
5.4 Haz	ards	5-4
5.4.1.1	Earthquake	5-4
5.4.1.	1.1 Description of Hazard	5-4
5.4.1.	1.2 Location and Extent of Hazard in Santa Barbara County	5-5
5.4.1.	1.3 History of Hazard in Santa Barbara County	5-7
5.4.1.	1.4 Probability of Occurrence	5-9
5.4.1.	1.5 Climate Change Considerations	5-10
5.4.1.2	Wildfire	5-10
5.4.1.2	2.1 Description of Hazard	5-11
5.4.1.2	2,2 Location and Extent of Hazard in Santa Barbara County	5-11
5.4.1.2	2.3 History of Hazard in Santa Barbara County	5-15
5.4.1.2	2.4 Probability of Occurrence	5-18
5.4.1.2	2.5 Climate Change Considerations	5-18
5.4.1.3	Landslide and other Earth Movements	5-19
5.4.1.	3.1 Description of Hazard	5-19
5.4.1.	3.2 Location and Extent of Hazard in Santa Barbara County	5-19
5.4.1.	3.3 History of Hazard in Santa Barbara County	5-21
5.4.1.	3.4 Probability of Occurrence	5-23
5.4.1.	3.5 Climate Change Consideration	5-23
5.4.1.4	Flood	5-24
5.4.1.4	4.1 Description of Hazard	5-24
5.4.1.4	4.2 Location and Extent of Hazard in Santa Barbara County	5-25
5.4.1.4	4.3 History of Hazard in Santa Barbara County	5-26
5.4.1.4	4.4 Probability of Occurrence	5-28
5.4.1.4	4.5 Climate Change Consideration	5-30
5.4.1.5	Drought and Water Shortage	5-32
5.4	1.5.1 Description of Hazard	5-32
5.4	1.5.2 Location and Extent of Hazard in Santa Barbara County	5-33

History of Hazard in Santa Barbara County	5-33
Probability of Occurrence	5-34
Climate Change Considerations	5-35
a Level Rise and Erosion	5-36
Description of Hazard	5-36
Location and Extent of Hazard in Santa Barbara County	5-36
History of Hazard in Santa Barbara County	5-36
Probability of Occurrence	5-36
Climate Change Considerations	5-36
nergy Shortage and Resiliency	
Description of Hazard	
Location and Extent of Hazard in Santa Barbara County	
History of Hazard in Santa Barbara County	
Probability of Occurrence	
Climate Change Considerations	
Dil Spills	
Description of Hazard	
Location and Extent of Hazard in Santa Barbara County	
History of Hazard in Santa Barbara County	
Probability of Occurrence	
Climate Change Considerations	
vere Weather and Storms	5-37
Extreme Heat	5-37
.1.1 Description of Hazard	5-37
.1.2 Location and Extent of Hazard in Santa Barbara County	5-37
.1.3 History of Hazard in Santa Barbara County	5-37
.1.4 Probability of Occurrence	5-37
15 Climate Change Considerations	5-37
Freeze	5-38
.2.1 Description of Hazard	5-38
.2.2 Location and Extent of Hazard in Santa Barbara County	5-38
.2.3 History of Hazard in Santa Barbara County	5-38
	History of Hazard in Santa Barbara County Probability of Occurrence

	5.4.2.1.2.4	Probability of Occurrence	5-38
	5.4.2.1.2.5	Climate Change Considerations	5-38
5	.4.2.1.3 Hai	ilstorm	5-39
	5.4.2.1.3.1	Description of Hazard	5-39
	5.4.2.1.3.2	Location and Extent of Hazard in Santa Barbara County	5-39
	5.4.2.1.3.3	History of Hazard in Santa Barbara County	5-39
	5.4.2.1.3.4	Probability of Occurrence	5-39
	5.4.2.1.3.5	Climate Change Considerations	5-39
5	.4.2.1.4 Hu	rricanes	5-39
	5.4.2.1.4.1	Description of Hazard	5-39
	5.4.2.1.4.2	Location and Extent of Hazard in Santa Barbara County	5-40
	5.4.2.1.4.3	History of Hazard in Santa Barbara County	5-40
	5.4.2.1.4.4	Probability of Occurrence	5-40
	5.4.2.1.4.5	Climate Change Considerations	5-40
5	5.4.2.1.5 To	madoes	5-40
	5.4.2.1.5.1	Description of Hazard	5-40
	5.4.2.1.5.2	Location and Extent of Hazard in Santa Barbara County	5-41
	5.4.2.1.5.3	History of Hazard in Santa Barbara County	5-42
	5.4.2.1.5.4	Probability of Occurrence	5-42
	5.4.2.1.5.5	Climate Change Considerations	5-42
5	5.4.2.1.6 W	Vindstorm	5-42
	5.4.2.1.6.1	Description of Hazard	
	5.4.2.1.6.2	Location and Extent of Hazard in Santa Barbara County	5-43
	5.4.2.1.6.3	History of Hazard in Santa Barbara County	5-43
	5.4.2.1.6.4	Probability of Occurrence	5-43
	5.4.2.6.5	Climate Change Consideration	5-43
5.4	4.2.2 D	am Failure	5-46
	5.4.2.2.1	Description of Hazard	5-46
	5.4.2.2.2	History of Hazard in Santa Barbara County	5-46
	5.4.2.2.3	Location and Extent of Hazard in Santa Barbara County	5-46
	5.4.2.2.4	Probability of Occurrence	5-48
	5.4.2.2.5	Climate Change Considerations	5-48

5.4.2.3	Agricultural Pests	5-49
5.4.2.3.1	Description of Hazard	5-49
5.4.2.3.2	History of Hazard in Santa Barbara County	5-49
5.4.2.3.3	Location and Extent of Hazard in Santa Barbara County	5-49
5.4.2.3.4	Probability of Occurrence	5-51
5.4.2.3.5	Climate Change Consideration	5-51
5.4.2.4	Epidemic/Pandemic/Vector Borne Disease	5-52
5.4.2.4.1	Description of Hazard	5-52
5.4.2.4.2	Location and Extent of Hazard in Santa Barbara County	5-53
5.4.2.4.3	History of Hazard in Santa Barbara County	5-53
5.4.2.4.4	Probability of Occurrence	5-53
5.4.2.4.5	Climate Change Consideration	5-54
5.4.2.5	Hazardous Materials Release	5-54
5.4.2.5.1	Description of Hazard	5-54
5.4.2.5.2	Location and Extent of Hazard in Santa Barbara County	5-56
5.4.2.5.3	History of Hazard in Santa Barbara County	5-55
5.4.2.5.4	Probability of Occurrence	5-55
5.4.2.5.5	Climate Change Consideration	5-55
5.4.2.6	Radiological Accidents	5-55
5.4.2.6.1	Description of Hazard	5-55
5.4.2.6.2	Location and Extent of Hazard in Santa Barbara County	5-56
5.4.2.6.3	History of Hazard in Santa Barbara County	5-56
5.4.2.6.4	Probability of Occurrence	5-56
5.4.2.6.5	Climate Change Consideration	5-57
5.4.2.7	Terrorism	5-57
5.4.2.7.1	Description of Hazard	5-57
5.4.2.7.2	Location and Extent of Hazard in Santa Barbara County	5-57
5.4.2.7.3	History of Hazard in Santa Barbara County	5-57
5.4.2.7.4	Probability of Occurrence	5-57
5.4.2.7.5	Climate Change Consideration	5-57
5.4.2.8	Cyber Threats	5-58
5.4.2.8.1	Description of Hazard	5-58

5.4.2.8.2	Location and Extent of Hazard in Santa Barbara County5-58
5.4.2.8.3	History of Hazard in Santa Barbara County5-58
5.4.2.8.4	Probability of Occurrence
5.4.2.8.5	Climate Change Consideration5-58
5.4.2.9	Aircraft Crashes5-58
5.4.2.9.1	Description of Hazard5-59
5.4.2.9.2	Location and Extent of Hazard in Santa Barbara County5-59
5.4.2.9.3	History of Hazard in Santa Barbara County5-59
5.4.2.9.4	Probability of Occurrence5-59
5.4.2.9.5	Climate Change Consideration5-59
5.4.2.10	Train Accidents
5.4.2.10.1	Description of Hazard5-59
5.4.2.10.2	Location and Extent of Hazard in Santa Barbara County5-59
5.4.2.10.3	History of Hazard in Santa Barbara County5-60
5.4.2.10.4	Probability of Occurrence
5.4.2.10.5	Climate Change Consideration5-60
5.4.2.11	Natural Gas Pipeline Rupture & Storage Facilities5-60
5.4.2.11.1	Description of Hazard5-60
5.4.2.11.2	Location and Extent of Hazard in Santa Barbara County5-60
5.4.2.11.3	History of Hazard in Santa Barbara County5-61
5.4.2.11.4	Probability of Occurrence5-61
5.4.2.11.5	Climate Change Consideration5-62
5.4.2.12	Levee Failure5-62
5.4.2.12.1	Description of Hazard5-62
5.4.2.12.2	Location and Extent of Hazard in Santa Barbara County5-62
5.4.2.12.3	History of Hazard in Santa Barbara County5-63
5.4.2.12.4	Probability of Occurrence5-64
5.4.2.12.5	Climate Change Consideration5-64
5.4.2.13	Tsunami5-64
5.4.2.13.1	Description of Hazard5-64
5.4.2.13.2	Location and Extent of Hazard in Santa Barbara County5-64
5.4.2.13.3	History of Hazard in Santa Barbara County5-64

5.4.2.13	.4 Probability of Occurrence	5-65
5.4.2.13	.5 Climate Change Consideration	5-66
5.4.2.14	Civil Disturbance	5-66
5.4.2.14	.1 Description of Hazards	5-66
5.4.2.14	.2 Location and Extent of Hazard in Santa Barbara County	5-67
5.4.2.14	.3 History of Hazard in Santa Barbara County	5-67
5.4.2.14	.4 Probability of Occurrence	5-67
5.4.2.14	.5 Climate Change Consideration	5-67
5.4.2.15	Well Stimulation and Hydraulic Fracturing	5-67
5.4.2.15.	.1 Description of Hazard	5-67
5.4.2.15.	.2 Location and Extent of Hazard in Santa Barbara County	5-68
5.4.2.15.	.3 History of Hazard in Santa Barbara County	5-68
5.4.2.15.	.4 Probability of Occurrence	5-68
5.4.2.15.	.5 Climate Change Consideration	5-68
5.4.2.16	Marine Invasive Species	5-68
5.4.2.16	.1 Description of Hazard	5-68
5.4.2.16	.2 Location and Extent of Hazard in Santa Barbara County	5-69
5.4.2.16	.3 History of Hazard in Santa Barbara County	5-69
5.4.2.16	.4 Probability of Occurrence	5-69
5.4.2.16	.5 Climate Change Consideration	5-69
Section 6 V	ulnerability Assessment	6-1
6.1 Ove	rview	6-1
6.1.1	Scientific Loss Estimation Models	6-1
6.1.2	Analysis of Exposure of Critical Facilities to Hazards	6-5
6.1.3	Qualitative Estimate of Impacts	6-6
6.2 Scie	entific Loss Estimation Analysis	6-7
6.2.1	Earthquake and Liquefaction (High Impact/Medium Probability)	6-7
6.2.1.	1 HAZUS-MH Earthquake Risk Assessment	6-7
6.2.2	HAZUS-MH Flood Risk Assesment	6-15
6.3 Critic	al Facilities Analysis	6-19
6.3.1	Flood and Coastal Storm Surge (Medium Impact/High Probability)	6-19
6.3.1.1	Repetitive Loss (RL) Properties	6-21

6.3.2	Groundwater Liquefaction (High Impact/Medium Probability)6-22
6.3.3	Wildfire (Medium Impact/High Probability)6-24
6.3.4	Landslide and other Earth Movement (Medium Impact/High Probability)
6.3.5	Sea Level Rise, Coastal Storm Surge and Erosion (Medium Impact/High
Probabi	lity)
6.3.6	Dam Failure (High Impact/Low Probability)6-31
6.3.7	Tsunami (Medium Impact/Low Probability)6-33
6.4 Quali	tative Estimate of Impacts Analysis6-34
6.4.1	Drought and Water Shortage (Medium Impact/High Probability)6-34
6.4.2	Levee Failure (Medium Impact/Low Probability)6-35
6.4.3	Severe Weather (Medium Impact/High Probability)6-35
6.4.3	1 Extreme Heat
6.4.3	2 Freeze
6.4.3	3 Hailstorm
6.4.3	4 Hurricane
6.4.3	5 Tornado
6.4.3	.6 Widnstorm
6.4.4	Energy Shortage and Energy Resilience (Medium Impact/High Probability)6-37
6.4.5	Oil Spill (Medium Impact/High Probability)6-38
6.4.6	Agricultural Pests and Disease (Low Impact/High Probability)6-38
6.4.7	Epidemic/Pandemic/Vector Borne Disease (Low Impact /Medium Probability)6-38
6.4.8	Hazardous Materials Release (Medium Impact/Medium Probability)6-38
6.4.9	Radiological Incident (High Impact/Low Probability)6-38
6.4.10	Terrorism (Medium Impact/Medium Probability)6-39
6.4.11	Cyber Threat (Low Impact/Medium Probability)6-39
6.4.12	Aircraft Crash (Low Impact/Medium Probability)6-39
6.4.13	Train Accident (Low Impact/High Probability)6-40
6.4.14	Natural Gas Pipeline/Storage Facility Accidents (Medium Impact/Low
Probabi	lity)
6.4.15	Civil Disturbance (Medium Impact/Low Probability)6-41
6.4.16	
0.4.10	Well Stimulation/Hydraulic Fracking (Medium Impact/Low Probability)6-41

Section	7 County Mitigation Strategies
7.1	Mitigation Goals and Objectives7-1
7.2	Mitigation Action/Progress
7.3	Prioritizing Mitigation Action7-13
7.4	Mitigation Action
7.5	Implementation Plan7-16
Section	8 Plan Maintenance
8.1	Point of Contact
Append	ix
Annexes	5
Section	9 City Of Beullton
Section	10City of Carpinteria
Section	11 City of Goleta
Section	12City of Guadalupe
Section	13City of Lompoc
Section	14 City of Santa Barbara
Section	15 City of Santa Maria
Section	16City of Solvang

### SECTION 1 INTRODUCTION

Across the United States, natural and manmade disasters have led to increasing levels of death, injury, property damage, and interruption of business and government services. The impact on families and individuals can be immense and damages to businesses can result in regional economic consequences. The time, money and effort to respond to and recover from these disasters divert public resources and attention from other important programs and problems. Santa Barbara County, California recognizes the consequences of disasters and the need to reduce the impacts of all hazards. The elected and appointed officials of the County also know that with careful selection, mitigation actions in the form of projects and programs can become a long-term, cost effective means for reducing the impact of these hazards.

The Santa Barbara County *Multi-Jurisdictional Hazard Mitigation Plan* (the Plan) was prepared and formulated with input and coordination from each incorporated city, the County of Santa Barbara, citizen participation, responsible officials, and support from the State of California Governor's Office of Emergency Services (CalOES) and the Federal Emergency Management Agency (FEMA). The process to update the Plan included nearly a year of coordination with representatives from all of the incorporated cities within the County and County representatives who comprised our Mitigation Advisory Committee (MAC). The Plan guides the Santa Barbara County Operational Area toward greater disaster preparedness and resistance in harmony with the character and needs of the County and its communities.

*Mitigation* is commonly defined as action(s) taken to reduce or, where possible, eliminate risks to people and property from hazards and their effects. *Hazard mitigation* focuses attention and resources on actions that will reduce or eliminate long term risks to persons or property from natural hazards.

The impact of expected yet often unpredictable natural and human-caused events can be reduced through planning. History has demonstrated that it is less expensive to mitigate against disaster damage than to repeatedly repair damage in the aftermath. A mitigation plan states the aspirations and specific courses of action jurisdictions intend to follow to reduce vulnerability and exposure to future hazard events.

It is the County's hope the Plan continues to be used as a tool for all stakeholders to increase public awareness of local hazards and risks, while at the same time providing information about options and resources available to reduce those risks. Informing and educating the public about potential hazards will help County, City residents, and visitors protect themselves against their effects.

The emphasis of the Plan is on the assessment of identified risks, identifying mitigation measures for existing exposures, and ensuring critical infrastructure are capable of surviving a disaster. Hazard mitigation strategies help to eliminate losses by limiting new exposures in identified hazard areas, diverting the hazard by reducing the impact, and developing an awareness of hazard area location to avoid future development.

Federal legislation has historically provided funding for disaster preparedness, response, recovery, and mitigation. The Disaster Mitigation Act of 2000 (DMA 2000) is legislation designed to improve the delivery of mitigation programs through sound and viable planning. The legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur. As such, DMA 2000 establishes a pre-disaster hazard mitigation program, outlining requirements for the post-disaster Hazard Mitigation Grant Program (HMGP).

DMA 2000 specifically addresses mitigation planning at the state and local levels. It identifies requirements that allow HMGP funds to be used for planning activities, and increases the amount of HMGP funds available to states that have developed a comprehensive, enhanced mitigation plan prior to a disaster. State, County, and local jurisdictions must have an approved mitigation plan in place prior to receiving post-disaster HMGP funds. These mitigation plans must demonstrate that their proposed projects are based on a sound planning process that accounts for the risk to and the capabilities of the individual communities.

Local governments have certain responsibilities for implementing Section 322, including:

- Preparing and submitting a local mitigation plan;
- Reviewing and updating the Plan every five years; and
- Monitoring Projects.

DMA 2000 is intended to facilitate cooperation between state and local authorities, prompting them to work together. It encourages and rewards local and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network is intended to enable local and state governments to articulate accurate needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects.

This Plan has been prepared to meet FEMA and CalOES requirements thus continuing the County's eligibility for funding and technical assistance from state and federal hazard mitigation programs, such as the HMGP, Pre Disaster Mitigation, and Flood Mitigation Assistance programs.

### SECTION 2 PLAN PURPOSE AND AUTHORITY

Authority to create this Plan is derived from the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), as amended by the Disaster Mitigation Act of 2000 (DMA 2000). The requirements and procedures for mitigation plans are found in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Part 201 and the associated Interim Final Rule changes. The federal law and associated rule changes and regulations establish planning and funding criteria for states and local communities.

- *Enhance Public Awareness and Understanding* to help residents of the County better understand the natural hazards that threaten safety and welfare; economic vitality; and the operational capability of critical infrastructure;
- *Create a Decision Tool for Management* to provide information that managers and leaders of local government, business and industry, community associations, and other key institutions and organizations need to take action to address vulnerabilities to future disasters;
- *Promote Compliance with State and Federal Program Requirements* to ensure that Santa Barbara County and its incorporated cities can take full advantage of state and federal grant programs, policies, and regulations that encourage or mandate that local governments develop comprehensive hazard mitigation plans;
- *Enhance Local Policies for Hazard Mitigation Capability* to provide the policy basis for mitigation actions that should be promulgated by participating jurisdictions to create a more disaster-resistant future; and

- Provide *Inter-Jurisdictional Coordination of Mitigation-Related Programming* to ensure that proposals for mitigation initiatives are reviewed and coordinated among the participating jurisdictions within the County.
- Achieve *Regulatory Compliance* To qualify for certain forms of federal aid for pre- and postdisaster funding, local jurisdictions must comply with the federal DMA 2000 and its implementing regulations (44 CFR Section 201.6). DMA 2000 intends for hazard mitigation plans to remain relevant and current. Therefore, Local plans (including Santa Barbara County's) are updated every five years. This means that the Hazard Mitigation Plan for Santa Barbara County uses a "five-year planning horizon". It is designed to carry the County through the next five years, after which its assumptions, goals, and objectives will be revisited and the Plan resubmitted for approval. Section 7 details specific goals and objectives with regard to implementing mitigation activities over the life of this Plan. In Section 8, Santa Barbara County has outlined a more aggressive approach to ensuring the Plan is implemented, evaluated, monitored and updated.

On the following pages are the resolutions that adopted the 2017 Plan.

#### **RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA**

#### A RESOLUTION IN THE MATTER OF THE ADOPTION OF THE 2017 SANTA BARBARA COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Resolution No. 17–175

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

WHEREAS, the County of Santa Barbara Office of Emergency Management, working with the Public Works Department and other County departments, and has coordinated the hazard mitigation planning efforts among the incorporated cities of the county; and

WHEREAS, the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan, ("Plan") identifies a county-wide risk assessment and mitigation strategies to reduce the impacts of natural, technological, and human caused disasters on the public and local government; and

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

WHEREAS, the Act specifies documentation that the Plan has been approved by the FEMA and formally adopted by the Santa Barbara County Board of Supervisors; and

WHEREAS, on June 28, 2017, FEMA approved the County's Plan; and

WHEREAS, the Office of Emergency Management will coordinate the incorporated cities respective Annexes submitted to FEMA for inclusion in the Plan after they are adopted by their City Councils.

NOW, THEREFORE, BE IT RESOLVED, that the County of Santa Barbara Board of Supervisors hereby adopts the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan and directs the Office of Emergency Management to continue its work with the incorporated cities to include their respective Annexes to the Plan. A Resolution in the Matter of the Adoption of the 2017 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan

**PASSED AND ADOPTED** by the Board of Supervisors of the County of Santa Barbara, State of California this 22<sup>nd</sup> day of August, 2017 by the following vote:

AYES:

Supervisors Williams, Wolf, Hartmann, Adam, and Lavagnino

NOES: None

ABSTAIN: None

ABSENT: None

JOAN HARTMANN, CHAIR BOARD OF SUPERVISORS

ATTEST: MONA MIYASATO CLERK OF THE BOARD

Deputy

APPROVED AS TO FORM RISK MANAGEMENT RAY AROMATORIO

By Date:

APPROVED AS TO FORM: MICHAEL C. GHIZZONI COUNTY COUNSEL

<u>Deputy</u>

APPROVED AS TO FORM THEODORE A. FALLATI, CPA AUDITOR-CONTROLLER

By:

8.9.17 Date:

DIRECTOR OF EMERGENCY MANAGEMENT ROBERT LEWIN OFFICE OF EMERGENCY MANAGEMENT

By

Date: 8-9-17

## RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA

A RESOLUTION TO INTEGRATE BY REFERENCE THE 2017 MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN INTO THE NEXT SANTA BARBARA COUNTY SAFETY ELEMENT UPDATE OF THE GENERAL PLAN

Resolution No. <u>17-176</u>

WHEREAS, the Governor's Office of Emergency Services (Cal OES) Mitigation Division requires a Board Resolution recognizing the adoption of the County Multi-Jurisdictional Hazard Mitigation Plan into the Safety Element of the County General Plan; and

WHEREAS, the Santa Barbara County Board of Supervisors adopted the revised Safety Element to the General Plan August 10, 2010; and

WHEREAS, the Santa Barbara County Board of Supervisors adopted the FEMA approved Multi-Jurisdictional Hazard Mitigation Plan on this date, August 22, 2017; and

WHEREAS, this Resolution enables Santa Barbara County to qualify for additional mitigation funding after a disaster; and

WHEREAS, the Safety Element of the General Plan currently integrates the Multi-Jurisdictional Hazard Mitigation Plan, in accordance with California Government Code Sections 8685.9, 65302 and 65302.6; and

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Santa Barbara County hereby accepts and adopts the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan and resolves to integrate the updated Plan by reference into the Safety Element of the General Plan with the next Safety Element update in accordance with the requirements of Government Code sections 65302, 65302.6 and 8685.9 (AB 2140(2006), and there is no possibility that the activity in question may have a significant impact on the environment and is therefore exempt from the provisions of CEQA, General Rule-Section 15061(b)(3). A Resolution Integrating by Reference the 2017 Multi-Jurisdictional Hazard Mitigation Plan into the Santa Barbara County Safety Element of the General Plan

**PASSED AND ADOPTED** by the Board of Supervisors of the County of Santa Barbara, State of California this 22<sup>nd</sup> day of August, 2017 by the following vote:

AYES:

Supervisors Williams, Wolf, Hartmann, Adam, and Lavagnino

NOES: None

ABSTAIN: None

ABSENT: None

JOAN HÀRTMANN, CHAIR BOARD OF SUPERVISORS

APPROVED AS TO FORM: MICHAEL C. GHIZZONI

COUNTY COUNSEL

ATTEST: MONA MIYASATO CLERK OF THE BOARD

Deputy

APPROVED AS TO FORM

**RISK MANAGEMENT** 

**RAY AROMATORIO** 

By

Date:

Deputy

APPROVED AS TO FORM PLANNING and DEVELOPMENT GLENN S. RUSSELL,PHD

vine VI By: Deputy

Date:

DIRECTOR OF EMERGENCY MANAGEMENT ROBERT LEWIN OFFICE OF EMERGENCY MANAGEMENT

Date: 8-14-17

#### SECTION 3 PLANNING PROCESS

#### 3.1 OVERVIEW

The planning process implemented for updating the Santa Barbara County Multi-jurisdictional Hazard Mitigation Plan (HMP) utilized two (2) different planning teams. The first team is the Mitigation Advisory Committee (MAC) and the second is the Local Planning team. All eight (8) incorporated cities (City of Buellton, City of Carpinteria, City of Goleta, City of Guadalupe, City of Lompoc, City of Santa Barbara, City of Santa Maria, and City of Solvang) joined the County of Santa Barbara in the preparation of this Multi-Jurisdictional Hazard Mitigation Plan. Each of the participating jurisdictions had representation on the MAC and was responsible for the administration of their own Local Planning Team.

The planning process followed the concepts and principles outlined in the Comprehensive Preparedness Guide (CPG) 101. Both the MAC and the Local Planning teams focused on these underlining philosophies:

- <u>Focus on the mitigation strategy</u> The mitigation strategy is the plan's primary purpose. All other sections contribute to and inform the mitigation strategy and specific hazard mitigation actions.
- <u>Process is as important as the plan itself</u> In mitigation planning, as with most other planning efforts, the plan is only as good as the process and people involved in its development. The plan should also serve as the written record, or documentation, of the planning process.
- <u>*This is the community's plan*</u> To have value; the plan must represent the current needs and values of the community and be useful for local officials and stakeholders. Develop the mitigation plan in a way that best serves your community's purpose and people.
- <u>Intent is as important as Compliance</u> Plan reviews will focus on whether the mitigation plan meets the intent of the law and regulation; and ultimately that the plan will make the community safer from hazards.

The planning process for the Santa Barbara County Multi-jurisdictional Hazard Mitigation Plan (HMP) incorporated the following steps:

- <u>Plan Preparation</u>
  - Form/Validate planning team members
  - Establishing common project goals
  - Setting expectations and timelines
- <u>Plan Development</u>
  - Validate and revise the existing conditions/situation within planning area; the *Capabilities Assessment and Hazard Assessment Sections* in the HMP
  - Develop and review the risk to hazards (exposure and vulnerability) within the planning area; the *Vulnerability Assessment Section* in the HMP

Santa Barbara County

- 2017 Multi-Jurisdictional Hazard Mitigation Plan
  - Review and identify mitigation actions and projects within the planning area; the Mitigation Strategy in the HMP
  - Finalize the Plan
    - Review and revise the plan
    - Approve the plan
    - Adopt and disseminate the plan

Throughout this process, and though other standard practices, opportunities for public involvement was offered and encouraged. More details about public engagement is provided under Section 3.4.

The MAC team was guided through the planning process; and as material was shared and decisions were made, it was the MAC team's responsibility to bring these findings back to their Local Planning Team. Below is a summary of the collaborative planning process of the MAC and Local Planning team.

During the 2017 update of the HMP, the MAC reviewed several other plans, utilized the information provided, and cross referenced where applicable; including:

- 2011 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan
- 2013 Santa Barbara County Emergency Management Plan
- 2009 Santa Barbara County Comprehensive Plan-Safety Element
- 2016 Santa Barbara County Operational Area THIRA
- 2013 California Enhanced Hazard Mitigation Plan
- 2015 Ventura County Hazard Mitigation Plan
- 2014 San Luis County LHMP

## 3.2 MITIGATION ADVISORY COMMITTEE (MAC)

## 3.2.1 MAC Members

The Mitigation Advisory Committee (MAC) is a standing committee that works together throughout the year to discuss and provide input on a variety of activities. The MAC is led by Santa Barbara County Office of Emergency Management and has representation from all of the local jurisdictions, as well as County Departments and CalOES. These representatives also represent other regional agencies such as Fire Protection Districts, Water Agencies, and schools. A press release was also sent out announcing the planning process and soliciting input and involvement from adjacent agencies and the public. This press release is attached in the Appendixes.

The MAC was utilized for the updating of the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan. To assist with this effort Santa Barbara County Office of Emergency Management

hired a consultant to support and assist each jurisdiction with their Local Hazard Mitigation Plan; contained as an annex in the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan.

Names	Organization	MAC Member Status
Michael Dyer	Santa Barbara County – Emergency Manager	New Member
Shannon	Santa Barbara County – Emergency Services	New Member
McCrone	Planner	
Robert Troy	Santa Barbara County – Deputy Director Emergency Management	New Member
Tylor Headrick	Santa Barbara County- GIS/Emergency Services Planner	New Member
Rob Hazard	Santa Barbara County Fire – Battalion Chief	New Member
Rudy Martel	Santa Barbara County Agricultural Commissioner	New Member
Joyce Tromp	Santa Barbara County Flood Control	New Member
Jon Frye	Santa Barbara County Flood Control	New Member
Jan Koegler	Santa Barbara County Health	Returning Member
Marc Bierdzinski	City of Buellton – City Manager/Planning Director	Returning Member
Mimi Audelo	City of Carpinteria – Program Manager	New Member
Claudia Dato	City of Goleta – Senior Project Manager (Public Safety)	Returning Member
Gary Hoving	City of Guadalupe – Public Safety Director	New Member
Kurt Latipow	City of Lompoc – Fire Chief	New Member
Yolanda McGlinchey	City of Santa Barbara – Emergency Services Manager	Returning Member
Roy Dugger	City of Santa Maria – Emergency Preparedness Coordinator	Returning Member
Lisa Martin	City of Solvang	New Member
Yvette LaDuke	Cal OES – Emergency Services Coordinator	New Member
Andrew Petrow	Consultant	New Member

## 3.2.2 Overview of MAC Meetings

The MAC meetings were arranged and scheduled to follow the planning process steps outlined in Section 3.1. Each meeting was designed to walk the MAC members through sections of the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan and annexes. In addition to reviewing and validating material, the intent was to also educate MAC members on the planning process and purpose of each section. By taking this step it will help ensure that each MAC member could bring this knowledge back to their Local Planning Teams. The table below (**Table 3.2**) provides a list and the main purpose of each of the MAC meetings.

Date	Purpose
April 2015	Kick Off (in person)
11pm 2015	• Reviewed and discussed the hazards in the Plan; including initial ranking.
	<ul> <li>Each jurisdiction was asked to review their previous goals and objectives with a</li> </ul>
	local planning team.
December 2015	MAC Meeting (in person)
	• Recap of previous MAC meeting
	• Goal of the project
	• Understanding of HMP update requirements
	Validation of team members
	Proposed Planning Process
	Review of Capabilities Assessment Section
	·
	• Review results of Outreach Survey and incorporate into Plan where necessary
January 2016	MAC Meeting (conference call)
j	• Recap of previous MAC meeting
	Review of Capabilities Assessment Section
	Discussion of public outreach efforts
	Preparation for next MAC meeting
	• Treparation for next wide meeting
February 2016	MAC Meeting (in person)
	• Recap of previous MAC meeting
	• Review of Hazard Assessment Section
	• Presentation of Vulnerability Assessment results
	• Discussion of public outreach efforts
	• Preparation for next MAC meeting
March 2016	MAC Meeting (conference call)
	Recap of previous MAC meeting
	Review of Capabilities Assessment and Vulnerability Assessment Sections
	• Preparation for next MAC meeting
April 2016	MAC Meeting (in person)
	• Recap of previous MAC meeting
	• Initial discussion of mitigation projects and actions
May 2016	MAC Meeting (conference call)
1114 2010	Recap of previous MAC meeting
	<ul> <li>Discussion of mitigation actions and projects</li> </ul>
	Discussion of undate process
	Preparation for next MAC meeting

Date	Purpose
June 2016	<ul> <li>MAC Meeting (in person)</li> <li>Recap of previous MAC meeting</li> <li>Discussion of mitigation actions and projects</li> <li>Discussion of update process</li> </ul>

## 3.3 COUNTY LOCAL PLANNING TEAM

## 3.3.1 Local Planning Team Planning Process

Meetings were conducted to review the existing Hazard Mitigation Plan, update the capabilities and hazard assessments, and discuss existing, recurring, or new mitigation strategies. This Plan was developed as a county-wide hazard mitigation plan focusing on collaboration to implement mitigation strategies throughout the county, while maintaining accountability within each participating City to identify and track specific mitigation actions.

Each of the following sections detail the methodologies for development and updates since the 2011 Plan. The *Capability Assessment* (Section 4) has been updated to reflect changes in county departments and organizational structure. As necessary, the discussions of local planning documents have been revised to reflect updates since 2011.

The *Hazard Assessment*, detailed in Section 5, presents the methodology in which the Local Planning team reviewed the previously identified hazards and discussed revisions to their prioritization. A profile for each hazard is included which summarizes the type of hazard, location and extent, history of past occurrences, and probability of future occurrences. The hazard identification and ranking documented in this section form the foundation for prioritizing mitigation actions.

The Local Planning team reviewed the previous *Mitigation Strategy* and reported on progress made in implementing the listed actions. In addition, based on updates to the hazard identification, profiles, vulnerability assessments, and the capability assessment new mitigation actions were identified. The progress report and new mitigation actions are presented in the updated *Mitigation Strategy* (Section 7).

The Local Planning team held regular meetings and continually worked on the Plan. The Local Planning team coordinated and consulted with other entities and stakeholders to identify and delineate natural hazards within the County to assess the risks and vulnerable property in identified hazard areas. From the start, every attempt was made to establish an open public process to provide an opportunity for all sectors of the overall community to be involved in the planning process. In some cases direct public input was successful and in others the residents were represented in the process by their jurisdictions staff, by necessity.

## 3.3.2 Local Planning Team Members

Table 3.3 lists the members of the Santa Barbara County Local Planning Team. These individuals collaborated to identify/validate the unincorporated County's critical facilities, provide relevant information/material (i.e., plans), review/update sections, and report on progress and suggest new mitigation actions.

	Name	Title
Office of		
Emergency	Michael Dyer	Emergency Manager
Management		
	Shannon McCrone	Emergency Services Planner
	Robert Troy	Deputy Director Emergency Management
Fire	Rob Hazard	Battalion Chief
Community	Coores Charitan	Director
Services	George Chapjian	Director
Flood	Jon Frye	Engineering Manager
Public Works	Tom Fayram	Deputy Director
General Services	Anne Fearon	Enterprise Leader-Special Project Manager
Planning	Matthew Schneider	Deputy Director
	Mindy Fogg	Supervising Planner
Ag Commissioner	Rudy Martel	Deputy Commissioner
GIS	Tylor Headrick	Office of Emergency Management

### Table 3.3 County Planning Committee 2017

## 3.3.3 Overview of Local Planning Team Meeting

The County Planning Committee met regularly during the planning process to discuss data needs and organize data collection.

Meeting Dates	Summary of Discussions
January 2016	<b>Meeting #1:</b> Discussed sections 1-4 update, also agreed to insert a County Land Use Section; The committee also agreed to standardize County GIS mapping, if possible.
March 2016	<b>Meeting #2:</b> Discussed Hazard Assessment (section 5) update; reviewed and agreed upon on 33 identified hazard profiles for the County; discussed hazard impacts on the County and agreed to the three scenarios for HAZUS run event (100-year flood event, San Luis Range South Margin Earthquake, and Red Mountain Range North Margin Earthquake); Agreed to use the Probability v. Impact Matrix for hazard prioritization.
May	Meeting #3: Discussed Vulnerability Assessment (Section 6) update; defined critical

## Table 3.4 County Planning Committee Meetings Summary

Meeting Dates	Summary of Discussions
2016	facilities for the County; reviewed and revised the critical facilities list from 2011 plan; Reviewed the HAZUS default data and the three scenarios from the HAZUS run event; Agreed to run three types of hazard vulnerability methods (scientific Loss Estimation, Analysis of Exposure to Critical Facilities, and Qualitative Estimation of Impacts); Discussed steps for the update of County Mitigation Strategies (Section 7).
June 2016	<b>Meeting #4:</b> Discussed Mitigation Strategies (Section 7) update; reviewed Future Projects from 2011 Plan; categorized those projects by responsible Department/Agency; reviewed final timeline for plan update.

## 3.4 PUBLIC OUTREACH

There were two different Public Outreach campaigns used during the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan update process: the first informing the Community of HMP Update, and the second educating the Community of Hazards. The second campaign (educating of the Community of Hazards) is an ongoing campaign that was leveraged during the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan update process. Below is a summary of the campaigns:

## 3.4.1 Informing the Community of the HMP Update process

In July 2015, Santa Barbara County Office of Emergency Management issued a press release (in Spanish and English) announcing the commencement of the hazard mitigation planning process. This announcement invited the public to notify the County of their interest to participate in the planning process or submit comments.

Additionally, as part of the Public Outreach effort, Santa Barbara County Office of Emergency Management participated in a Radio interview and held two workshops to present the updates and solicit input from the public. Final drafts of the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan were also made available to the public through the Aware and Prepare Website and hard copies were available in select Public Libraries. Input from the public was presented to both the MAC and Santa Barbara County Local Planning Team for consideration of incorporation into the HMP.

## 3.4.2 Ongoing Public Outreach

The County of Santa Barbara utilizes several platforms to educate the public about hazards in the community, relevant programs to safeguard and protect themselves from disaster, and actions they can take to prepare themselves for events. Below is a list of the different platforms used and a brief summary of the some of the programs:

- County Aware and Prepare Website
- Social Media (Facebook, Twitter)

- Meetings/Workshops
- Public Service Announcements- radio and television
- Public Surveys
- Community Emergency Response Team Training (CERT)
- Defensible Space Education
- Evacuation training for Schools and Communities
- Drought Education
- Flood emergency awareness

As part of the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan process, the County issued a public survey (in Spanish and English) to seek input from the community about would prioritize hazards facing the county and what government officials could do to better communicate the risk. Hard copies of the bilingual surveys were also made available on public counters within the County offices and several City planning departments. The County posted a notification on their Facebook page and sent emails to key stakeholder groups such as the CAER Chapter (a government-industry group) and the Santa Barbara County Fire Safe Council about the survey.

# SECTION 4 COUNTY CAPABILITY ASSESSMENT

## 4.1 SANTA BARBARA COUNTY - INTRODUCTION

Santa Barbara County, one of 58 counties in the State of California, was established on February 18, 1850. The County is located approximately 300 miles south of San Francisco and 100 miles north of Los Angeles, and covers 3,789 square miles, nearly 1,061 square miles (28%) of which is water and 2,735 square miles (72%) of which is land area. Elevation ranges from sea level to 6,820 feet at Big Pine Mountain. A corner of Kern and San Luis Obispo Counties border it to the north, Ventura County to the east, and the Pacific Ocean to the west and south. The County has 110 miles of coastline, and one third of the land area is located in the Los Padres National Forest.

Santa Barbara County is comprised of eight incorporated cities and 14 unincorporated communities including Vandenberg Air Force Base. According to the 2010 Census, the County's total population was 423,895 with a median household income of \$62,779. Santa Barbara is currently the 19<sup>th</sup> most populous County in the state.

The following subsections provide an overview of the *Economy*, *Physical Features*, *Infrastructure*, and *Jurisdictional Summaries* for the County of Santa Barbara.

## 4.1.1 Economy

Santa Barbara can be subdivided into three economic regions, North County, Central County, and the South County. Each region has unique features which influence the economics of the area.

The North County is part of the central California coastal region. It is defined by the Santa Maria and Lompoc Valleys with several different communities, including Vandenberg Air Force Base. The presence of the base in the area has generated a variety of business opportunities, causing the region to evolve away from a strictly agriculture-based economy into one that is more diverse with hospitality, retail, and financial services.

The Central County is known primarily for its vineyards, horse ranches, Bed-and-Breakfasts and Cachuma Lake. Visitors come to the Los Padres National Forest and Cachuma Lake for a variety of outdoor activities including camping, boating, fishing, hiking, and rock climbing. The Danish village of Solvang also attracts a number of tourists to the region throughout the year.

The South County's economy is based largely on tourism, education, and services. Several educational institutions are located in South County including Westmont College and the University of California-Santa Barbara. Many festivals in South County attract visitors throughout the year. In addition to education and tourism, a variety of technological and agricultural businesses have headquarters in Goleta and Carpinteria. The City of Santa Barbara is the retail center of the region. The result is a healthy and diverse economy in the South County.



Agriculture is a major industry throughout the entire County and provides a significant opportunity for employment. A large percentage of the County's undeveloped area is devoted to agriculture. In spite of pressures from urbanization and foreign imports, agriculture continues to thrive. The top five crops by value are:

Strawberries: \$464.7 million Wine grapes: \$155.3 million Broccoli: \$137.4 million Cut flowers: \$105.0 million Nursery products: \$86.0 million

Due to the significance that agriculture has on the economy and landscape of Santa Barbara County, impacts on agriculture from most of the hazards specified in this plan are identified.

## 4.1.2 Employment

Santa Barbara's percent unemployed in the civilian labor force, according to the July 2017 State of California Employment Development Department, was 4.7%. The top three Employers in the County are Higher Education, Department of Defense, and Local Government.

## 4.1.3 Climate

The Mediterranean climate in the Santa Ynez Valley is considered one of the finest in California. Temperatures in the winter range from an average of 33-degree lows at night to 55-degree highs during the day and in the summertime the daytime highs range in the 70s and 80s with lows ranging in the 50s and 60s. The Cuyama Valley has consistently warm days and cold nights, with gentle breezes keeping temperatures mild in the afternoon, and down-valley breezes cooling things off at night. In the mountains the climate is still considered Mediterranean, with mild rainy winters and warm dry summers.

## 4.1.4 Physical Features

Santa Barbara County has a mountainous interior, primarily made up of three mountain ranges; the Santa Ynez Mountains, the San Rafael Mountains, and the Sierra Madre Mountains. Most of the mountainous region is within the Los Padres National Forest. The forest contains the San Rafael and the Dick Smith Wildernesses. The valleys, especially those along the coast, is where the majority of the County's population resides. The cities of Santa Barbara, Goleta, and Carpinteria are all along the south coast, in the coastal plain south of the Santa Ynez Mountains. The Cuyama Valley in the north part of the County is less populated and more arid; oil production, ranching, and agriculture are the dominant land uses there. The County also includes four of the eight Channel Islands in the Pacific Ocean: San Miguel Island, Santa Barbara Island, Santa Cruz Island, and Santa Rosa Island. Santa Cruz Island is the only one of the four that is privately owned by The Nature Conservancy who has owned it since 1987. The other islands are part of the Channel Islands National Park.

Due to the Mediterranean climate of Santa Barbara County and the variability of rainfall, stream flow throughout the County is highly variable and directly impacted from rainfall with little snowmelt or base

flow from headwaters. Most streams in the County are dry during the summer months. Many streams in the County have flows that rise and fall in response to precipitation. Watercourses can experience a high amount of sedimentation during wet years and high amounts of vegetative growth during dry and moderate years.

The drainages in the southern part of the County are characterized by high intensity, short duration runoff events, due to the relatively short distance from the top of the Santa Ynez Mountains to the Pacific Ocean. The drainages in the northern part of the County are contained in the upper mountain areas, but broaden out into level coastal plains. The drainages in the northern part of the County are generally characterized by longer duration and less intense storms than the southern coastal areas. The majority of streams in Santa Barbara County only flow during winter months.

There are four (4) major reservoirs located in the County: Lake Cachuma, Twitchell, Gibraltar, and Jameson Lake. Lake Cachuma, Gibraltar Reservoir, and Jameson Lake are located along the Santa Ynez River, in North County. Lake Cachuma is the largest reservoir along the Santa Ynez River, with a drainage area of 421 square miles upstream of the Bradbury Dam. Gibraltar Reservoir has a drainage area of 214 square miles upstream of Gibraltar Dam and Jameson Lake has a drainage area of 14 square miles upstream of Juncal Dam.

In North County, the Twitchell Reservoir is located along the Cuyama River. The Cuyama River Basin has a drainage area of approximately 1,140 square miles and it is the confluence of the Cuyama and Sisquoc Rivers that form the Santa Maria River. The Twitchell Reservoir has a drainage area of 1,135 square miles above Twitchell Dam.

The County is divided into five (5) major watersheds: Santa Maria, Cuyama, San Antonio, Santa Ynez River, and South Coast. The Santa Maria Watershed includes the Cuyama and Sisquoc watersheds. The drainage areas for these watersheds are:

Watershed	Drainage Area
Santa Maria	1,845 square miles
Cuyama	1,140 square miles
San Antonio	165 square miles
Santa Ynez River	900 square miles
South Coast	416 square miles

## 4.1.5 Infrastructure

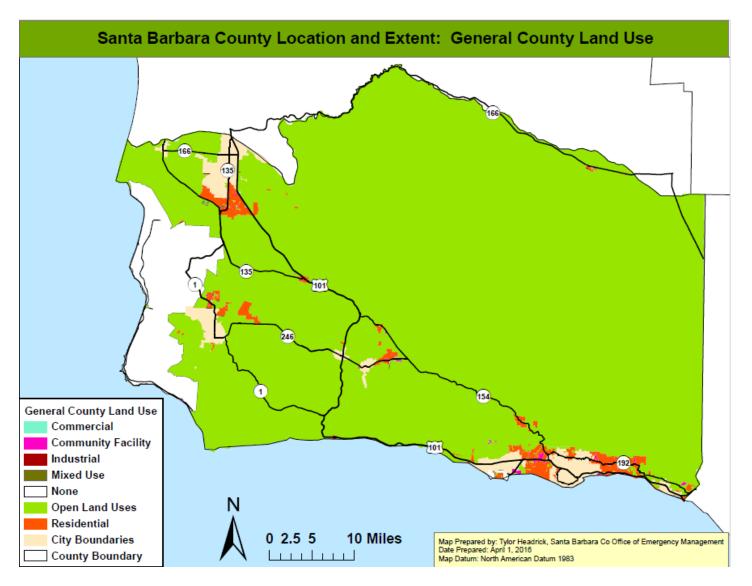
The infrastructure of Santa Barbara County supports its industries and residents. The Public Works Department maintains over 1,668 lane miles of major roads and local streets in the unincorporated portions of the County, including over 112 bridges. There are five airports in the County of Santa Barbara; Lompoc Airport, Santa Barbara Airport, Santa Barbara Municipal Airport, Santa Maria Public Airport, and Santa Ynez Airport. The County has been producing oil and gas since the late 1800's. It was in 1896 that oil producers constructed piers to access the underwater portion of the Summerland Oil Field, marking the beginning of offshore oil production. Several operational oil platforms are located along the Coast of Santa Barbara County, including one in the tidewaters. Groundwater is the primary source of potable water for many County residents. However, river water and rain water is collected into reservoirs and treated, serving

the majority of the South County population. However, the County has experienced excessive drought conditions over the last five years, nearly depleting its water resources. The Cachuma and Twitchell Reservoirs are owned by the federal government, administered by the Water Resources Division, and operated by local water purveyors. Prolonged drought has resulted in the installation of a pump in Cachuma Lake that will be used to pump out water from the deepest portion of the lake, if needed. The Gibraltor Reservoir is owned and operated by the City of Santa Barbara, and serves its residents. Jameson Reservoir is operated by the Montecito Water District and its water is delivered to the south coast via three tunnels through the Santa Ynez Mountains.

## 4.1.6 Land Use-Unincorporated County

Santa Barbara County is known for its natural scenic resources. The coastal terraces between ocean and mountains, the scenic inland valleys with large expanses of cultivated farmlands and gently rolling hillsides, and the rugged Los Padres National Forest are all key elements that define the county's resources. The unincorporated county is largely rural in character, with distinct compact urban communities separated by public open space and private grazing lands. The foothill elevations typically reach about 800 feet above sea level. The mountain ranges crest between four and five miles inland (north and east) from the coast and reach elevations between 3,200 and 3,800 feet above sea level. **Figure 4.1** shows General County Land Use overall.





Santa Barbara County contains five main geographical sub regions for land use: 1) the South Coast Area, 2) Santa Maria Valley, 3) Lompoc Valley, 4) Santa Ynez Valley, and 5) Cuyama Valley. Development over the last five years in these sub regions, much like the county as a whole, has been limited to infill type projects; there has been no major new development. Additionally, there are no major planned development projects. However, any new major development will need to meet all current building codes and standards. This includes an assessment of the development against the Comprehensive Plan, especially the Safety Element which has incorporated lessons learned from the Multi-Jurisdictional Hazard Mitigation Plan update process. Descriptions of each of these sub regions follow.

## 1. South Coast Area:

The South Coast Area sub region is the largest designated urbanized area in the county, covering approximately 130 square miles, and includes the cities of Santa Barbara, Goleta, and Carpinteria. This

coastal area is characterized by numerous canyons between the foothills of the Santa Ynez Mountains and the Pacific Ocean. The unincorporated communities and sub-areas of the South Coast Area include: Summerland, Montecito, Toro Canyon, Mission Canyon, Eastern Goleta Valley, Isla Vista, and the Gaviota Coast.

### Summerland

Summerland is located in southern Santa Barbara County between the Cities of Santa Barbara and Carpinteria, and is bordered by Ortega Ridge Road on the west, the Montecito Planning Area on the north, Padaro Lane on the east, and the Pacific Ocean on the south. Summerland is bisected by two major transportation corridors: U.S. Highway 101 and Union Pacific Railroad (UPRR), used by passenger and freight trains. These major transportation corridors separate most of the community from the Pacific Ocean.

Summerland is separated into two subareas: the urban area (where land uses are primarily residential), mixed-use, commercial, and the rural area (where land use is dominated by large residential developments and agricultural). Summerland's exiting land use includes: 249 acres of agriculture, 13 acres of commercial, 185 acres of residential, 235 acres of residential ranchette, and 38 acres of recreational. The area encompasses 706 existing residential units. Summerland currently has a small commercial strip centered on Lillie Avenue adjacent to U.S. Highway 101, and has a total of 111,004 sq. ft. of commercial development.

#### Montecito

Montecito is a low to medium density residential community comprising 13 square miles and 8,965 people. The community lies between the Pacific Ocean and the foothills of the Santa Ynez mountain range, with the City of Santa Barbara to the west and the community of Summerland to the east. The community contains approximately 3,010 residential units. The central urban sub-area, which lies between the Los Padres National Forest and U.S. Highway 101, is characterized by about 2,200 low-density residential parcels. The central urban sub-area also contains Montecito's only commercial center and Public Park. Montecito's coastal sub-area, which lies to the south of U.S. Highway 101, encompasses 290 acres, all of which exist in the Coastal Zone. The coastal sub-area is primarily developed with medium to high density residential. The mountain sub-area extends to the north of the Los Padres National Forest boundary and occupies the northern portion of the Montecito Planning Area. The mountain sub-area encompasses 9,984 acres and is dominated by mountainous open space with few residential units.

## Toro Canyon

Toro Canyon is an area of mixed rural and semi-rural, agricultural and low-density residential uses of approximately 5,950 acres. Toro Canyon's existing land uses include large expanses of agriculture, a few concentrated and many scattered residential developments, two small commercial areas, recreation and undeveloped open space. The Toro Canyon Plan Area includes approximately 1,000 parcels and the following land uses: 850 residential units; 61,665 sq. ft. of commercial and industrial space; 5,236,132 sq. ft. of greenhouses and related development; 88,545 sq. ft. of institutional/educational development; and 130,399 sq. ft. of other non-residential development. Major access roads into Toro Canyon include U.S. Highway 101, Via Real and State Route 192 (East Valley Road/Foothill Road).

Santa Claus Lane and Via Real at the eastern Padaro Lane/Highway 101 interchange are the only commercial areas in Toro Canyon. Residential development is scattered throughout Toro Canyon, generally with larger

parcels to the north and smaller parcels to the south. Several neighborhoods with parcel sizes between 7,000 square feet to one acre exist in southern Toro Canyon, including beach front properties along Padaro Lane and Rural Neighborhoods (RNs) surrounded by agricultural and rural land. Upper Toro Canyon (generally north of East Valley Road and Paredon Ridge) residential development is characterized by parcel sizes of five acres or greater, and is generally associated with either agricultural uses or large estates.

Toro Canyon contains almost 2,700 acres designated for agriculture with zoning ranging from AG-I-5 (minimum 5-acre lots) to AG-II-100 (minimum 100-acre lots). In addition, almost 1,400 acres are designated Mountainous Area, with zoning that allows existing agricultural use along with some permit requirements for agricultural expansion.

Toro Canyon supports a high diversity of biological resources, including southern oak riparian woodland, coastal scrub and chaparral. The watersheds of both Toro Creek and Arroyo Paredon Creek support stretches of relatively undisturbed habitat serving as wildlife corridors between the mountainous Los Padres National Forest and the Pacific Ocean.

## Mission Canyon

The Mission Canyon area is located in the foothills of the Santa Ynez Mountains, north of and adjacent to the City of Santa Barbara. Mission Canyon's 1,122 acres contain 1,141 parcels and support residential development, agriculture, and open space. There is no commercial or industrial development. Residential development occurs throughout the area, generally with larger parcels to the north and smaller parcels to the south. Residential parcels range from under 7,000 sq. ft. to over 40 acres. The South Foothill sub-area falls to the south of Foothill Road, and comprises 143 acres with 258 parcels that average 0.5 acre in size. The Mission Canyon Heights sub-area contains 550 parcels within its 160 acres of steeply sloped terrain, and averages about 0.5 acre per parcel. Finally, the Upper Mission Canyon sub-area comprises 817 acres of terrain occupied by low-density residential and open space. Several popular hiking trailheads are located in this sub-area.

Mission Canyon supports a diversity of biological resources, including coast live oak riparian woodland and chaparral. The upper watershed of Mission and Rattlesnake Creeks supports stretches of relatively undisturbed habitat serving as wildlife corridors within the area. The Mission Canyon Scenic Corridor runs north to south through the entire area.

## Eastern Goleta Valley

Eastern Goleta Valley is located between the City of Santa Barbara and the City of Goleta. The unincorporated coastal plain and foothills reaching from Camino Cielo Road on the north to the Pacific Ocean on the south covers approximately 23,300 acres of between the Cities of Santa Barbara and Goleta. Of this area, about 15,300 acres lie within the designated Rural Area, and 7,900 acres lie within the designated Urban Area where the majority of the approximately 36,000 residents of Eastern Goleta Valley live. Eastern Goleta Valley is largely suburban residential in character, providing a range of residential types, including single family, condominium, apartment and mobile home types in the Urban Area, with ranchette neighborhoods on the peripheral areas of Hope Ranch and the foothills. There are currently 10,222 residential units in the area. There is a total of 3,187,463 sq. ft. of commercial development in Eastern Goleta Valley, most of it concentrated along the Hollister Avenue – State Street corridor. The mid to higher

elevations of Eastern Goleta Valley are designated as mountainous areas and are characterized by rugged terrain, habitat areas, headwaters of local watershed sub-basins, and clusters of rural residential neighborhoods. Much of the mountainous area lies within the boundaries of Los Padres National Forest, which is owned both publicly and privately. Per the Land Use Element, minimum parcel size in this area ranges from 40 to 320 acres, with 5- to 20-acre minimum parcel size residential zoning. The foothills of Eastern Goleta Valley support rural agriculture, typified by orchards, large parcel crop productions, and grazing land.

### Isla Vista

Isla Vista is an unincorporated community located 9 miles west of the City of Santa Barbara. Surrounded on three sides by the University of California, Santa Barbara (UCSB), Isla Vista is located on a coastal bluff overlooking the Pacific Ocean. The current population of Isla Vista is approximately 20,000, and the area is ½ square mile. Much of Isla Vista is a densely populated residential community, with one of the highest concentrations of people in the state (62.5 people per acre). Isla Vista's downtown area is located on the eastern edge of the community adjacent to the UCSB Main Campus and contains 134,000 sq. ft. of commercial development.

#### Gaviota Coast

The Gaviota Coast is a 158 square mile (101,199 acres) unincorporated area of coastal plains and foothills north of the City of Goleta that contains 1,006 parcels with an average size of 110 acres. The area is bounded by Vandenberg AFB to the west, the Pacific Ocean on the South, the crest of the Santa Ynez Mountains on the north, and the City of Goleta to the east. Highway 101 is the primary thoroughfare, while Highway 1 provides access to the Lompoc Valley.

Agriculture is the predominant land use designation with 77,820 acres, followed by Mountainous Area of 26,051 acres, recreation/open space of 5,562 acres, and other miscellaneous designations for the balance of 2,266 acres. Much of the agricultural land includes Los Padres National Forest in the inland portions of the Gaviota Coast. Cattle's grazing is the primary agricultural use, in addition to orchards and other agricultural operations. The Los Padres National Forest covers 15,634 acres on the Gaviota Coast, and is owned by the U.S. Federal Government. Three major State parks and one County park exist within the Gaviota Coast: Gaviota State Park, El Capitan State Beach, Refugio State Beach, and Jalama Beach County Park. Commercial land uses in the Gaviota Coast are limited to approximately 100 acres of oil facilities contained within three industrial developments: Plains Exploration and Production Company (PXP) Point Arguello, ExxonMobil's Las Flores Canyon Processing Facility, and the Tajiguas Landfill. Residential development in the area is broadly dispersed, with single-family homes located on large agricultural zoned parcels. An exception is the small pocket of rural residential development at Arroyo Quemada, and developed smaller agricultural parcels at El Capitan Ranch and the upper reaches of Refugio Road near West Camino Cielo. A total of approximately 234 existing single-family dwellings exist in the Gaviota Coast.

## 2. Santa Maria Valley:

This sub region includes the Santa Maria Valley urbanized area. This urban area is the largest retail trade center in the North County. The valley is situated in the northwest corner of the county and is bounded by the Santa Maria River to the north, the Casmalia Hills to the west, the San Rafael Mountains to the east, and the

Solomon Hills to the south. The unincorporated communities of Orcutt and Los Alamos are located in this area, as are the cities of Santa Maria and Guadalupe. The land use outside these urbanized zones is largely rural in character, and dominated by cultivated agriculture, grazing, and open space.

## Los Alamos

Los Alamos is a residential community located in a narrow valley transverse by the San Antonio Creek watershed between the Purisima Hills and the Solomon Hills approximately 15 miles southeast of the City of Santa Maria. The community is approximately one square mile, or 460 acres in area, with a population of about 1,900. The urban area is primarily composed of 10,000 sq. ft. residential lots. Agricultural land surrounding the community consists of large parcels (100 acres or greater), most of which are currently under active Williamson Act contracts.

## Orcutt

The community of Orcutt is located immediately south of the City of Santa Maria and encompasses 14,650 acres with 10,300 parcels and approximately 11,000 residential units. There is 609,000 sq. ft. of commercial, industrial, or institutional development. Orcutt's central urban core is located in the northern part of the township and comprises 3,600 acres and 8,250 residential units. All of Orcutt's major commercial development is located in this area. South and West Orcutt are primarily low to medium density residential, with approximately 2,400 residential units in the 10,000 acre area. Agriculture dominates the land use outside the urban core and residential areas, with approximately 7,000 acres of land designated for agriculture in Orcutt, of which 6,000 is in production.

## 3. Lompoc Valley:

The Lompoc Valley is located in the mid-western portion of the county, adjacent to Vandenberg Air Force Base, and is separated from the rest of the county by the Purisima, Santa Rita, Santa Rosa, and White hills. The Santa Ynez River also traverses the Lompoc Valley in a westerly direction and eventually drains into the Pacific Ocean. This area includes the city of Lompoc and the unincorporated communities of Vandenberg Village and Mission Hills. Vandenberg Village is located in the Lompoc Valley at the westerly end of the Santa Ynez River Basin, and is bordered by Vandenberg AFB to the west and the City of Lompoc to the south. Vandenberg Village has a population of approximately 6,497 and is 5.2 square miles. The low to medium density residential core is surrounded primarily by agriculture and open space.

## 4. Santa Ynez Valley:

The Santa Ynez Valley is located in central Santa Barbara County, adjacent to the Cachuma Lake Recreation Area. The area extends north from the Santa Ynez River to the Woodstock Ranch and Oak Trails subdivisions, and east from the western outskirts of the City of Buellton to the Rancho Estates neighborhood. The Santa Ynez Valley is located at the base of several converging mountain ranges, including the San Rafael and Santa Ynez mountains, and the Purisima and Santa Rita hills. The Santa Ynez River is located to the south of this valley. The area is approximately 72 square miles (46,933 acres) and includes the unincorporated communities of Santa Ynez, Ballard, and Los Olivos.

The Santa Ynez Valley area contains 3,901 parcels with a net area of approximately 45,380 acres. Agriculture is the predominant land use designation with 43,441 acres, followed by residential at 1,580 acres, commercial at 110 acres, and industrial at 51 acres. The Santa Ynez Valley Community Plan separates the area into three distinct land use types: rural, inner-rural, and urban townships. About half of the area (22,915 acres) is designated as rural, with parcels larger than 40 acres and large-scale agricultural users. Inner-rural land, which surrounds the townships and is home to agriculture, recreational, and ranchette-style residential parcels of 5 to 40 acres, accounts for 20,434 acres of the area. The remaining 2,031 acres are designated as urban land use, or townships. Approximately 56% of the areas 9,850 residents reside in the three townships, which offer low to medium density residential development.

The township of Santa Ynez is located east of the City of Solvang and west of the junction of Highways 154 and 246. Approximately 4,000 residents inhabit the township's 1,565 acres, and land use is predominantly lower density residential surrounding a downtown commercial center located in the southeastern part of the town. The 137 acre reservation of the Santa Ynez Band of Chumash Indians is located within the urban boundary of Santa Ynez.

The township of Los Olivos is located in the northern part of the Santa Ynez Valley region, and consists of 287 acres with a population of approximately 1,000 people. There is a 22 acre commercial district at the northern end of the township. Low to medium density residential surrounds the commercial core and accounts for over 85% of the total land area of the township.

Located north of Santa Ynez and south of Los Olivos, the community of Ballard has an estimated 500 residents and encompasses 94 acres and 118 parcels. 75% of the township is designated for residential use, with approximately four acres of commercial property. A mix of smaller agricultural parcels (5 to 40 acres) surrounds Ballard.

## 5. Cayuma Valley:

The Cuyama Valley is isolated in the far northeastern portion of the county and is a large agricultural area bounded by the Caliente Mountain Range to the north and the Sierra Madre Mountains to the south. The San Andreas Fault is located to the east of the Cuyama Valley and travels in a northwest direction. The valley is bisected by the Cuyama River and includes the communities of Cuyama and New Cuyama. The area has a population of approximately 500, mostly concentrated in the community of New Cuyama.

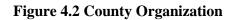
## 4.2 ADMINISTRATIVE AND TECHNICAL CAPACITY

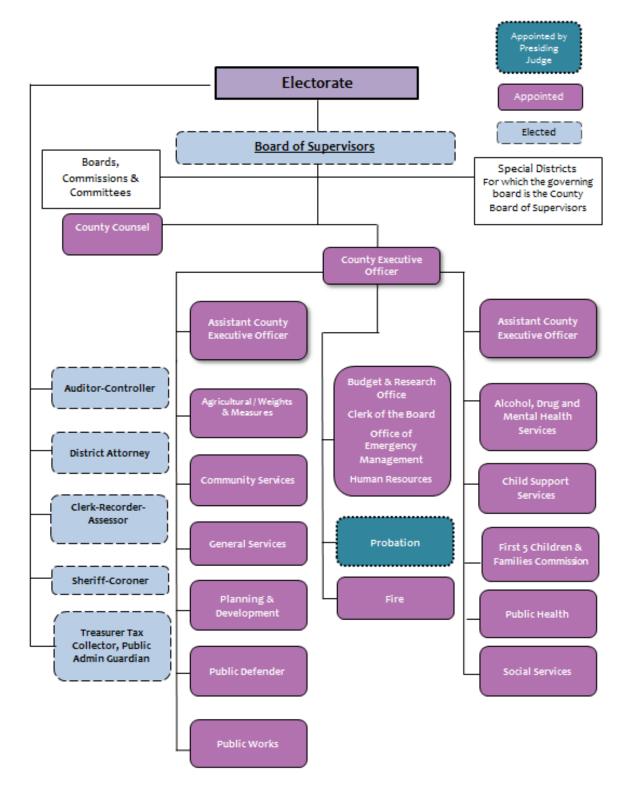
The County Local Planning Team identified current capabilities and mechanisms available for implementing hazard mitigation activities. This section includes a summary of departments and their responsibilities associated with hazard mitigation planning.

## 4.2.1 The Roles of County Departments in Hazard Mitigation

The following is a summary of County departments and their responsibilities related to hazard mitigation planning and implementation; as well as existing planning documents and regulations related to mitigation efforts within the community. The administrative and technical capabilities of the County, as shown in Table

4.3 provides an identification of department resources available to implement the actions identified in the mitigation section of the Plan. Specific resources reviewed include those involving technical personnel such as planners/engineers with knowledge of land development and land management practices, engineers trained in construction practices related to building and infrastructure, planners and engineers with an understanding of natural or manmade hazards, floodplain managers, surveyors, personnel with GIS skills and scientists familiar with hazards in the community. **Figure 4.2** shows the specific County departments that will have a significant role in implementing the Plan.





Many of the programs and plans of these departments, with applicability and links to loss reduction efforts are detailed below.

## 4.2.1.1 Santa Barbara County Office of Emergency Management

The Santa Barbara County Office of Emergency Management (OEM), a division of the Santa Barbara County Chief Executive Office is responsible for emergency planning and coordination for the Santa Barbara Operational Area; which includes:

Cities:	Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara,
Communities/Special Districts:	Santa Maria, Solvang Gaviota, Hope Ranch, Painted Cave, Surf, Ventucopa, Cachuma Operations and Maintenance Board, Cachuma Resource Conservation District, Carpinteria Sanitary District, Carpinteria Valley Water District, Carpinteria-Summerland Fire Protection District, Embarcadero Municipal Improvement District, Goleta Cemetary District, Goleta Sanitary District, Goleta Water District, Goleta West Sanitary District, Isla Vista Recreation and Park District, Lompoc Healthcare District, Los Alamos Community Services District, Mission Hills Community Services District, Montecito Fire Protection District, Montecito Sanitary District, Montecito Water District, Mosquito and Vector Management District of Santa Barbara County, Santa Barbara County Air Pollution Control District, Santa Barbara County Fire Protection District, Santa Maria Public Airport District, Santa Maria Valley Water Conservation District, Santa Ynez
	Community Services District, Vandenberg Village Community Services District.
Volunteer Organizations:	American Red Cross, Amateur Radio Emergency Services (ARES), Equine Evacuation, Montecito Emergency Response & Recovery Action Group (MERRAG), Voluntary Organizations Active in Disasters (VOAD).
Industry Groups:	CAER-Community Awareness and Emergency Response, Petroleum
Tri-County Coordination:	industry mutual aid group, SBIA-Santa Barbara Industrial Association. Santa Barbara County OEM also coordinates with adjoining offices of emergency services in Ventura and San Luis Obispo Counties.

OEM is responsible for the following activities:

- Maintain the Santa Barbara County Emergency Management Plan.
- Maintain the Operational Area Emergency Operations Center (EOC) in a state of operational readiness.
- Maintain a trained cadre of EOC team members for EOC activations.
- Provide ongoing leadership and coordinate disaster plans and exercises with the eight cities throughout the County.
- Assist County departments with emergency plans to address how they will perform during disasters.
- Assist County Departments' facility emergency plans for occupied County facilities.

- Provide ongoing training for County department emergency coordinators.
- Participate in public information campaigns for all hazards through the Aware and Prepare Campaign, public venues and various media presentations.

The Santa Barbara County Office of Emergency Management, within its duties noted above, will use this Multi-Jurisdictional Hazard Mitigation Plan in conjunction with the EMP to implement strategies, projects, and policies which lead to a more resilient and safe County.

## 4.2.1.2 Santa Barbara County Fire Department

Mission Statement	t The Santa Barbara County Fire Department serves and safeguards the community from the impacts of fires, medical emergencies, environmental emergencies, and natural disasters through leadership, planning, education, prevention, code enforcement, and all-hazard emergency response.	
Vision Statement Core Values	The Santa Barbara County Fire Department will be a model public safety agency, widely recognized for our effectiveness, regional strength, and community attentiveness. Commitment – Courage - Integrity - Innovation - Teamwork - Service	
Core values	Communent Courage meeting milovation - reanwork - Service	

The Fire Department is responsible for the following activities:

- Fire Suppression
- Defensible Space Program
  - Enforcing Public Resource Code 4291 defensible space
- Enforcing Development Standards
- Updating and implementing the Santa Barbara County Fire Unit Strategic Fire Plan (meeting the California Strategic Fire Plan and National Fire Plan Standards)
  - Santa Barbara County is one of six "contact counties" (Santa Barbara, Ventura, Los Angeles, Orange, Kern, and Marin), which has executed a contract with the State of California to provide wildland fire protection on state responsibility areas (SRA). Santa Barbara County has the responsibility as a contract county to implement the 2010 State Strategic Fire Plan for California in Santa Barbara County. As such the Santa Barbara County Fire Department functionally operates as a Unit of the California Department of Forestry and Fire Protection (CAL FIRE) and is responsible for all Strategic Fire Plan activities within the County.
- Assisting Planning and Development (and other Departments) with Development Standards for High Fire Hazard Areas
- Conducting Community Outreach and Public Education Programs
- Providing assistance and oversight of Community Wildfire Protection Plans (CWPP) throughout Santa Barbara County.
- Conducting prescribed burns and vegetation management projects
- Monitoring "fire weather" and maintaining and utilizing "Red Flag Alert" signs as part of the "Red Flag Warning Plan" to alert citizens of dangerous fire weather conditions
- Burn Permit Program (agriculture and hazard reduction burning to reduce hazardous accumulations of fuels)
- Support the Community Emergency Response Teams (CERT) program

Many of these policies and development standards are designed to reduce the risk to wildfire damage. They provide a foundation for implementing the identified wildfire mitigation strategies within this Multi-Jurisdictional Hazard Mitigation Plan. Through participation in the Mitigation Advisory Committee, the

County Fire Department will use this foundation to help implement the identified wildfire mitigation strategies as resources are available.

## 4.2.1.3 Santa Barbara County General Services Department

The mission of the General Services Department is to provide a full range of services, guidance, and expertise that enables County government to deliver public services effectively.

Administrative & Financial Support	Financial Services, Risk Management, Purchasing, Back to Work
	Program
Support Services	Real Property, Facilities Management, Capital Projects, Vehicle
	Operations
Information Technology Services	Computer Services, Communications, Imaging and Copying
	Services and Government Access TV

General Services delivers an array of support services to County departments and prides itself on excellent customer service. Services provided by General Services include:

- **Capital Improvements** provides full service planning, design, and construction of new County facilities, including remodels and related projects for County departments. The Office of the County Architect provides services related to space planning and utilization in addition to management of historical projects.
- Facility Management (including Energy Management) promotes a safe and healthy environment for County employees and visitors. It provides a full range of maintenance services and coordinates contracts for custodial and landscaping services for County-owned structures. Facilities also include county-wide Energy Management efforts to improve the efficiency of the County's facilities and reduce our utilities.
- **Finance and Administration** supports the department mission by delivering successful Budgeting and Finances, Human Resources, county-wide utility processing and Information Technology support.
- **Information Technology** enables County departments to provide effective services to citizens through innovative technology solutions. The Division delivers reliable information technology, telephone, and public safety radio network systems. Services include: Windows infrastructure and email services, web hosting and network security systems. These services are used by Santa Barbara County employees and partners.
- **Public Safety Radio Communications** provides portable and mobile microwave radio communications across the County's diverse terrain supporting Fire, Sheriff, Probation, EMS and General Government communications in conjunction with our partner agencies.
- **Purchasing, Mail Service & Surplus Property** provides procurement services for County departments and encourages partnerships with local vendors on services and consumable

commodities. This team also provides inter-office and US mail delivery, and movement of equipment, furniture and disposition of surplus property.

- **Real Estate Services Real Property** provides professional real estate services to meet the needs of the County by preparing and negotiating real property transactions including leases, sales, and acquisitions.
- Vehicle Operations meets all of the transportation needs of the County by procuring, maintaining and disposing of all light, medium and heavy duty vehicles and equipment, administration of the motor pool, and the fuel station operations.

The Department of General Services plays a key role in hazard mitigation, county-wide emergency preparedness and support of an emergency response or threat. Each functional area represented above is an active member of the County Logistics Team, playing a key role in support of an incident, as well as continuing to deliver a continuity of mission critical County Services during an event. Facilities, Procurement, Transportation, Communication, Information Technology and Resources are core functions in the mitigation of natural and man-caused hazards. As we procure, design, remodel, operate and maintain County facilities and infrastructure, physical or virtual, we attempt to reduce potential hazards and strive for a high level of preparedness and resilience.

## 4.2.1.4 Santa Barbara County Planning and Development Department

Planning & Development plans for and promotes reasonable, productive and safe, and sustainable use of the land to foster economic, social, cultural and environmental prosperity across Santa Barbara County. It provides quality planning, permitting and inspection services through thoughtful, collaborative and professional process under the policy direction of the Board of Supervisors and the Planning Commission.

It is responsible for the creation, update and implementation of the County Comprehensive Plan, including the Seismic Safety and Safety Element. The divisions of the Planning and Development Department that have a role in mitigation include:

## 4.2.1.4.1 Development Review

This division reviews development projects for permit decisions by staff, the Zoning Administrator, the Planning Commission, or the Board of Supervisors based on policies in the Comprehensive Plan, state law and local ordinances. It also ensures compliance with environmental impact mitigation measures and conditions of approval.

## 4.2.1.4.2 Long Range Planning

The mission of the Long Range Planning Division is to research, analyze, develop, and communicate land use policies that meet Federal and State mandates in a manner that fosters economic, social, cultural, and environmental prosperity across the county. The work of this division is organized according to the following subject areas: Required Services and Operations, Comprehensive Plan Amendments, Community Plan Amendments, and Special Projects.

## 4.2.1.4.3 Building and Safety

The primary function of this division is to provide property and permitting information to the public. The Division processes ministerial permits, reviews and approves ministerial zoning permits, enforces the County's ordinances, performs plan reviews and inspects construction projects for compliance with building codes. It is also responsible for reviewing plans and inspecting grading for code compliance. Additionally, the Division conducts housing inspections; issues film permits and provides safety reviews on oil operations for the Energy Division.

## 4.2.1.4.4 Energy and Minerals

This division develops the policy recommendation, administers mitigation programs, processes permit applications and assures permit compliance for oil and gas and other energy development and transportation projects within the County. The Energy Division focuses on offshore projects and their related onshore facilities. It is also responsible for enforcing the Petroleum Ordinance for onshore oil operations.

## 4.2.1.4.5 Agricultural Planning

The Agricultural Planning Division supports the review of development projects and long range planning projects by providing input and technical expertise related to agricultural resources to mitigate the effects of natural, technological and human-caused hazards.

The Planning and Development Department plays an instrumental role in the Mitigation Advisory Committee ensuring this Multi-Jurisdictional Hazard Mitigation Plan is consistent with other long term and comprehensive planning efforts throughout the County. The Planning and Development Department identifies development policies already in place which help reduce future damage to structures from natural hazards and would play a crucial role in creating new development policies as necessary to implement the identified mitigation strategies.

## 4.2.1.5 Santa Barbara County Community Services Department

The divisions of the Community Services Department that have a role in mitigation include:

## 4.2.1.5.1 Parks Division

The Parks Department maintains more than 900 acres of parks and open spaces, 84 miles of trails and coastal access easements, and the grounds surrounding county buildings. Park rangers or hosts reside in every major park to provide public assistance and supervise the grounds, enjoyed by over 6 million people annually. As pertains to natural hazard mitigation, the Park Department's role includes facility and infrastructure protection, hazard prevention, and public safety on Park lands.

## 4.2.1.5.2 Santa Barbara County Housing & Community Development Division

The mission of the Housing and Community Development Department (HCD), working in cooperation with county citizens, cities, governmental entities, commercial interest and other valuable county stakeholders, is to:

- Coordinate the development and implementation of regional strategic housing and community development processes that respect local needs, priorities and our natural environment, that lead to the development of healthy and viable neighborhoods and an improved quality of life for all in our region.
- Lead this community building effort by developing partnerships to create a full spectrum of housing; building creative strategies for economic vitality; promoting advocacy & educational activities on healthy growth and well-designed development initiatives.

These two mission areas for the Housing & Community Development Division are closely linked to mitigation in that the department wants to ensure the development it promotes is safely constructed and well sited with regard to risk of the identified natural hazards.

## 4.2.1.6 Santa Barbara County Agricultural Commissioner's Office

Regulates pesticide use by commercial agriculture and regulates the movement of plant material to ensure compliance with local, state, federal, and foreign regulations. During disasters, this office gathers and compiles crop loss data to determine eligibility for Disaster Declarations and associated aid.

Since agricultural pests and diseases was identified as a hazard of concern during the 2011 update of this Local Hazard Mitigation Plan, the Agricultural Commissioner's Office within the County Park Department will continue to play a critical role with the Mitigation Advisory Committee to reduce risk to agricultural production from future pests and diseases.

## 4.2.1.7 Santa Barbara County Department of Public Works

The County of Santa Barbara, Public Works Department is comprised of five (5) divisions and each division performs functions that are directly related to hazard mitigation.

## 4.2.1.7.1 Administration

Within the administration division is housed the Office of the Disaster Recovery Manager (DRM). This position is responsible for coordinating the Public Works response in a post-disaster environment to ensure that federal and state disaster relief programs are handled efficiently and to the maximum benefit of the residents of Santa Barbara County. Additionally, Public Works has an on-going Mutual Aid Plan that has been adopted by the Board of Supervisors which is managed by the DRM in which all the cities in the operational area may request disaster assistance in the form of labor, equipment and/or materials for their Public Works Department. This has been accomplished by the Cities joining the County Mutual Aid Plan by City Council Adoption which is linked into the State Wide Public Works Mutual Aid Plan which assures reimbursement eligibility from Cal OES and FEMA.

The Public Works (PW) DRM, in addition to the responsibility of managing all disasters for the Public Works Department under the Federal and State PA Program, also manages, alongside chosen representatives from PW division, the Public Works 5-Year *Capital Improvement Program*. For Public Works, this is a \$584,968,000 funded and non-funded list of capital projects (<\$100,000>) report that is in creation (design) to completion (construction) from all the divisions in Public Works on behalf of the Director. As these are all <u>new</u> or <u>upgraded</u> projects, the opportunity to include hazard

mitigation safety measures for each project is reviewed and discussed. In some cases, a CIP project may identify HMP funding from FEMA as the main source of revenue for that project, such as seismic upgrades for facilities, or steal pile retaining wall to replace the outdated wooden solider pile walls, tire revetment retaining wall and or drainage increases at major locations that elevates flooding and/or water retention.

## 4.2.1.7.2 County Surveyor's Office

The mission of the office is to provide quality surveying services through the creation, maintenance and protection of land based records for public and private resources. The County Surveyor is designated in responsible charge for Land Surveying services provided by the Public Works Department. The Division has been allocated nineteen full time positions and has five general areas of responsibility. They are: 1) Checking and recording subdivision maps and documents; 2) Providing survey related data to the general public; 3) Providing record map and document research and professional land surveying advise to Public Works; 4) Conducting field surveys for County projects; 5) Administration of various State and local programs, and; 6) Providing real property services for the Department of Public Works.

## 4.2.1.7.3 Resource Recovery and Waste Management Division

The Resource Recovery and Waste Management Division is responsible for the cost-effective management of solid waste and utilities in the County. The Division's comprehensive program for the management of solid waste includes the collection, recycling, and disposal of solid waste, and also the abatement of illegal dumping of waste. The County maintains only one active landfill (Tajiguas).

There are four sections within the Division, each responsible for performing a unique series of functions:

- 1) Collection and Materials Management Section manages the County's resource recovery and waste diversion programs (community programs), reviews and manages long-range solid waste management plans, and oversees the County's solid waste collection franchises for regularly generated solid waste.
- 2) **Operations Section** manages waste processing and disposal operations at the County's transfer stations and active landfills.
- **3) Engineering Section** prepares all engineering and geologic plans and documents for the County's solid waste facilities, and monitors all active and closed landfills currently or previously owned by the County to ensure ongoing compliance with the many State and Federal regulations governing the environmental safety of each facility.
- 4) Utilities Section manages and operates the Laguna Wastewater Treatment Facility serving the unincorporated area of Orcutt in North County, and provides engineering and administrative support (i.e., billing) to the County's underground utilities program and the County-administered wastewater, water and street lighting districts located throughout the unincorporated areas of the County.

In coordination with the Transportation and Water Resource Divisions of Public Works, the principal natural disaster mitigation related function of this division is debris management planning in a predisaster environment and debris disposal post disaster, of debris generated from Public Works infrastructure.

## 4.2.1.7.4 Transportation Division

The Transportation Division supports this mission through inspecting, maintaining, repairing, replacing and improving all infrastructure within the County's Road Right-of-Way. This includes roadways, bridges, culverts and drainage structures. The Transportation Division is responsible for the maintenance of approximately 900 center lane miles of roads throughout the County, or approximately 1,800 lane miles, approximately 110 bridge structures, 4200 drainage structures (including culverts and drop inlets), 65 traffic signals (including flashing beacons), thousands of signs, and striping along the majority of the County's 900 roads.

The Transportation Division ensures that these facilities are maintained through our preventative maintenance programs, capital improvement projects to replace structurally deficient structures, and constructing vital links in the County's roadway infrastructure. In addition, the Transportation Division continually inspects all infrastructures and identifies hazards likely to impact County-owned facilities.

During a hazardous or disaster event, the Transportation Division maintenance staff immediately transforms into an emergency response organization that includes the design, traffic and construction sections. A local base of operations (called a Department Operations Center (DOC) located in North and South County) is established in order to effectively coordinate personnel and resources in order to immediately respond to hot spots as they are identified by Public Works staff, local agencies and 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 County Flood Control is coordinated with Roads for public information, dispatch to the CHP and Sheriff, dispatch to their construction and maintenance staff for road warnings and closures as needed. Staff are deployed to mitigate potential Public Health and Safety hazards on the roadway system, and inspect critical structures, as well as oversee any contracted clean-up or construction crews. Transportation staff is wellrehearsed in disaster response training, having experienced declared disasters in 1993 (FEMA-979) 1995 (1044-1045), 1998 (FEMA-1203), 2001 (State Proclamation 2001-01), 2005 (FEMA-1577), 2007 (Zaca), 2008 (Gap), 2009 (Tea-Jesusita), 2010 (FEMA-1952) and 2011 (State Proclamation). During past declared disasters and other lesser events, staff performed exceptionally in quickly and thoroughly reacting to the changing conditions and requirements of emergency response. The Public Works Department and the Transportation and Flood Control Division in particular have a pre-planned routine for emergency response, to assure FEMA reimbursement by using the correct documenting and reporting techniques with pre-assigned teams responsible for inspecting critical facilities and to perform as flexible response units. All of the disaster locations are identified and numbered and called into the DOC and the EOC (if activated).

Developing proper mitigation strategies and designs to these hazards is part of the mission of this division. To accomplish our mission statement all four of the Transportation Division's sections work together. The four (4) sections are Engineering, Traffic, Construction/ Permits, and Road Maintenance. Their roles are described in further detail below:

1) Engineering Section - Provides engineering needs related to new construction and rehabilitation of roads in the unincorporated area of the county, as well as develops design engineering for all major and routine road maintenance projects and capital improvement projects within the road right of way, oversees preparation of construction grant applications for federal and state funding, manages bidding for major road maintenance and construction projects, coordinates permit and environmental review, and plays a major role in administering and overseeing construction work performed by private contractors, including bridge management system and storm repair and restoration.

In response to a disaster, the Engineering Section:

- Performs immediate inspections of critical facilities in order to determine response strategies. This includes inspections of bridge structures, rock fall protection measures, drainage facilities, and roadways.
- Working together with the Construction and Maintenance Sections, properly trained staff survey the entirety of the County road system in an expeditious and thorough manner, and rapidly response to ensure public safety and protection of property.
- Develops and implements mitigation strategies to avoid further damage to critical facilities, or to reduce/avoid damage during future hazard events.
- Develops permanent designs to mitigate hazards, through construction/rehabilitation/retrofit strategies.
- Develops short and long-term inspection programs to monitor degradation of facilities due to natural hazards, and to develop mitigation strategies to avoid severe slides or other dangerous situations before disasters occur.
- Periodically works with County Fire and other emergency response agencies to keep key roadways and facilities critical for fire suppression and/or resident evacuation open and accessible to emergency vehicles and resident traffic
- 2) Traffic Section Provides transportation planning and traffic engineering for the County's unincorporated areas; prepares and reviews transportation improvement plans (TIPs), community plans, traffic impact studies, general plans and specific plans for proposed development projects; and performs operation and design functions including traffic signal repair and maintenance, striping and signage of roads, design and construction of bikeways and pedestrian facilities, traffic and turning movement counts, design of minor safety and operational improvements, computerized traffic modeling, and evaluation of requests for stop signs, parking restrictions, speed limit changes and traffic signals.

In response to a disaster, the Traffic Section:

- Performs inspections of critical traffic control facilities in order to determine response strategies to ensure the safety of the traveling public. This includes inspections of traffic control signals, signs, and potential electrical hazards.
- During major natural or man-made disasters, the Traffic Section would assist emergency services agencies to determine viable alternate routes and detours in order to avoid hazardous disaster areas, emergency repair sites, and staging areas.
- Works to quickly restore transportation access/infrastructure to avoid economic disruption and ensure public safety.
- 3) **Construction/Permits Section -** Inspects the construction for all projects that are constructed within the road right of way. These projects include: road rehabilitation, preventative road maintenance, and capital improvement projects. In addition, they verify all County road rights-of-way prior to the start

of any road encroachment operations or activity by individuals, corporations, utilities, cites and other governmental agencies; issues permits for construction activity within, under or over the County right-of-way; and performs final review and inspections to ensure that construction activity meets federal, state and county standards.

In response to a disaster, the Construction Section:

- Performs inspections of infrastructure and facilities in order to determine response strategies. This includes inspections of bridge structures, rock fall protection measures, drainage facilities, and roadways. Working together with the Engineering and Maintenance Sections, this allows for properly trained staff to survey the entirety of the County in an expeditious and thorough manner.
- Develops and implements mitigation strategies to avoid further damage to critical facilities, or to reduce/avoid damage during future hazard events.
- Perform inspections of emergency repairs, direct construction crews during emergency construction and cleanup operations.
- 4) Road Maintenance Section Provides major and routine maintenance of the County's road system and management of 13 different County road maintenance programs, including surface treatment, roadway and bike path surface maintenance, street tree maintenance and sidewalk surface grinding, roadway slope repair, weed and brush removal, traffic control maintenance/safety assessment, and culvert maintenance; cooperates with other public agencies and with private parties to promote the safe use of the county's roadways; and oversees private contractors which may be involved in major road maintenance projects.

In response to a disaster, the Maintenance Section:

- Performs inspections of infrastructure and facilities in order to determine response strategies. This includes inspections of bridge structures, rock fall protection measures, drainage facilities, and roadways. Working together with the Engineering and Maintenance Sections, this allows for properly trained staff to survey the entirety of the County in an expeditious and thorough manner
- Maintenance crews perform emergency repairs to critical facilities, and clear roadways of debris and water, in order to restore access to the public and County staff.
- Oversee contractors performing emergency repairs and clean-up operations.

On an annual basis, the Maintenance Section:

- Performs annual culvert inspection program
  - This has been instrumental in the creation of the Culvert Inventory Project, which has worked to determine the condition of all culverts within the maintenance system and prioritize which culverts are in need of repairs or replacement.
- Performs annual roadway inspection program to monitor slipping, cracking, etc. to formulate maintenance projects to prevent slides, and washouts of roadway and accompanying infrastructure.
- Periodically works with County Fire and other emergency response agencies to keep key roadways and facilities critical for fire suppression open and accessible to emergency vehicles and resident traffic.
- Implements fire abatement program along roadways, involving vegetation control to avoid fires and to provide a wider break in the event of a wildfire.

## 4.2.1.7.5 Water Resources Division

The Water Resources Division is comprised of office and technical staff and the Flood Control District includes field maintenance shops in Santa Barbara, Lompoc, and Santa Maria. It maintains hundreds of miles of creeks, channels and rivers, including 26 miles of levees in Santa Maria Valley. Office staff includes engineering, environmental, hydrology and administrative services.

The Flood Control and Water Conservation District, within the Water Resources Division implements programs and projects designed to provide protection for the public and to private property against flood risks and hazards. The most significant programs are the National Flood Insurance Program (NFIP) and the County's Floodplain Management Program. Capital improvement and ongoing maintenance projects are designed to reduce flood risks and enhance the environment by providing protection for property and minimizing flood hazards.

Construction of flood control and drainage system facilities has been taking place throughout the county since the District was formed in 1955. The District maintains an extensive amount of storm drains, channels, dams and debris basins and sediment basins.

#### Urban Drainage

The Flood Control District has constructed numerous underground storm drain pipe systems in urbanized areas that service a regional benefit. These systems carry the water safely to a major channel or the Pacific Ocean. Maintaining the underground storm drain pipe system in operation and repairing or replacing worn or damaged facilities is a major ongoing obligation.

#### Major Channels

Over two hundred miles of major channels carry peak flood runoff from the hills and upland areas safely through the developed communities in the valley and coastal plain. They also provide an outlet for the extensive urban drainage system extending throughout urbanized areas. Wherever possible, the District encourages the preservation of natural creek channels as open space green belts. These generally require more maintenance than modified channels. Maintenance and repair of the channels is a major ongoing obligation.

#### Flood Control

The District's dams and retarding basins are used for flood control, debris control, and water conservation. These dams require continual maintenance to assure the structural stability of the dams and the operational readiness of its mechanical equipment.

The Public Works Department and its various divisions within are responsible for the construction/physical aspects of implementing structural mitigation projects throughout the County. Mitigation measures minimize the damage to the infrastructure in the event of a natural or man-made disaster. Some examples of where mitigation measures could be implemented is retrofitting bridge structures, placing cable mesh netting on slopes that are prone to rock falls, constructing retaining walls on slopes that are prone to slides, lengthening and raising bridges to reduce the flooding impacts, and installing scour mitigation at bridges that have been identified as scour critical by Caltrans.

## 4.2.2 Relevant Governance

There are many plans, programs, codes, and policies that help govern the County of Santa Barbara. The purpose of this section is to present pertinent plans, programs, codes, and policies which support risk education and reduction and/or help to implement mitigation measures. It is important to note that during the LHMP update planning process these plans, programs, codes, and policies were evaluated to determine their effectiveness in risk education and reduction efforts, as well as, its usefulness to implement mitigation measures. Any shortfalls or areas where the plans, programs, codes, and policies could be improved or expanded were identified and captured under annual review, the annual planning process and Mitigation Actions chapter of this plan. If no mitigation actions were identified, then it can be assumed that the planning team determined that no shortfalls or areas for improvement are needed. Additionally, information gleaned through the Santa Barbara County *Multi-Jurisdictional Hazard Mitigation Plan* update process will be used in the plans, programs, codes, and policies update process. Below is a summary of the more significant relevant plans, programs, codes, and policies:

## 4.2.2.1 Plans

#### Comprehensive Plan

The Plan is a "comprehensive, long-term general plan" for the development of Santa Barbara County. The Comprehensive Plan focuses on the elements, land use, circulation, and environmental resource management. The Comprehensive Plan also includes a Hazardous Waste Element and a Hazardous Facilities/Materials Supplement. The Comprehensive Plan has several components specific to hazards and mitigation. The Comprehensive Plan identifies procedures for protecting watersheds such as installing debris basins and silt traps at development sites to remove sediment from runoff, planting temporary vegetation to thwart erosion, and providing adequate storm water conveyance.

#### SEMS Emergency Management Plan

The Santa Barbara County Office of Emergency Management (OEM) developed the Emergency Management Plan (EMP) in June 2003, and updated it in 2013, in order to ensure life and property safety, security, and protection of, as well as assuring the overall well-being of the population during a disaster. The EMP was developed for the Santa Barbara Operational Area as part of the California Standardized Emergency Management System (SEMS). The EMP addresses emergency responses associated with natural disasters, technological incidents, and national-security emergencies- including both peacetime and wartime nuclear defense operations. The EMP assigns tasks and specifies policies and standard operating procedures for coordination of emergency staff, resources, and service elements within the County. The Plan states that hazard mitigation is a year round effort and encourages all communities to prepare hazard mitigation plans. The following activities were 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 (i.e., insurance), and providing hazard warning and protecting the population.

#### <u>Tsunami Plan</u>

Santa Barbara County has a countywide Tsunami Plan that covers emergency response actions associated with tsunami events. Santa Barbara County OEM receives advisory messages and warnings through an emergency services microwave/computer communications network from Coast and Geodetic Survey Stations. If a seismic wave or tidal disturbance has been observed, the main system at the Honolulu Observatory will transmit warnings to satellite stations including the time of occurrence of the disturbance, the location, verification of tsunami generation, and expected arrival times at various points along the Pacific coast.

#### Dam Plan

The Dam Plan for Santa Barbara County contains general information, maps of potential inundation area, and proposed evacuation routes for dams.

#### Capital Improvement Plan

The CIP is a compilation of projects intended to implement various plans including community plans, facilities plans, and the County Comprehensive (General) Plan. Projects in the CIP quantify current and future capital needs. Accordingly, it includes projects for new and improved roads and bridges, County buildings and clinics, parks and other facilities. Because the CIP includes estimates of all capital needs, it provides the basis for setting priorities, reviewing schedules, developing funding policy for proposed improvements, monitoring and evaluating the progress of capital projects, and informing the public of projected capital improvements and unfunded needs.

### 4.2.2.2 Programs

#### National Flood Insurance Program

Santa Barbara County is an active member of the National Flood Insurance Program (NFIP). The program is administered by the County Public Works-Flood Control District. As stated by FEMA, "The NFIP aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures. Overall, the program reduces the socio-economic impact of disasters by promoting the purchase and retention of general risk insurance, but also of flood insurance, specifically.

As part of the NFIP are the FEMA Flood Insurance Rates Maps (FIRMs) which identify areas in the County which are vulnerable to flooding. The flood zones identified on the FIRMs are areas susceptible to 100-year and 500-year flood events. A 100-year and 500-year storm event is when storms have a 1% or 0.2% annual chance of occurrence. Another measure of the probability of occurrence of a 100-year storm is there is at least a 26% chance of a 100-year storm during the life of a 30-year mortgage. An estimated 2,194 structures are located within these 100-year floodplain areas.

The information in the Flood Insurance Study and resultant FIRMs is based on historic, meteorological, hydrologic, hydraulic and topographic data, as well as open-space conditions, flood control works, and development within the study area. Other information included on the maps includes Special Flood Hazard Areas (SFHA), Base Flood Elevations, and insurance risk zones. FIRMs are used to determine the BFE at specific sites or if a specific property is located in a floodplain or SFHA in order to administer floodplain management regulations, determine potential locations for new development, and make flood insurance determinations. The FIRMs were last updated in December 2012 and made available in GIS format as Digital Flood Insurance Rate Maps.

Another aspect if the NFIP is the Repetitive Loss (RL) Properties program. 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 County also participates in the Community Rating System (CRS). The CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS:

- 1. Reduce flood damage to insurable property;
- 2. Strengthen and support the insurance aspects of the NFIP, and
- 3. Encourage a comprehensive approach to floodplain management.

### Floodplain Management Program

The objective of the Floodplain Management Program is to minimize future flood hazards, created in developing areas subject to flooding, and to reduce the necessity of constructing expensive flood control facilities in the future. Benefits derived from this program include the prevention of losses in flood-prone areas and reduced need for public emergency response during storm activity. Activities associated with the Floodplain Management Program include reviewing new development permit applications for elevation above the 100-year flood level, proper setback from watercourses, and adequate drainage plans. The County's Floodplain Management Ordinance exceeds the minimum requirements for participation in the National Flood Insurance Program (NFIP).

This program also reviews development permit applications for structure elevation above the base flood elevation (BFE). The intent is to certify that the lowest floor of any building in a special flood hazard area (SFHA) is elevated above the BFE before final approval for floodplain construction can be obtained. FEMA Elevation Certificates are required.

## Defensible Space Program

Establishing defensible space around structures is one of the most powerful tools for preventing fire hazards and is therefore required by both County regulations and State law. The California Fire Code Chapter 49 as amended by the County of Santa Barbara through Chapter 15 of the County Code defines defensible space as:

"The area surrounding a structure or building where basic wildfire protection practices are implemented, providing the key point of defense from an approaching wildfire or escaping structure fire. The area is characterized by the establishment and maintenance of fuel modification measures."

## Routine Maintenance Program

As part of the District's Floodplain Management Program, it conducts routine creek maintenance. It has been doing so since 1992. The Routine Maintenance Program occurs annually and each year the District prepares an Annual Routine Maintenance Plan, conducting public workshops and California Environmental Quality Act (CEQA) reviews of planned maintenance projects. The Annual Routine Maintenance Plan includes a description of the need for maintenance work, the work to be performed, the presence of sensitive biological resources, impacts of the activities on biological resources, standard maintenance practices to reduce impacts, and restoration measures. The Routine Maintenance Program focuses on urbanized areas or developed agricultural areas. The main objective of the program is to reduce flood hazard and damage to life, public property, and infrastructure by maintaining the conveyance capacity of key channels in the County. All routine maintenance activities are conducted in a manner that minimizes environmental impacts. Maintenance activities are completed prior to the winter. The Routine Maintenance Program includes selective brushing, de-silting, channel shaping, bank stabilization, bank protection, herbicide spraying, and

channel clearing activities in most creeks and streams throughout the County. These activities can be applied individually or in combination to address the specific requirements of the affected drainage. The Routine Maintenance Program also addresses the maintenance and repair of concrete lined channels. The individual flood zones fund the Routine Maintenance Program and the extent and frequency of channel maintenance is dependent upon the availability of funds.

#### **Operation and Maintenance Program**

The Operation and Maintenance Program is one of the District's highest priority programs, and includes normal operation of the District's dams, channels and other flood protection facilities, and the routine and emergency maintenance and repair of these facilities. The District maintains channels, debris basins, dams, and storm drain facilities to prevent flooding.

#### Dam Safety Program

The District is responsible for being compliant with the State's Dam Safety Program. The District is exposed to a substantial potential liability because of the catastrophic losses that could occur in the event of a dam failure. The objective of the program is to assure the continuing safety of dams in their flood control and water conservation functions.

#### Debris Control Program

The District operates and maintains 39 debris basins, which constitute the primary debris control system within the District. Flood runoff from the hillsides, particularly from those hillsides recently denuded by fires, slides or developments, is heavily laden with rock, sand, silt, mud, and debris. The dams and debris basins restrain the rock, sand, silt, mud and debris that would otherwise clog and damage channels, which could result in flooding of adjacent property and downstream floodplains.

The objectives of the Debris Control Program include the prevention of debris flow; the planning and construction of adequate debris control facilities; the routine, scheduled clearance and disposal of debris from basins and dams; and the overall management of debris flow through channels.

There are 16 debris basins on the South Coast and the operation and maintenance procedures for these are described in the Debris Maintenance Plan, which is considered an element of the overall Maintenance Program.

Basin maintenance is conducted on an as-needed basis to ensure the proper functioning of the basin prior to each winter. Basins are inspected during the winter after significant rain events. Routine maintenance includes keeping the outlet works clear of vegetation, and maintenance of a 15-foot wide pilot channel through the center of the basin. Long-term maintenance of the basins involves the removal of sediment once the design capacity has been reduced by 25 percent (or when there is a significant wildfire in the basin's watershed.).

#### Storm Rehabilitation Program

The Storm Rehabilitation Program provides for post-storm rehabilitation of flood control facilities damaged in any storm disaster. The objective of the program is to prevent future hazard to life and property by returning the flood control system back to its intended function. Activities included in the Storm Rehabilitation Program include removing debris from access roads, reservoirs, debris basins, and reconstruction and repair as necessary.

The objectives of the District through the Storm Rehabilitation Program are to:

- 1. Assess condition of facilities quickly and completely in regards to public safety;
- 2. Allocate District resources on a priority basis to emergency work and permanent work;
- 3. Maximize efforts to receive State and Federal funding, when possible;
- 4. Complete emergency work quickly to provide for the public safety and to prevent further damage and complete permanent work in a timely manner to return damaged infrastructure to its intended function; and Contact and request assistance from other agencies, when necessary.

#### Current Santa Ynez River Programs

The following subsections describe current activities performed by the District along the Santa Ynez River.

#### Santa Ynez Maintenance Program

As part of the Lower Santa Ynez River Maintenance Project, the District has periodically cleared portions of the lower Santa Ynez River that is prone to flooding. The maintenance project defined in 2001 was a 4.5-mile reach extending from the Lompoc Wastewater Treatment Plant to the 13<sup>th</sup> Street Bridge on Vandenberg Air Force Base; however the project no longer includes Vandenberg Air Force property.

The objective of the Lower Santa Ynez River Maintenance Project is to maintain a 100-foot wide swath along the project reach with non-obstructive vegetation in order to allow sufficient channel capacity for certain flood flows. Maintenance is performed on the Lower Santa Ynez River as needed. The Santa Ynez Maintenance Program evaluated annually.

#### Santa Ynez River Flood Warning System

The Santa Ynez Rive Flood Flow Model (SYRFFM) was developed by the SBCFCD, and predicts floodflows in the Santa Ynez River in Santa Barbara and Ventura Counties. The model encompasses approximately 1253 square miles of drainage area from the Santa Ynez headwaters above Gibraltar Reservoir to Vandenberg Village, just upstream from the river's outlet to the Pacific Ocean.

The program input is both for forecast and actual precipitation, plus various parameters for estimating losses, runoff, and reservoir operation. The output is hourly flow in cubic-feet-per-second (cfs) at 20 locations along the Santa Ynez River, and hourly operational data for Gibraltar and Cachuma Reservoirs.

Typical model results show the predicted water flow behavior of the Santa Ynez River, water level and inflow predictions for Cachuma dam operations, and downstream dam water release predictions within the river system.

Closely coordinated communications with USBR (and other) during Cachuma Dam modeling operations typically results in hourly SYRFF Models being generated by County FCD personnel-and disseminated by email to individuals involved with Cachuma Reservoir and Santa Ynez River operations.

## 4.2.2.3 Codes

#### County Building Codes

Under the County's Planning and Development Department, the Building & Safety Division's primary function is to provide reasonable controls and regulations that protect the citizenry and establish effective safeguards for the life, health, and property equally throughout the unincorporated areas of Santa Barbara County. This is achieved through the application of uniform codes and standards that involve design, materials, construction, use, and occupancy of all buildings constructed within our

jurisdiction. Building & Safety staff strive to implement these standards in a fair and consistent manner while encouraging an open communication process with the public they serve.

#### Fire Hazard Severity Zoning

Hazard severity zone maps are available through Cal Fire FRAP website, Santa Barbara County Fire, and County Planning and Development: <u>http://frap.fire.ca.gov/projects/hazard/fhz.html</u>

## 4.2.2.4 Policies

### Emergency Storm Response

During flood events, the District staff transforms into an emergency response organization. District staff work around-the-clock and are deployed to flood-fighting and support activities. Staff from the District office performs a variety of emergency tasks such as answering phone calls, storm monitoring, radio dispatching, field patrolling, and computer modeling for flood flow forecasting. Emergency operations also include pre-planned routines such as the monitoring of all flood facilities and equipment; the operation of dams and channel gates; and the provision of logistics support, field operations headquarters and responses to emergency situations.

### ALERT Flood warning system

The District maintains and operates a comprehensive automated ALERT (Automated Local Evaluation in Real Time) storm monitoring system consisting of rain gauges, weather sensors, stream flow gauges, and reservoir level and gate opening gauges.

The automated storm monitoring system consists of 91 County-wide real-time transmitting gauge installations (60 ALERT rain gauges, 15 ALERT stream-flow gauges, 10 ALERT Weather stations, and 6 ALERT Reservoir gauge sites).

Once a predefined significant change in any of the parameters has occurred a transmission is sent from the sensor to the base station located at the District Office. The data is used in conjunction with computer models to determine the location and timing of potential flooding. District staff coordinates with the National Weather Service (NWS) and other emergency services to advise the public and reduce the damages to life and property from flooding. In addition, the ALERT network has been instrumental in guiding reservoir operations to maximize both flood control and water supply benefits.

The Flood warning system also has the capability to issue automated (cell phone and email) text messages in the even that established (rain/stream/reservoir) thresholds have been exceeded. This valuable warning system enables District personnel to be immediately informed of potential flood risk information-that may result in more timely and detailed field observations, coordinated agency action plans, and filed remediation action.

## Flood Zone Development

The Comprehensive Plan establishes flood hazard area policies that regulate development within the 100year floodplain. The plan also establishes location specific measures for flood control facilities, such as for the Lompoc area in which flood control measures include provisions to recharge water basins with water runoff. According to the Environmental Resource Management Element of the Comprehensive Plan, policies on development of lands subject to environmental constraints are identified by four categories; Categories A, B, C, and D. The categories and their application to floodplain management are described in **Error!** 

#### Santa Barbara County 2017 Multi-Jurisdictional Hazard Mitigation Plan

**Reference source not found.** It should also be noted that the Seismic Safety and Safety Element in the Comprehensive Plan also minimizes impacts from geologic and fire hazards.

Table 4.1 Flood Policies in C	Comprehensive Plan
-------------------------------	--------------------

Category	Floodplain Development Policy			
А	Urbanization should be prohibited in these areas;			
	• Stream channels with flood hazard or recharging groundwater.			
	Floodway areas.			
В	Urbanization should be prohibited in these areas, except in a relatively			
	few special instances;			
	• 100-year floodplains (except west of the City of Lompoc).			
С	Urbanization could be permitted in these areas only in appropriate			
	instances, subject to plan review and imposition of specific conditions			
	to protect against hazards and to preserve the integrity of the land and			
	environment:			
	• Areas subject to inundation by tsunamis.			
	• Areas of unknown flood hazard.			
D	Urbanization should be permitted these areas. There are no concerns			
	regarding floodplains with lands in this category.			

### Defensible Space

In 2005, the State Board of Forestry adopted provisions now identified in Public Resource Code 4291 that requires all structures on State Responsibility Area (SRA) lands to maintain 100 feet of defensible space clearance from all structures. Within the County of Santa Barbara, 100 feet defensible space is also enforced on unincorporated Local Responsibility Area (LRA) in the Santa Barbara County Fire Protection District. The 100-foot defensible space clearance is a minimum, and in some instances this distance may need to be increased due to the location of a structure on a slope or because of the vegetative fuel loading surrounding a structure. Beyond Defensible Space, the Fire Department has developed seven standards for residential and commercial development. These standards are identified in **Table 4.2.** 

#### Table 4.2 Santa Barbara County Fire Development Standards 1-7

Santa Barbara County Fire Department Development Standards			
Development Standard #1 Private Roadway	Establishes minimum standards for		
and Driveway Standards	driveways and private roads. These		
	standards outline minimum road widths and		
	vegetation clearance designed to provide fire		
	vehicles access to residences and associated		
	structures.		
Development Standard #2 Fire Hydrant	Establishes fire hydrant spacing, discharge		
Spacing and Water Flow Rates	outlet configuration and flow rate		
	requirements. Flow rate standards are used		
	when calculating peak load water supply		
	requirements for one-and-two family		
	dwelling units.		

Santa Barbara County 2017 Multi-Jurisdictional Hazard Mitigation Plan

Development Standard #3 Stored Water Fire	Establishes standards for stored water fire	
Protection Systems Serving One and Two-	protection systems serving one and two-	
Family Dwellings	family dwellings.	
Development Standard #4 Automatic Fire	Establishes standards for automatic fire	
Sprinkler System Standards	sprinkler systems.	
Development Standard #5 Automatic Alarm	Establishes standards for automatic alarm	
System Standards	systems.	
Development Standard #6 Vegetation	Establishes standards for vegetation	
Management Plan	management plans.	
Development Standard #7 Access Gates	Establishes standards for gates on private	
	roads and private driveway access points.	

# 4.2.3 Summary of Capabilities

The departments, plans, programs, and policies addressed above provide an overview of the County's activities related to natural disaster mitigation. **Table 4.** provides a general analysis of administrative and technical capabilities within the County's departments.

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	Planning and Development; Public Works	
B. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure		Planning and Development; Public Works; County Fire	
C. Planners or Engineer(s) with an understanding of natural and/or manmade hazards		Planning and Development; Public Works;	
D. Floodplain Manager	Y	Public Works, Flood Control District	
E. Surveyors	Y	Public Works, County Surveyor's Office (GIS also)	
F. Staff with education or expertise to assess the community's vulnerability to hazards	Y	Public Works, County Fire; OEM	
G. Personnel skilled in GIS and/or HAZUS	Y	Assessors Office, Public Works - County Surveyor's Office, Planning & Development; OEM	
H. Scientists familiar with the hazards of the County	Y	DPW, P&D	
I. Emergency Manager	Y	OEM	
J. Grant writers	Y	Departments determine their own level of service. (Disaster Recovery Manager with Public Works is lead for most disaster related grants.)	

Table 4.3 County of Santa I	Barbara: Administrative	and Technical Capacity
Tuble ne county of Sunta 1		and reemical capacity

\*The legal and regulatory capabilities of the County are shown in the Santa Barbara County Code of Ordinances

**Table 4.4** Presents the existing ordinances and codes that affect the physical or built environment of the County. Examples of legal and/or regulatory capabilities can include: the County's building codes, zoning ordinances, subdivision ordinances, special purpose ordinances, growth management ordinances, site plan

### Santa Barbara County 2017 Multi-Jurisdictional Hazard Mitigation Plan

review, general plans, capital improvement plans, economic development plans, emergency response plans, and real estate disclosure plans.

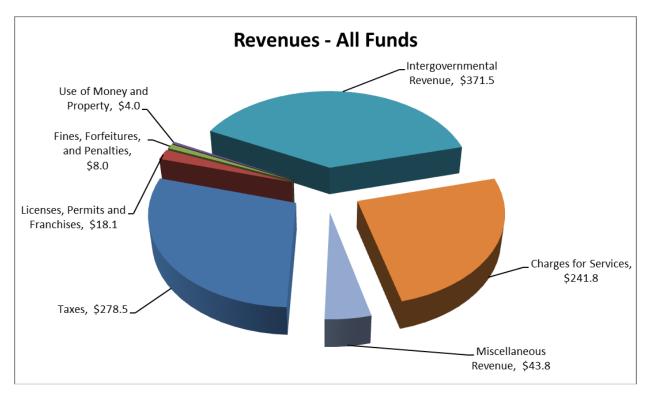
<b>Regulatory Tools (ordinances, codes, plans)</b>	Local Authority (Y/N)	State Prohibition (Y/N)
A. Building code	Y	Ν
B. Zoning ordinance	Y	Ν
C. Subdivision ordinance or regulations	Y	Ν
D. Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, wildfire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

# Table 4.4 County of Santa Barbara: Legal and Regulatory Capability

# 4.3 FISCAL RESOURCES

This section presents a review of the County's fiscal capabilities that may be applicable to providing financial resources to implement identified mitigation action items.

The County budget for Fiscal Years 2015-16 and 2016-17 presents a balanced budget, with FY 2015-16 Operating Revenues of \$965.6 million (see **Table 4.5** below) and Operating Expenditures of \$965.1 million resulting in an operating surplus of \$0.5 million. The Recommended Operating Revenues exceed Recommended Operating Expenditures and is demonstrating a solid foundation for the future. Improving revenues, up \$49.2 million (5.3%), and measured expenditure growth, \$44.2 million (4.7%), have helped to develop a balanced Recommended Budget.



# Table 4.5 Operating Revenue - All Funds \$965.6 million (Dollars in millions)

# SECTION 5 HAZARDS ASSESSMENT

# 5.1 OVERVIEW

The purpose of this section is to review, update, and/or validate the identified and profiled hazards in 2016 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan (HMP). The intent is to confirm the list of hazards facing the county and determine if the current information and material is accurate. The importance of this is to ensure that all hazards are being considered and decisions are based on the most up-to-date information. Another purpose of this section is to screen the hazards. It will provide an understanding of the significance by ranking hazards by their priority in the community.

To assist with this effort two groups were utilized: the Mitigation Advisory Committee (MAC) and the Santa Barbara County Local Planning Team. The MAC group assessed information as it related to their jurisdiction, while the Local Planning Team assessed information at the county-level.

As part of process both groups leveraged other planning efforts and documents, including the State of California Multi-Hazard Mitigation Plan, the Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element, and the Santa Barbara County 2016 HMP.

# 5.2 MITIGATION ADVISORY COMMITTEE HAZARD ASSESSMENT

Utilizing the information and material from the State of California Multi-Hazard Mitigation Plan, the Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element, and the Santa Barbara County 2011 HMP; the MAC reviewed and revised 1) the list of hazards in the geographic area; 2) the information and material presented for each hazard; and 3) the prioritization of the hazards. The following sections provide a summary of the work.

# 5.2.1 Hazard Identification

Based on the review of the Santa Barbara County 2016 HMP, incorporating information from other documents (i.e., the California State Multi-Hazard Mitigation Plan), and utilizing local experience and knowledge. Table 5.1 lists the hazards the MAC has identified as being relevant to Santa Barbara County.

County Hazards
Earthquake
Liquefaction
Landslides and Other Earth Movements
Expansive Soils/Land Subsidence
Wildfire
Flood
Coastal Storm Surge
Climate-Related
Sea Level Rise/Coastal Flooding and Erosion
Droughts and Water Shortage

# Table 5.1 Relevant Hazards in Santa Barbara County

Severe Weather and Storms
Extreme Heat
Freeze
Hailstorm
Hurricane
Tornado
Windstorm
Energy Shortage and Energy Resilience
Oil Spill
Dam Failure
Agricultural Pests and Disease
Epidemic/Pandemic/Vector Borne Disease
Hazardous Material Release
Radiological Incident
Terrorism
Cyber Threat
Aircraft Crash
Train Accident; Explosion and/or Chemical Release
Natural Gas Pipeline/Storage
Levee Failure
Tsunami
Civil Disturbance
Well Stimulation/Hydraulic Fracking

# 5.2.2 Hazard Screening/Prioritization

The intent of screening hazards is to help prioritize which hazard creates the greatest concern in the community. Because the original process used to rank hazards in the Santa Barbara County 2011 HMP is not being utilized, an alternative approach is being recommended. A summary of the process and the results of the revised hazard ranking for the 2016 HMP Update are discussed below:

#### Ranking Tool Design

The ranking tool prioritizes hazards on two (2) separate factors:

- Probability of the hazard affecting the community
- Potential impacts of the hazard on the community

To further assist with the process; the following definition of "High", "Medium", and "Low" probability and impacts were utilized. To futher assist, a numeric value was applied to the ranking scale allowing for a clear definition between priority hazards and hazards of interest.

#### <u>Probability</u>

High-	Highly Likely/Likely (100 % chance will happen every year) (3 points)		
Medium-	Possible (75 % chance will happen every 5 years)(2 points)		
Low-	Unlikely (50 % chance will happen every 10 years)(1 point)		
<u>Impact</u>			
High-	Catastrophic/Critical: Major loss of function, downtime, and/or evacuations (3 points)		

Medium-	Limited: Some loss of function, downtime, and/or evacuations (2 points)
Low-	Negligible: Minimal loss of function, downtime, and/or evacuations (1 point)

Based on the revised list of hazards and utilizing the Hazard Screening/Prioritization approach, the MAC screened the hazards. The results of the assessment are in **Table 5.2**. The shading of the matrix boxes indicate the priority level: Red = tier 1 or 5-6 points; Green = tier 2 or 4 points; and Gray = tier 3 or 2-3 points.

Rank	High Impact	Medium Impact	Low Impact
High Probability		<ul> <li>Drought/Water Shortage</li> <li>Energy Shortage</li> <li>Flooding</li> <li>Landslide/Other Earth Movements</li> <li>Oil Spill</li> <li>Sea Level Rise/Coastal Flooding</li> <li>Wildfire</li> </ul>	<ul><li>Agricultural Pests/Disease</li><li>Train Accident</li></ul>
Medium Probability	• Earthquake	<ul><li>HazMat Release</li><li>Terrorism</li><li>Severe Weather</li></ul>	<ul><li>Commercial/Military Aircraft Crash</li><li>Cyber Threat</li></ul>
Low Probability	<ul> <li>Dam Failure</li> <li>Radiological Accident</li> </ul>	<ul> <li>Civil Disturbance</li> <li>Levee Failure</li> <li>Marine Invasive Species</li> <li>Natural Gas Pipeline/Shortage</li> <li>Well Stimulation/Hydraulic Fracking</li> <li>Tsunami</li> </ul>	

## Table 5.2 Hazard Screening and Ranking

# 5.3 LOCAL PLANNING TEAM HAZARD ASSESSMENT

The Santa Barbara County Local Planning Team leveraged the work completed by the MAC since the unincorporated county makes up a large portion of the county. As part of the Local Planning Team's efforts it reviewed the information and material from the State of California Multi-Hazard Mitigation Plan; the Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element; and the Santa Barbara County 2016 HMP; in addition to other documents, plans, and material provided by the Local Planning Team members. The following sections provide a summary of the work.

# 5.3.1 Hazard Identification

By considering information and material from the State of California Multi-Hazard Mitigation Plan; the Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element; the Santa Barbara County 2016 HMP; and other documents, plans, and material provided by the local planning team members, the local planning team adopted the MAC list of hazards (*see* Table 5.1). This is further supported by the fact that the unincorporated county makes up a large portion of the county.

# 5.3.2 Hazard Screening/Prioritization

Because of the similarities between of the list of hazards, the local planning team determine the most prudent course of action was to review and validate the hazard screening effort completed by the MAC. After internal discussions the local planning team adopted the MAC hazard screening and rankings (*see* Table 5.2).

# 5.4 HAZARDS

Based on HMP update requirements and discussions with Cal OES and FEMA, it was suggested that the list of hazards be divided into Profiled Hazards and Hazards of Interest. As reflected in Table 5.2, the "*higher priority*" profiled hazards are indicated in the Red boxes and the "*lower priority*" Hazards of Interest are reflective in the Green and Grey boxes. It should be noted that mitigation actions and projects will focus on the "*higher priority*" hazards. The following sections represents work done by the MAC and confirmed by the local planning team. The information provided below is relevant to the jurisdiction. In other words, if a particular hazard is not a threat to a community it is not included in the HMP. The following material is intended to be an overview of the hazards; more information can be found in the State of California Multi-Hazard Mitigation Plan, the Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element, and other documents.

# 5.4.1 Higher Priority Profiled Hazards

# 5.4.1.1 Earthquake

# 5.4.1.1.1 Description of Hazard

An earthquake is caused by a release of strain within or along the edge of the Earth's tectonic plates producing ground motion and shaking, surface fault rupture, and secondary hazards, such as ground failure. The severity of the motion increases with the amount of energy released, decreases with distance from the causative fault or epicenter, and is amplified by soft soils. After just a few seconds, earthquakes can cause massive damage and extensive casualties.

The effect of an earthquake on the Earth's surface is called the intensity. The intensity scale consists of a series of certain key responses such as people awakening, movement of furniture, damage to chimneys, and total destruction. The scale currently used in the United States is the Modified Mercalli Intensity (MMI) Scale. It was developed in 1931 by the American seismologists Harry Wood and Frank Neumann. This scale is composed of 12 increasing levels of intensity designated by Roman numerals that range from imperceptible shaking to catastrophic destruction. It does not have a mathematical basis; instead it is an arbitrary ranking based on observed effects.

Most people are familiar with the Richter scale, a method of rating earthquakes based on strength using an indirect measure of released energy (**Table 5.3**). The Richter scale is logarithmic. Each one-point increase corresponds to a 10-fold increase in the amplitude of the seismic shock waves and a 32-fold increase in energy released. For an example, an earthquake registering 7.0 on the Richter scale releases over 1,000 times more energy than an earthquake registering 5.0.

Richter Magnitudes	Earthquake Effects	
Less than 3.5	Generally not felt, but recorded.	
3.5-5.4	Often felt, but rarely causes damage.	
Under 6.0	Slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions.	
6.1-6.9	Can be destructive in areas up to about 100 kilometers across residential areas.	
7.0-7.9	Can cause serious damage over larger areas.	
8 or greater	Can cause serious damage in areas several hundred kilometers across.	

### Table 5.3 Richter Scale

Peak ground acceleration (PGA) is a measure of the strength of ground shaking. Larger peak ground accelerations result in greater damage to structures. PGA is used to depict the risk of damage from future earthquakes by showing earthquake ground motions that have a specified probability (10%, 5%, or 2%) of being exceeded in 50 years return period. These values are often used for reference in construction design, and in assessing relative hazards when making economic and safety decisions.

Liquefaction is the phenomenon that occurs when ground shaking causes loose, saturated soils to lose strength and act like viscous fluid. Liquefaction causes two types of ground failure: lateral spread and loss of bearing strength. Lateral spreads develop on gentle slopes and entail the sidelong movement of large masses of soil as an underlying layer liquefies. Loss of bearing strength occurs when the soil supporting structures liquefy, causing the structures to settle; resulting in damage and, in some cases, collapse.

# 5.4.1.1.2 Location and Extent of Hazard in Santa Barbara County

As previously mentioned, Santa Barbara County is located in a high seismic activity zone in the Transverse Range geologic province. Movement of continental plates manifest primarily along the San Andreas Fault system. The San Andreas Fault is situated seven miles northeast of Santa Barbara County; active faults in the San Andreas Fault system that fall within Santa Barbara County include the Nacimiento, Ozena, Suey, and Little Pine faults. Other active faults in the region include the Big Pine, Mesa, Santa Ynez, Graveyard-Turkey Trap, More Ranch, Pacifico, Santa Ynez, and Santa Rose Island faults. The Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element provides descriptions of all faults in Santa Barbara County. This list includes historically active, active, potentially active, and inactive faults, as well as their location and fault length. A map of faults in the Santa Barbara County region is located below (**Figure 5.1**).

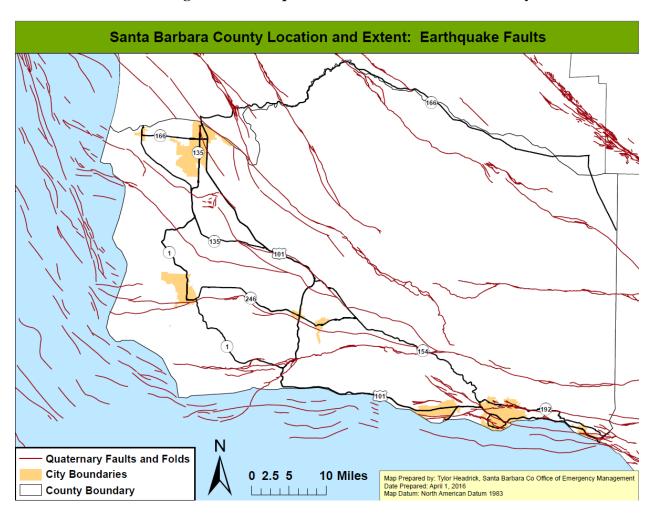
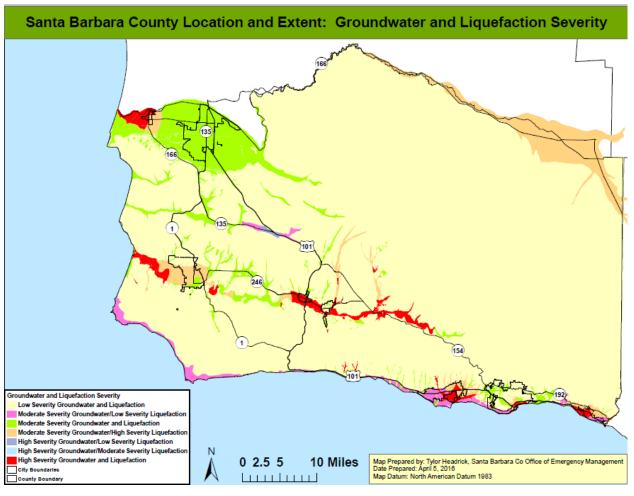


Figure 5.1 Earthquake Faults in Santa Barbara County

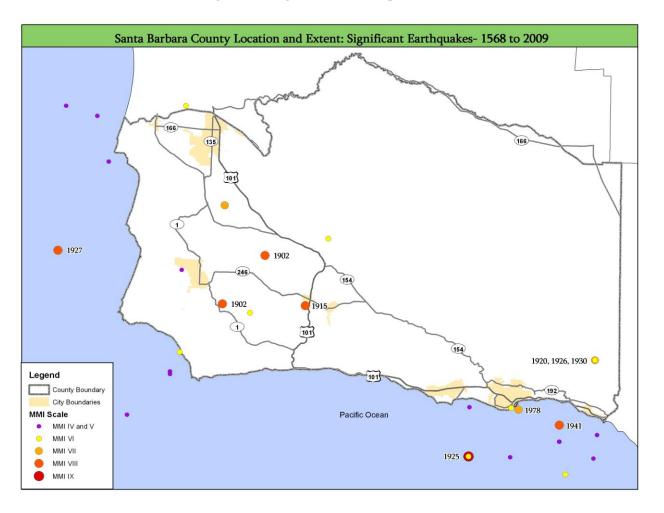
After earthquakes, some regions may be prone to liquefaction. On level ground, liquefaction results in water rising to the ground surface. On sloping ground, liquefaction will usually result in slope failure such as the event at the Sheffield Dam in the aftermath of the 1925 Santa Barbara earthquake. Liquefaction risk is considered high if there are soft soils (Types D or E) present. The National Earthquake Hazards Reduction Program (NEHRP) rates soils from hard to soft, and gives the soils ratings from Type A through Type E. The hardest soils are rated Type A, and the softest soils are rated Type E. The majority of the soils in Santa Barbara County are types A-C, with some areas having type D. There have been no Type E soils identified. (NOTE: A further discussion of soils can be found in the Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element, along with maps of the expansive soils and collapsible soils problems ranking.) Liquefaction risk is also determined by depth to groundwater. Most of the low coastal plan and valley bottoms are underlain by alluvium and given a moderate rating with respect to liquefaction potential. Based on this information and work conducted as part of the Santa Barbara County Comprehensive Plan a map was generated indicating groundwater and liquefaction severity (**Figure 5.2**).



### Figure 5.2 Groundwater and Liquefaction Severity

5.4.1.1.3 History of Hazard in Santa Barbara County

Santa Barbara is located in a high seismic activity zone and as such has a long history of earthquakes. Although most seismic activity in California occurs along the San Andreas Fault system, most historic seismic events in the Santa Barbara region have been centered offshore on an east-west trending fault between Santa Barbara and the Channel Islands. The below map (**Figure 5.3**) displays historical epicenters of earthquakes located in the Santa Barbara County since 1568. There have not been any significant earthquakes in Santa Barbara County since 2009. The dates of the more significant earthquake events are provided adjacent to the epicenters.



### Figure 5.3 Significant Earthquakes Since 1568

While more extensive discussion of previous earthquakes in Santa Barbara County is available in the Seismic and Safety Element of the Santa Barbara County Comprehensive Plan, the following information provides an overview of the more recent, significant events:

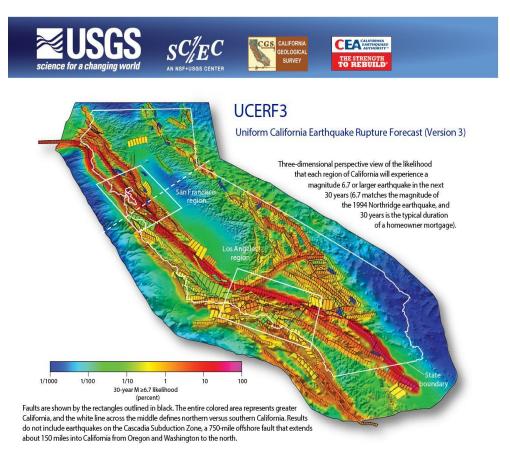
In March of 1978, and continuing sporadically through July of 1978, a swarm of small earthquakes, called micro-earthquakes occurred underneath the northeastern end of the Santa Barbara Channel. Toward the end of the micro-earthquake swarm, in July and early August of 1978, an unusually large amount of oil and tar was reported on local beaches in Santa Barbara. A common occurrence for the Santa Barbara area, the oil from these natural seeps was considered only a minor nuisance. On August 13, 1978, an earthquake occurred just to the southwest of the City of Santa Barbara, about 5 miles beneath the Santa Barbara Channel. The earthquake ruptured to the northwest, focusing its energy toward Goleta, the most intense ground motion occurring between Turnpike Road and Winchester Canyon Road, an area that includes the University of California, Santa Barbara. A strong-motion seismograph on the University of California campus recorded an acceleration of 0.45 times that of gravity. Another seismograph, located at the top of North Hall, recorded an acceleration of 0.94 times that of gravity. Sixty-five people were treated for injuries at local hospitals. No deaths were reported.

On December 22, 2003 at 11:15 in the morning a magnitude 6.5 earthquake struck the central California coast. The event, known as the San Simeon Earthquake, was located 11 kilometers northeast of San Simeon, and 39 kilometers west/northwest of Paso Robles. Although the San Simeon Earthquake had a more significant impact on San Luis Obispo County, the event was reportedly felt as a MMI VI in Guadalupe and Santa Maria and as a MMI V in Lompoc, Santa Ynez and Solvang. According to reports on the San Simeon earthquake by the U.S. Geological Survey and U.C. Berkeley Seismological Laboratory, two (2) people were killed, 40 people were injured, over 40 buildings collapsed or were severely damaged and more than 10,000 homes and businesses were without power. The most severe damage was to un-reinforced masonry (URM) structures that had not yet been retrofitted to better withstand earthquakes. In Santa Barbara County, there was minor damage to more than 30 URM buildings in the City of Guadalupe.

#### 5.4.1.1.4 Probability of Occurrence

The United States Geological Survey (USGS) and their partners, as part of the latest Uniform California Earthquake Rupture Forecast Version 3 (UCERF3; 2015), have estimated the chances of having large earthquakes throughout California over the next 30 years (**Figure 5.4**).

#### Figure 5.4 Rates for Earthquake of Magnitude 6.7 or Larger in the Next 30 years (USGS, 2015)



Statewide, the rate of earthquakes around Magnitude 6.7 (the size of the 1994 Northridge earthquake) has been estimated to be one per 6.3 years (more than 99% likelihood in the next 30 years); in southern California, the rate is one per 12 years (93% likelihood in the next 30 years). Southern California's rates are given in **Table 5.4**.

	Magnitude	Average Repeat	30-year likelihood
(	greater than or	Time (years)	of one or more
	equal to)		events
	5	0.24	100%
	6	2.3	100%
	6.7	12	93%
	7	25	75%
	7.5	87	36%
	8	522	7%

### Table 5.4 Southern California Region Earthquake Likelihoods (UCERF3, 2015)

### 5.4.1.1.5 Climate Change Considerations

To date, no credible evidence has been provided that links climate to earthquakes; however, climate and weather does play a significant role in the response and recovery from earthquakes. Effects from climate change could create cascading complications and impacts.

### 5.4.1.2 Wildfire

#### 5.4.1.2.1 Description of Hazard

Wildfires can be classified as either a wildland fire or a wildland-urban interface (WUI) fire. The former involves situations where wildfire occurs in an area that is relatively undeveloped except for the possible existence of basic infrastructure such as roads and power lines. A WUI fire includes situations in which a wildfire enters an area that is developed with structures and other human developments. In WUI fires, the fire is fueled by both naturally occurring vegetation and the urban structural elements themselves. According to the National Fire Plan issued by the U.S. Departments of Agriculture and Interior, the wildland-urban interface is defined as "...*the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.*"

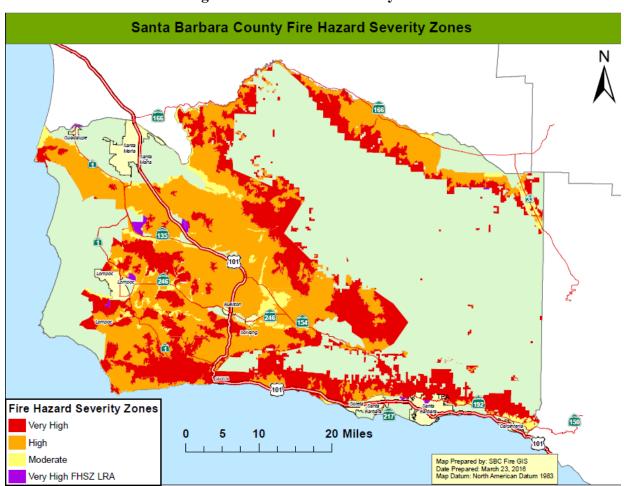
The WUI fire can be subdivided into three categories (NWUIFPP, 1998): The <u>classic wildland-urban</u> <u>interface</u> exists where well-defined urban and suburban development presses up against open expanses of wildland areas. The <u>mixed wildland-urban interface</u> is characterized by isolated homes, subdivisions, and small communities situated predominantly in wildland settings. The <u>occluded wildland-urban interface</u> exists where islands of wildland vegetation occur inside a largely urbanized area. Generally, many of the areas at risk within the Santa Barbara County fall into the classic wildland-urban interface category.

Certain conditions must be present for a wildfire hazard to occur; a large source of fuel must be present, the weather must be conducive (generally hot, dry, and windy), and fire suppression sources must not be able to easily suppress and control the fire. The cause of a majority of wildfires is human-induced or lightning; however, once burning, wildfire behavior is based on three primary factors: fuel, topography, and weather.

Fuel will affect the potential size and behavior of a wildfire depending on the amount present, its burning qualities (e.g. level of moisture), and its horizontal and vertical continuity. Topography affects the movement of air, and thus the fire, over the ground surface. The terrain can also change the speed at which the fire travels, and the ability of firefighters to reach and extinguish the fire. Weather as manifested in temperature, humidity and wind (both short and long term) affect the probability, severity, and duration of wildfires.

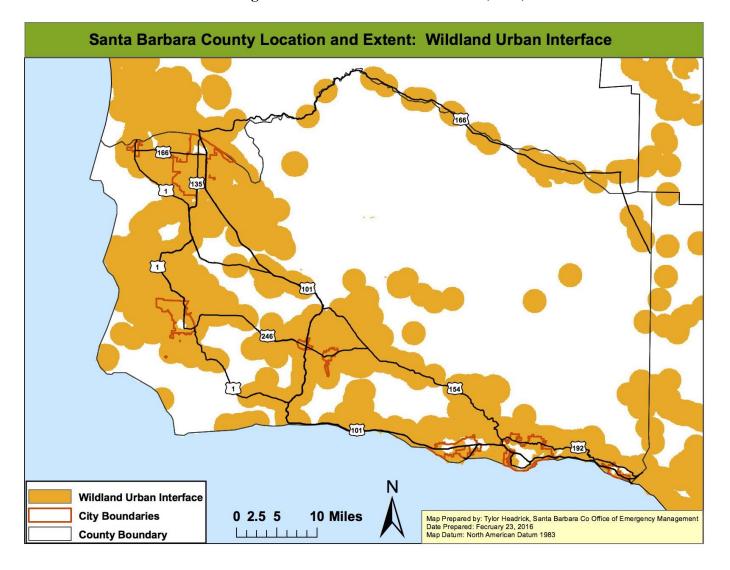
# 5.4.1.2.2 Location and Extent of Hazard in Santa Barbara County

The climate, topography, and vegetation in Santa Barbara County is conducive to wildfires. California Department of Forestry and Fire Protection, Fire and Resource Assessment Program (CDF-FRAP) were mandated to map areas of significant fire hazards based on fuels (vegetation), terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, define the application of various mitigation strategies to reduce risk associated with wildland fires. The most current mapping efforts by CDF-FRAP were conducted in 2007. The map below shows the Fire Hazard Severity Zones located in Santa Barbara County (**Figure 5.5**).



#### **Figure 5.5 Fire Hazard Severity Zones**

CDF-FRAP developed data that displays the relative risk to areas of significant population density from wildfire. This data is created by intersecting residential housing unit density with proximate fire threat, to give a relative measure of potential loss of structures and threats to public safety from wildfire. The map (**Figure 5.6**) was generated using this data but shows only the wildland-urban interface (WUI) in Santa Barbara County. The WUI map depicts areas where potential fuels treatments will be prioritized to reduce wildland fire threats.





Fire representatives on the Mitigation Advisory Committee (MAC) acknowledge that the WUI data shown in Figure 5.6 was developed on a statewide basis and does not consider the placement of local neighborhoods within the geography. Santa Barbara County Fire has synthesized the data at a more local level to convey communities at risk. To help protect people and their property from potential catastrophic wildfire, the National Fire Plan directs funding to be provided for projects designed to reduce the fire risks to communities. A fundamental step in achieving this goal was the identification of communities that are at

high risk of damage from wildfire. These high risk communities identified within the WUI, were published in the Federal Register in 2001. At the request of Congress, the Federal Register notice only listed those communities neighboring federal lands. The list represents the collaborative work of the 50 states and five federal agencies using a standardized process, whereby states were asked to submit all communities within their borders that met the criteria of a structure at high risk from wildfire. The following list contains the federally regulated (communities which adjoin federal lands) communities at risk within Santa Barbara County:

• Carpinteria Gaviota

Tajiguas

•

•

•

- Casmalia
- Goleta •
- Mission Hills
- Vandenberg Air Force Base •
- Cuyama
- Lompoc •
- Santa Barbara
- Vandenberg Village ٠

With California's extensive WUI situation, the list of communities extends beyond just those adjacent to Federal lands. After the 2000 fire season the California Department of Forestry and Fire Protection (CAL FIRE), working with the California Fire Alliance, developed a list of communities at risk from wildfire using 1990 Census and USGS Geographic Names Information System data to identify populated places, and CAL FIRE's Fire and Resource Assessment Program (FRAP) fuel hazard data. In addition to the alreadymentioned communities, they designated the following as WUI Communities at Risk:

**Buellton** •

- •
- Solvang •

- Guadalupe
- Los Olivos •
- Santa Ynez •
  - Summerland

• Montecito Sisquoc •

Isla Vista

Ventucopa •

Combining both lists, there are currently 25 communities on the Communities at Risk List in Santa Barbara County. The California State Forester (CAL FIRE Director) has assigned the role of managing the list to the California Fire Alliance (Alliance). In addition to the 25 State and Federal recognized communities, there are other communities within the county that are also at risk of wildfire and need to be identified. Communities that were not captured in any state or federally recognized list, but have been identified by County Fire and other jurisdictions to be at risk include:

- Cebada Canyon •
- Woodstock •
- Miguelito Canyon •
- Painted Cave
- Jalama •
- Gobernador •

- Toro Canyon •
- Jonata Ranch/Bobcat Springs
- Mission Canyon
- **Rosario** Park
- **Tepusquet Canyon** •

- El Capitan •
- Hope Ranch
- Trout Club •
- **Refugio Canyon**
- Paradise

Many of the communities at risk listed above contain relatively old homes that reflect the building materials and/or codes in effect at the time of construction. As such, large numbers of homes are at increased risk of ignition due to structure vulnerabilities (e.g., wood shake roofs and siding, open eaves, unscreened crawlspace and attic vents), which research has shown to be important in most home losses during wildfires. In addition to hazard reduction through fuel reduction, education of homeowners and mitigation of structure ignition vulnerabilities is therefore recognized as an important priority in these communities at risk. Programs that support retrofits to existing structures, combined with building codes that make future structures more fire resistant, are needed in many fire-prone areas.

- Garey
- Los Alamos
- Santa Maria

• Orcutt The figure (Figure 5.7) below provides an overview of the location of the Communities at Risk.



# Figure 5.7 Communities at Risk

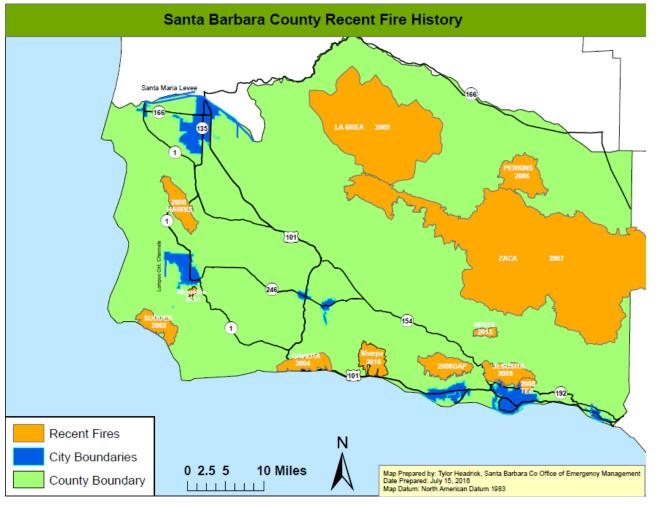
# 5.4.1.2.3 History of Hazard in Santa Barbara County

Because Santa Barbara County is prone to wildfires, there is a long history of wildfires in the County. **Table 5.5** lists the major wildfires in Santa Barbara County from 1922-2016.

Year	Fire Name	Acres Burned
1922	Kellye Ranch	59,600
1923	Oso Canyon	70,000
1928	Aliso Canyon	42,880
1933	Indian Canyon	30,800
1950	San Marcos	9,500
1953	Big Dalton	73,450
1955	Refugio	84,770
1964	Coyote	67,000
1966	Wellman	93,600
1971	Romero	14,538
1977	Sycamore Canyon	805
1977	Hondo Canyon	8,087
1979	Spanish Ranch	1,190
1979	Eagle Canyon	3,765
1990	Paint	4,424
1993	Marre	43,864
1994	Oak Hill	2,130
1997	Santa Rosa	3,074
1999	Spanish Ranch	22,296
1999	Camuesa	180
2000	Harris	8,684
2002	Sudden	7,500
2004	Gaviota	7,197
2006	Perkins	14,923
2007	Zaca	240,807
2008	Gap	9,443
2008	Tea	1,940
2009	Jesusita	8,733
2009	La Brea	89,489
2010	Bear Creek	1,252
2011	Figueroa	698
2013	White	1,984
2015	Miguelito	632
2016	Sherpa	7,474

Table 5.5 Major Wildfires in Santa Barbara County

The CDF-FRAP compiles fire perimeters of wildfires and has established an on-going fire perimeter data capture process. The map below (**Figure 5.8**) shows historic, significant wildfire perimeters in Santa Barbara County. Fire perimeters provide a reasonable view of the spatial distribution of past large fires.

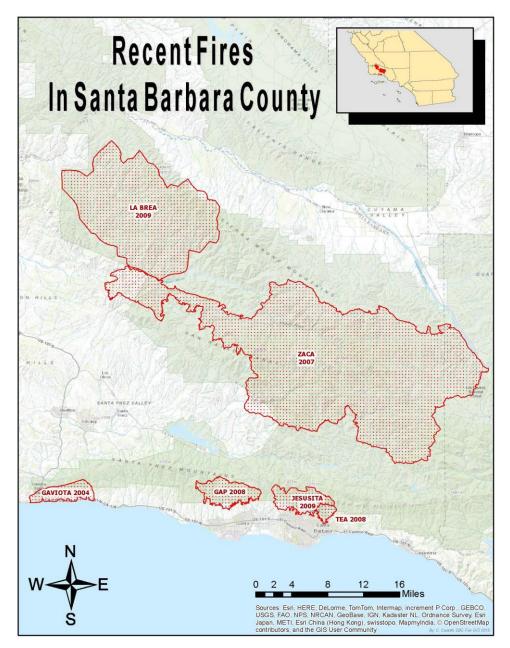


#### Figure 5.8 Santa Barbara County Fire History

Over the last ten years, Santa Barbara County has experienced seven (7) major fires. Three of these fires; Gap, Tea, and Jesusita; directly threatened the heavily populated Santa Barbara Front Country. Two of these fires, Tea and Jesusita, destroyed close to three hundred structures and burned a total 16 <sup>1</sup>/<sub>2</sub> square miles. Combined, the La Brea Fire and the Zaca Fire burned a total of 518 square miles, predominately in backcountry areas of the County. Although these two fires did not directly threaten urban areas, the smoke and ash produced created air quality issues for hundreds of miles. Recently the Miguelito and the Mesa fires threatened the Lompoc area (2015). While more extensive discussion of previous wildfires in Santa Barbara County is available, the following information provides an overview and the location (**Figure 5.9**) of the more recent, significant events:

- The Zaca Wildfire burned 240,207 acres, making the Zaca Fire one of the largest wildfires in California history. The total cost of suppression was over \$119 million.
- The Gap Wildfire charred 9,443 acres of forest in the Los Padres National Forest. The fire was located in the Santa Ynez Mountains north of the community of Goleta.

- The Jesusita Fire burned over 8,700 acres in the hills above the City of Santa Barbara. This wildfire was driven by a combination of a large dead fuel bed and sundowner winds gusting over 60 miles per hour. The damage, as a result of this fire, was significant, with 80 homes destroyed and another 15 homes badly damaged. No deaths were reported, but at least 30 firefighters were injured battling the fire.
- The La Brea Wildfire burned over 89,000 acres in the Los Padres National Forest in the County of Santa Barbara. The fire was fueled by very hot temperatures, low relative humidity and significant heavy fuels.

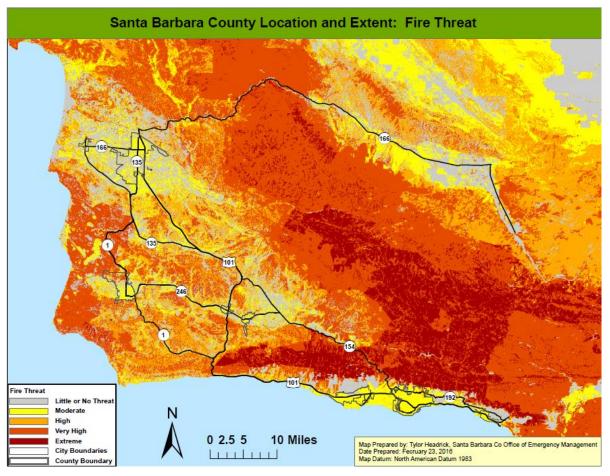


# Figure 5.9 Recent, Significant Fire Events

# 5.4.1.2.4 Probability of Occurrence

Vegetation and topography were the significant elements in the identification of the fire threat zones. A substantial amount of the vegetation in Santa Barbara is commonly called chaparral, it is a dense and scrubby bush that has evolved to persist in a fire-prone habitat. Chaparral plants will eventually age and die; however, they will not be replaced by new growth until a fire rejuvenates the area. Chamise, manzanita and ceanothus are all examples of chaparral which are quite common in Santa Barbara County.

Santa Barbara County was subject to 29 major wildfires over 88 years, resulting in a 33% chance of occurrence in any given year. In addition, the map below (**Figure 5.10**) shows the threat of fire to Santa Barbara County. Fire threat is a combination of two (2) factors: 1) fire frequency or the likelihood of a given area burning, and 2) potential fire behavior. These two factors are combined to create four (4) threat classes ranging from moderate to extreme.



# Figure 5.10 Fire Threat

5.4.1.2.5 Climate Change Considerations

Climate change plays a significant role in wildfire hazards. The changing conditions from wet to dry can create more fuel; the increased possibility of high winds increase risk and present a challenge, and drought conditions could hinder ability to contain fires. Large wildfires also have several indirect effects beyond

those of a smaller, local fire. These may include air quality and health issues, road closures, business closures, and other forms of losses. Furthermore, large wildfires increase the threat of other disasters such as landslide and flooding.

# 5.4.1.3 Landslide and other Earth Movements

### 5.4.1.3.1 Description of Hazard

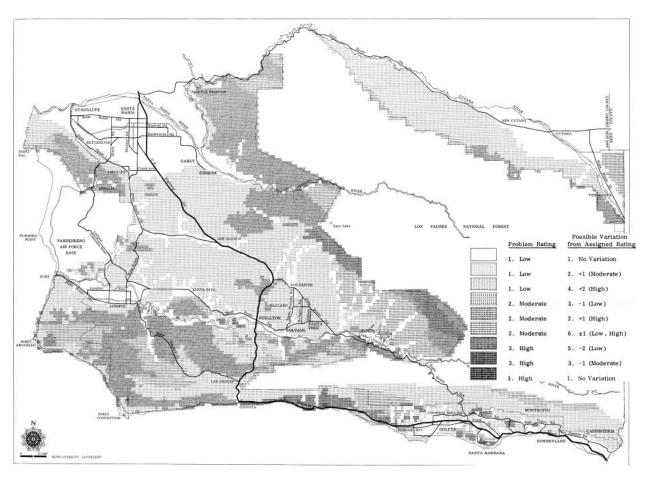
Landslides can be defined as the movement of a mass of rock, debris, or earth down an incline. Types of landslides include: rock falls, rock slides, deep slope failures, shallow debris flows, and mud flows.

- Slope failure occurs when there is erosion of slopes by surface-water runoff. The intensity of slope wash is dependent on the discharge and velocity of surface runoff and on the resistance of surface materials to erosion.
- Mudflows are defined as flows or rivers of liquid mud down a hillside on the surface of normally dry land. They occur when water saturates the ground, usually following long and heavy rain falls, or rapid snow melt. Mud forms and flows down slope if there is no ground cover such as brush or trees to hold the soil in place.
- Debris Flow is defined when water begins to wash material from a slope or when water sheets off of a newly burned stretch of land. Chapparel land is especially susceptible to debris flows after a fire. The flow will pick up speed and debris as it descends the slope. As the system gradually picks up speed it takes on the characteristics of a basic river system, carrying everything in its path along with it.

The most common cause of a landslide is an increase in the down slope gravitational stress applied to slope materials, also known as over-steepening. Over-steepening can be caused by natural processes or by manmade activities. Undercutting of a valley wall by stream erosion or of a sea cliff by wave erosion are ways in which over-steeping may occur naturally.

#### 5.4.1.3.2 Location and Extent of Hazard in Santa Barbara County

The location and extent of landslides are extremely difficult to predict consistently for a planning area the size of Santa Barbara County. Landslides and landslide prone sedimentary formations are present throughout the coastal plain of western Santa Barbara County (**Figure 5.11**). Landslides also occur in the granitic mountains of East Santa Barbara County, although they are less prevalent. Many of these landslides are thought to have occurred under much wetter climatic conditions than at present. Recent landslides are those with fresh or sharp geomorphic expressions suggestive of active (ongoing) movement or movement within the past several decades. Reactivations of existing landslides can be triggered by disturbances such as heavy rainfall, seismic shaking and/or grading. Many recent landslides are thought to be reactivations of ancient landslides.



# Figure 5.11 Slope Stability, Landslides

The Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element lists the areas in Santa Barbara County where there is fairly severe land sliding and associated geologic formations. The areas are as follows:

- Foothills in the Summerland area
- Foothills of the South Coast from Santa Barbara west to Gaviota Pass
- Hope Ranch area west of Lavigia Hill to Goleta
- Sea cliffs along the coast from Santa Barbara to Gaviota, particularly those with out-of-slope dips
- Solvang area south of the Santa Ynez River in the vicinity of, and east of Alisal Ranch
- Areas east and northeast of Los Olivos near the Los Padres National Forest boundary
- Lompoc area south of Santa Ynez River
- Mountains south of Guadalupe and east of Point Sal

Several areas in the County are prone to more frequent rain induced landslides, resulting in disruption to transportation and damage to roadways. The most common areas of recent historic slides are listed below.

#### South County

Road	Year
Palimino Road	1995, 1998
Gibraltar Road	1995, 1998, 2001, 2003
Glen Annie Road	1995, 1998, 2001, 2004
Refugio Road	1995, 1998, 2001
Ortega Hill Road	1195, 1998
Stagecoach Road	2003, 2004, Constant
Painted Cave	1995, 1998
Old San Marcus Road	1995, 1998, Currently Moving
Gobernador Canyon	1995, 1998, Currently Moving
East Mountain Drive	1995, 1998, 2001
All Road underlain by the Rincon Shale Formation	

#### North County

Road	Year
Miguelito Canyon	1995, 1998, ongoing threat
Sweeney Road	1995, 1998, ongoing threat
Jalama Road	1995, 1998, ongoing threat
Point Sal Road	1995, 1998, ongoing threat
Drum Canyon Road	1995, 1998, ongoing threat
Mail Road	1995, 1998, ongoing threat
Santa Rosa Road	1995, 1998, ongoing threat
Figueroa Mountain Road	1995, 1998, ongoing threat

#### 5.4.1.3.3 History of Hazard in Santa Barbara County

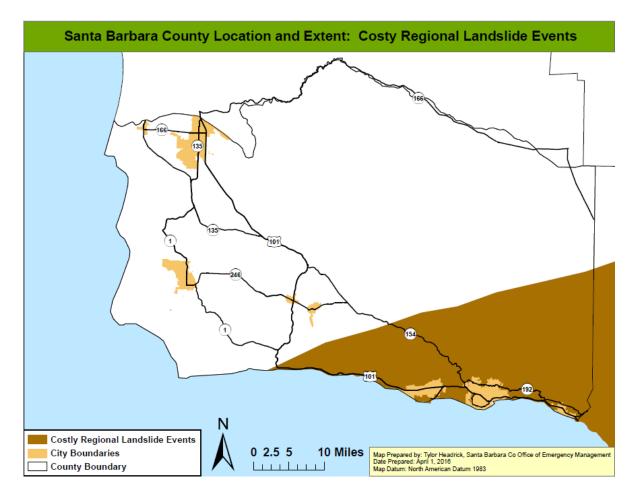
As previously mention, Santa Barbara County is prone to landslides; however many are smaller in nature and are not well documented. Three (3) of the more significant recent landslides are discussed below:

In January 2005, a powerful Pacific storm brought heavy rain, snow, flash flooding, high winds and landslides to Central and Southern California. During the 5 day event, rainfall totals ranged from 3 to 10 inches over coastal areas with up to 32 inches in the mountains. With such copious rainfall, flash flooding was a serious problem across Santa Barbara, Ventura and Los Angeles counties. In Santa Barbara County, flash flooding and mudslides closed Gibraltar Road at Mt. Calvary Road, stranding several vehicles, while mudslides inundated 3 homes in Lake Casitas. Across Ventura county, flash flooding and mudslides closed due to flooding. Across Los Angeles county, flash flooding killed a homeless man in Elysian Park, flooded a mobile home park in Santa Clarita, closed Highway 1 and caused numerous problems in Palmdale. In the mountains, 4 to 12 feet of snowfall was recorded along with southeast winds between 30 and 50 MPH with higher gusts. Across the Central Coast and in the Salinas River Valley, high winds gusting to 65 MPH knocked down numerous trees and power lines. In La Conchita, a devastating mudslide killed 10 people, destroyed 15 homes and damaged 12 other homes. Overall, damage estimates for the entire series of storms that started December 27th,

2004 and ended on January 11th, 2005 were easily over \$200 million with the most damage incurred by agricultural interests in Ventura County.

During the late 1990's in Sycamore Canyon, which resides near the border of Santa Barbara County and the City of Santa Barbara, a mud flow displaced a home from its foundation and moved it several feet downhill. This is only a minor example of the destruction that landslides can cause. In the spring of 1995, La Conchita, located at the western border of Ventura County and adjacent to Santa Barbara County, experienced a landslide that completely destroyed several houses in its path. A portion of the bank of the Cuyama River collapsed east of Santa Maria in 1998, affecting half a dozen cars and a tractor trailer rig on Highway 166, which were caught in the slide. Two people were killed.

In 1980 the most costly landslide events in the US occurred. The event depicted in this Santa Barbara County-specific map (**Figure 5.12**) affected six southern California counties, including Santa Barbara County. The type of landslide was mostly debris flow from heavy rainfall. Over \$800 million dollars' worth of damage resulted from this event.

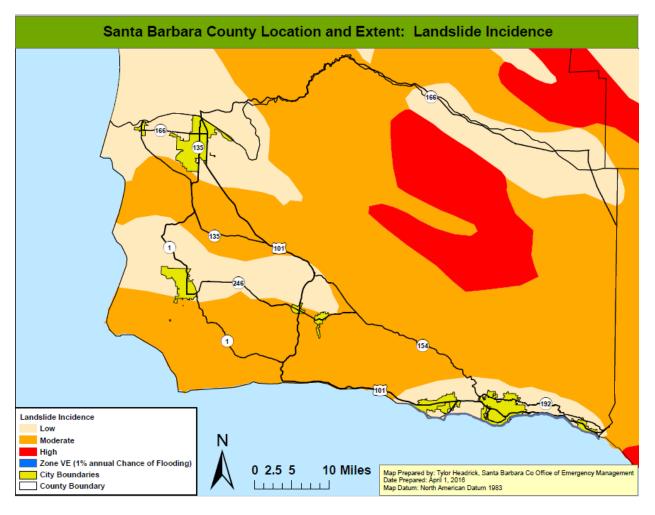


### Figure 5.12 Costly Regional Landslide Events

# 5.4.1.3.4 Probability of Occurrence

**Figure 5.13** shows the general locations of high and moderate landslide risk in Santa Barbara County These areas are considered to have a higher probability of landslide occurrence than the low landslide risk areas in Santa Barbara County.

In order for landslides to occur, the correct geological conditions, which include unstable or weak soil or rock, and topographical conditions, such as steep slopes, are necessary. Heavy rain often triggers these hazards, as the water adds extra weight that the soil cannot bear. Over irrigating has the same affect. Earthquakes can also affect soil stability, causing enough weakening to favor gravitational forces.



#### Figure 5.13 Landslide Incidence

5.4.1.3.5 Climate Change Consideration

Climate change can increase the frequency and/or intensity of landslides. Changes in precipitation, specifically the increased frequency of intense precipitation, can result in a water content the ground cannot tolerate, and may cause landslides. These landslides may happen more frequently due to the increased number of heavy rainfall events. Also, the increased heavy precipitation events may cause instability in areas where landslides we not as likely before. Therefore, resulting landslides may be larger or more widespread.

# 5.4.1.4 Flood

### 5.4.1.4.1 Description of Hazard

A flood is a general and temporary condition of partial or complete inundation on land that is normally dry. Several factors determine the severity of floods, including rainfall intensity and duration, antecedent moisture conditions, surface permeability, and geographic characteristics of the watershed such as shape and slope. Other causes can include a ruptured dam or levee, rapid ice or snow melting in the mountains, underengineered infrastructure, or even a poorly placed beaver dam can overwhelm a river or channel and send water spreading over adjacent land or floodplains.

A large amount of rainfall in a short time can result in flash flood conditions, as can a dam failure or other sudden spill. The National Weather Service's definition of a flash flood is a flood occurring in a watershed where the time of travel of the peak of flow from one end of the watershed to the other is less than six hours.

Another form of flooding occurs when coastal storms produce large ocean waves that sweep across coastlines making landfall. Storm surges inundate coastal areas, destroy dunes, and cause flooding. If a storm surge occurs at the same time as high tide, the water height will be even greater. The County historically has been vulnerable to storm surge inundation associated with tropical storms and El Nino.

#### 5.4.1.4.2 Location and Extent of Hazard in Santa Barbara County

The geographical location, climate, and topography of Santa Barbara County make the county prone to flooding. In regions such as Santa Barbara, without extended periods of below-freezing temperatures, floods usually occur during the season of highest precipitations or during heavy rainfalls after long dry spells. Additionally, due to the Mediterranean climate and the variability of rainfall, stream flow throughout the County is highly variable and directly impacted from rainfall with little snowmelt or base flow from headwaters. Watercourses can experience a high amount of sedimentation during wet years and high amounts of vegetative growth during dry and moderate years.

The drainages in the southern part of the County are characterized by high intensity, short duration runoff events, due to the relatively short distance from the top of the Santa Ynez Mountains to the Pacific Ocean. Runoff from high intensity, short duration storm events can cause inundation of over bank areas, debris including sediment, rock, downed trees in the water that can plug culverts and bridges, erosion and sloughing of banks, and loss of channel capacity due to sedimentation. The drainages in the northern part of the County are contained in the upper mountain areas, but broaden out into level valley floors. The drainages in the northern part of the County are generally characterized by longer duration and less intense storms than the southern coastal areas.

Another contributing factor to flooding is the County's location along the Pacific Ocean. With its 110 miles of coastline, the County is susceptible to storm surge events following storms off the coast. Additionally, portions of the County are subject to flooding due to flash flooding, urban flooding, river channel overflow, and downstream flooding.

# 5.4.1.4.3 History of Hazard in Santa Barbara County

Flooding has been a major problem throughout Santa Barbara County's history. Santa Barbara County has several hydrologic basins that have different types of flooding problems, including over bank riverine flooding, flash floods, tidal flooding/tsunamis, and dam failure. The most common flooding in Santa Barbara is due to riverine flooding and flash flood events.

Between 1862 and the 2014, Santa Barbara experienced 19 significant floods. Eight of these floods received Presidential Disaster Declarations. **Table 5.6** lists these floods, as well as information concerning the nature of the flooding and the extent of the damages.

Date	Damages	Source of Estimate	Comments
1862		1993 Precipitation Report	Largest discharges ever in California
1907	Significant damage to structures, crops	1993 Precipitation Report	4 straight days of rain, entire Lompoc Valley engulfed
1914	six bridges lost	County of Santa Barbara Sanitation and Flood Control	Destroyed 2 dams, 22 deaths
1952	inundated large.	EIR, 1993 Precipitation Report	Propagated the formation of the Flood Control District
1964	Millions of dollars	Floodplain Information Montecito Streams Vicinity of Montecito, SB County	Relatively light rain fell on recently burned areas. 20' walls of water, mud, boulders, and trees
1969	\$4.5 million	Floodplain Information Montecito Streams Vicinity of Montecito, SB County	Highest flows in 2900 years on Santa Ynez River, 16" of rain in 24 hours at Juncal Dam
1971	Federal Disaster Declaration	Floodplain Information Montecito Streams Vicinity of Montecito, SB County	High flows and flooding along Romero Canyon Creek, Garrapata Creek, and Toro Canyon Creek
1978		1993 Precipitation Report and Hydrology Methods	Inundation of agricultural areas and mudslides.
1980	Presidential Disaster Declaration	n/a	Severe flooding, mudslides, and high tides throughout County
1982- 1983	2 Presidential Disaster Declarations	n/a	Parts of southern California received over 200% of normal rainfall

#### Table 5.6 Historical Records of Large Floods in Santa Barbara County

Date	Damages	Source of Estimate	Comments
1993	\$1.4 million in disaster recovery funds received from FEMA	1993 Precipitation Report and Hydrology Methods	180%-209% or normal rainfall, with highest-ever intensity for the County recorded at Buellton Fire Station: $1^{1}/_{4}$ inches in 15 minutes.
January 1995	\$50 million, Presidential Disaster Declaration	1995 Floods	Flooding on most major channels in Goleta, Santa Barbara, Montecito, and Carpinteria
March 1995	\$30 million, Presidential Disaster Declaration	1995 Floods	Major flooding in Goleta, Santa Barbara, and Montecito, many of the same structures flooded in January were flooded again
1998	\$15 million, Presidential Disaster Declaration	1998 Flood Report	21.36" of rainfall that month in Santa Barbara, many areas at 600% of normal February rainfall
Februar y 2005	\$2 million	NCDC	In Santa Barbara county, flash flooding and mudslides closed down Highway 101 at Bates Road.
January 26, 2011	Total Individual Assistance: \$1,909,557 Total Public Assistance: \$75,414,223 Countywide per capita impact: Santa Barbara County- \$9.43, Presidential Disaster Declaration	FEMA	Severe winter storms, flooding, and debris and mudflows occurred from December 17, 2010 to January 4, 2011. The counties affected include: Inyo, Kern, Kings, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Tulare.
March 2011	\$1.7 Million	County Insurance Claims	A severe winter storm occurred in March 2011 that included flooding, debris and mudflows flows throughout Santa Barbara County
March 1 <sup>,</sup> 2014	\$500k	Television Reports	A strong winter storm caused significant damage to coastal properties on the

Date	Damages	Source of Estimate	Comments
			south coast of Santa Barbara County. Coastal Damage; Goleta Pier partially closed
Decemb er 12, 2014	<\$100k	County Flood Control District	A brief but intense rainfall, portions of which covered a limited area that exceeded a 200-year return period, caused damage county- wide, mostly in the form of downed trees, bank erosion and sediment and debris deposition.

While there is extensive detailed documentation of historical flood events in Santa Barbara County, the following section provides a summary of the more recent significant flood events:

**1992 Flood**- The 1992 – 1993 rainy season was one of the wettest recorded in Santa Barbara County, areas of the County received 180% to 209% normal rainfall. One of the County's highest short-duration rainfall intensities was recorded during 1993; 1-¼-inches fell in fifteen minutes at the Buellton Fire Station. Following a 25-year storm event that occurred in late March, Santa Barbara was declared a federal disaster area with 12 creeks substantially damaged along with several detention basins and residences. Santa Barbara County received approximately \$1.4 million in disaster recovery funds from FEMA. (1993 Precipitation Report and Hydrology Methods) (Presidential Disaster Declaration)

**1995 Flood**- The floods of 1995 brought widespread flooding to Santa Barbara County. The most severe flooding occurred on the South Coast while the rest of the County was largely spared from serious damages. On the South Coast, the 1995 Flood was more severe and wide spread than either the 1969 or 1967 floods. Flooding occurred on most major streams from Goleta to Montecito. Estimated public and private damages were around \$100 million and the area was declared a federal disaster area. (1995 Floods)

**January 1995**- Flooding occurred on most major channels in Goleta, Santa Barbara, Montecito, and Carpinteria. Approximately 510 structures were reported flooded and/or damaged along the South Coast, with a total cost resulting from public and private damages of approximately \$50,000,000. All modes of transportation in and out of the South Coast were cut off for several hours; some modes of transportation were not restored for several days. (1995 Floods) (Presidential Disaster Declaration)

**March 1995**- During the March 10<sup>th</sup> 1995 storm, major flooding occurred again in the areas of Goleta, Santa Barbara, and Montecito. More than 300 structures were reported flooded and/or damaged; many of the same structures flooded or damaged during the January 1995 storm event. Approximately 30 million dollars of public and private property were damaged during the storm. Once again, all modes of transportation in and out of the South Coast were cut off for several hours. (1995 Floods) (Presidential Disaster Declaration)

**1998 Flood**– February 1998 brought several record-breaking rainfalls with 50-year storm event intensities. The City of Santa Barbara recorded its wettest month in history, 21.36-inches of rainfall. By

the end of the month, many areas in the County had received 600% of normal February rainfall. Flood related damages within Santa Barbara occurred during three major storm periods: February 1-4, February 6-9, and February 22-24. The cost to repair extensive flood damage to public and private property was estimated at \$15 million. Just like in 1995, transportation throughout the County was disrupted through closures of roads, the Santa Barbara Airport, and train service. Flood damage was spread throughout the County and the County was declared a Federal Disaster Area on February 9. (Presidential Disaster Declaration)

Although the February storms had higher annual rainfalls, flooding in 1998 was considered less severe than other historical events due to flood control improvements, such as Cachuma Reservoir, and channel and debris dam maintenance performed by the County. (1998 Flood Report)

**2005** Flood– A powerful Pacific storm tapped into a subtropical moisture source to produce heavy rain and flash flooding across Southwestern California. Overall, rainfall totals ranged from 4 to 8 inches over coastal areas to between 10 and 20 inches in the mountains. In Ventura County, State Route 150 was closed at the Dennison Grade due to flash flooding and mudslides. In Los Angeles County, numerous roadways were closed due to mudslide and flash flooding including Interstates 5 and 10, Highway 101 in Hollywood, North Topanga Canyon Road in the San Fernando Valley, Malibu Canyon Road near Malibu and East Colima Road in Walnut. *In Santa Barbara county, flash flooding and mudslides closed down Highway 101 at Bates Road. With such heavy rainfall, both the Santa Clara River and the Santa Ynez River exceeded their respective flood stages.* In the mountains of Ventura and Los Angeles counties, resort areas received between 3 and 4 feet of new snowfall. Preliminary damage estimates from this storm range between \$8-10 million with agricultural interests in Ventura county accounting for most of the monetary damage.

**2011 Flood-** Severe winter storms, flooding, and debris and mudflows occurred from December 17, 2010 to January 4, 2011. The counties affected include: Inyo, Kern, Kings, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Tulare.

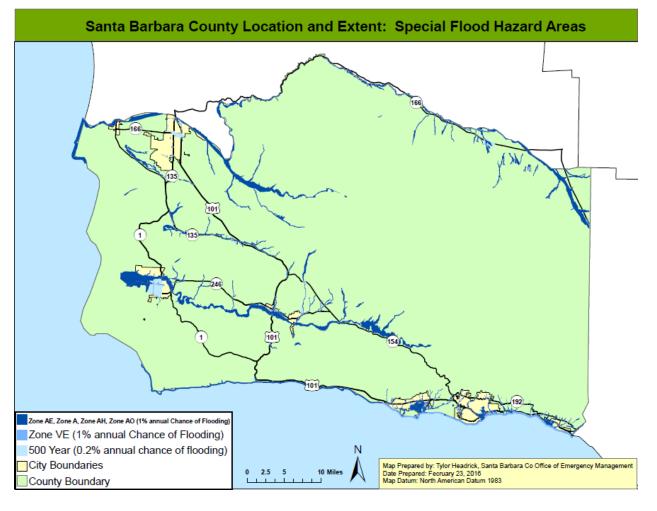
March 2011 Flood- A severe winter storm occurred in March 2011 that included flooding, debris and mudflows throughout Santa Barbara County.

March 1<sup>st</sup> 2014- A strong winter storm caused significant damage to coastal properties on the south coast of Santa Barbara County

**December 12, 2014** – A brief but intense rainfall, portions of which covered a limited area that exceeded a 200-year return period, caused damages county-wide, mostly in the form of downed trees, bank erosion and sediment and debris deposition.

#### 5.4.1.4.4 Probability of Occurrence

The probability of flooding in Santa Barbara County is shown in **Figure 5.14**. The map shows the location of the special flood hazard zones in Santa Barbara County. The flood hazard zones depicted on the map are derived from FEMA's Flood Insurance Rate Maps (FIRM) and indicate the probability of flooding happening over a given period of time. Flood zones are geographic areas that defined varying levels of flood risk. Each zone reflects the severity or type of flooding in the area. The FIRM boundaries are developed by FEMA to convey flood risk.



# Figure 5.14 Special Flood Hazard Area

Within the coastal special flood hazard area, there are two primary flood zones: Zone VE and Zone AE. Zone VE, also known as the Coastal High Hazard Area, has a wave component that is greater than three fee in height. Coastal Zone AE has a wave component of 0-3 feet in height.

This coastal study will result in floodplain mapping that is anticipated to become effective in 2018. Current indications are that the resulting base flood elevations will be several feet higher than the current flood mapping.

The following below describes the different flood hazard zones and their associated probabilities.

#### Zone A

Zone A is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study (FIS) by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no BFEs or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

#### Zone AE and A1-A30

Zones AE and A1-A30 are the flood insurance rate zones that correspond to the 100-year floodplains that are determined in the FIS by detailed methods. In most instances, BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

#### Zone AH

Zone AH is the flood insurance rate zone that corresponds to the areas of 100-year shallow flooding with a constant water-surface elevation (usually areas of ponding) where average depths are between 1 and 3 feet. The BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

#### Zone AO

Zone AO is the flood insurance rate zone that corresponds to the areas of 100-year shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. The depth should be averaged along the cross section and then along the direction of flow to determine the extent of the zone. Average flood depths derived from the detailed hydraulic analyses are shown within this zone. In addition, alluvial fan flood hazards are shown as Zone AO on the FIRM. Mandatory flood insurance purchase requirements apply.

#### Zone AR

Zone AR is the flood insurance rate zone used to depict areas protected from flood hazards by flood control structures, such as a levee, that are being restored. FEMA will consider using the Zone AR designation for a community if the flood protection system has been deemed restorable by a Federal agency in consultation with a local project sponsor; a minimum level of flood protection is still provided to the community by the system; and restoration of the flood protection system is scheduled to begin within a designated time period and in accordance with a progress plan negotiated between the community and FEMA. Mandatory purchase requirements for flood insurance will apply in Zone AR, but the rate will not exceed the rate for unnumbered A zones if the structure is built in compliance with Zone AR floodplain management regulations.

For floodplain management in Zone AR areas, elevation is not required for improvements to existing structures. However, for new construction, the structure must be elevated (or floodproofed for non-residential structures) such that the lowest floor, including basement, is a maximum of 3 feet above the highest adjacent existing grade if the depth of the base flood elevation (BFE) does not exceed 5 feet at the proposed development site. For infill sites, rehabilitation of existing structures, or redevelopment of previously developed areas, there is a 3 foot elevation requirement regardless of the depth of the BFE at the project site.

The Zone AR designation will be removed and the restored flood control system shown as providing protection from the 1% annual chance flood on the NFIP map upon completion of the restoration project and submittal of all the necessary data to FEMA.

#### Zone A99

Zone A99 is the flood insurance rate zone that corresponds to areas of the 100-year floodplains that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No BFEs or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

#### Zone D

The Zone D designation on NFIP maps is used for areas where there are possible but undetermined flood hazards. In areas designated as Zone D, no analysis of flood hazards has been conducted. Mandatory flood insurance purchase requirements do not apply, but coverage is available. The flood insurance rates for properties in Zone D are commensurate with the uncertainty of the flood risk.

#### Zone V

Zone V is the flood insurance rate zone that corresponds to the 100-year coastal floodplains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no BFEs are shown within this zone. Mandatory flood insurance purchase requirements apply.

#### Zone VE

Zone VE is the flood insurance rate zone that corresponds to the 100-year coastal floodplains that have additional hazards associated with storm waves. BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

#### Zones B, C, and X

Zones B, C, and X are the flood insurance rate zones that correspond to areas outside the 100-year floodplains, areas of 100-year sheet flow flooding where average depths are less than 1 foot, areas of 100-year stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 100-year flood by levees. No BFEs or depths are shown within this zone.

#### 5.4.1.4.5 Climate Change Consideration

Climate change is both a present threat and a slow-onset disaster. It acts as an amplifier of existing hazards. Extreme weather events have become more frequent over the past 40 to 50 years and this trend is projected

to continue. Rising sea levels, changes in rainfall distribution and intensity are expected to have a significant impact on coastal communities, including portions of Santa Barbara County. This section presents a discussion of how climate change might impact the frequency, intensity and distribution of flood hazards.

# 5.4.1.5 Drought and Water Shortages

### 5.4.1.5.1 Description of Hazard

Drought and water shortages are a gradual phenomenon and generally are not signified by one or two dry years. California's and Santa Barbara's extensive system of water supply infrastructure (reservoirs, groundwater basins, and interregional conveyance facilities) generally mitigates the effects of short-term dry periods for most water users. However, drought conditions are present when a region receives below-average precipitation, resulting in prolonged shortages in its water supply, whether atmospheric, surface, or ground water. A drought can last for months or years, or may be declared after as few as 15 days. Because of its unique geographical terrain and mediteranian climate, Santa Barbara County has <u>not</u> been in drought when there have been previous federal and state declarations. Conversly, Santa Barbara County is currently still in a drought emergency while the state of California is not. This recent drought emergency is the first local emergency declaration of drought in Santa Barbara County's history.

# 5.4.1.5.2 Location and Extent of Hazard in Santa Barbara County

The entire county is subject to drought conditions and water shortages. This is largly due to Lake Cachuma being the primary source of water for the whole county. Lake Cachuma primarily receives it water supply through precipitation run-off and has very limited access to state water resources. The extent of hazard is further articulated in the next passage.

# 5.4.1.5.3 History of Hazard in Santa Barbara County

The state of California and Santa Barbara have been in a drought since 2014. Recently, on April 7, 2017, Santa Barbara and the state, with a few exceptions declared the drought over. The average rainfall in Santa Barbara County is 17.6 inches; however, since 2016, Santa Barbara has experienced significantly less than normal rainfall. The effects of the drought are most visible when looking at the current capacity and maximum storage of the two main water reservoirs in the county, Lake Cachuma and Twitchell. On February 16, 2016, Cachuma was reported to be at 14.9% capacity, and Twitchell was at 0.2% capacity.

#### 5.4.1.5.4 Probability of Occurrence

In any given year, Santa Barbara County can be subject to drought conditions and water shortages.

# 5.4.1.5.5 Climate Change Considerations

This entire section is dedicated to climate change hazards, and as such, is focused on climate change's effects on the community. However, it is important to highlight climate change's potential direct impact.

Climate change has the potential to make drought events more common in the West, including California. Extreme heat creates conditions more conducive for evaporation of moisture from the ground, thereby increasing the possibility of drought. A warming planet could lead to earlier melting of winter snow packs, leaving lower stream flows and drier conditions in the late spring and summer. Snow packs are important in terms of providing water storage and ensuring adequate supply in the summer, when water is most needed. Changing precipitation distribution and intensity have the potential to cause more of the precipitation that does fall to run-off rather than be stored. The result of these processes is an increased potential for more frequent and more severe periods of drought.

# 5.4.1.6 Sea Level Rise and Erosion

### 5.4.1.6.1 Description of Hazard

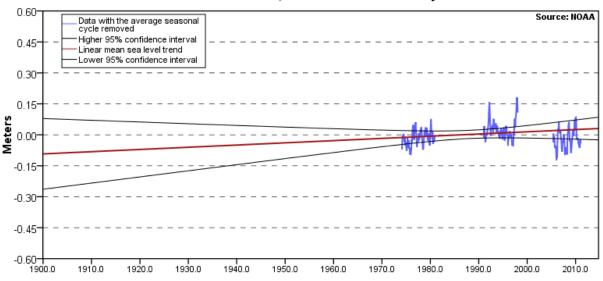
Sea level rise (SLR) is defined as the rising of the level of the sea as a result of the so-called greenhouse effect or global warming. SLR can occur through one or more of three (3) processes that include eustasy, isostasy, or thermal expansion. Erosion is a natural process which alters existing geomorphic features. Erosion can occur due to a number of factors, including winter storms, tidal action, wind-generated high surf, wave action, and rising sea levels.

### 5.4.1.6.2 Location and Extent of Hazard in Santa Barbara County

The impacts from SLR and erosion in Santa Barbara County will be felt along its 110 mile long coastline. SLR coupled with increased frequency, severity, and duration of high tide and storm events related to climate change will result in more frequent and severe extreme events along the coast. These events could expose the coast to severe flooding and erosion, damage to coastal structures and real estate, and salinity intrusion into delta areas and coastal aquifers (Projecting Future Sea Level, A Report from the California Climate Change Center, 2006).

# 5.4.1.6.3 History of Hazard in Santa Barbara County

Typically, the highest sea level readings along California's coastline occur during periods of heavy rain that coincide with high tides, causing coastal flooding, coastal bluff erosion, and landslides such as were experienced during the 1998 El Nino storms. Sea levels are already rising along the Santa Barbara County coastline as is evident in long term tidal gauge records from Station 9411340 since 1973 (**Figure 5.15**).



#### Figure 5.15 Mean Sea Level Trend in Santa Barbara

Santa Barbara, CA 1.25 +/- 1.82 mm/yr

In addition to SLR occurrence, below are several bridges throughout the County that are known to experience scour during flooding erosion events:

#### North County

- Foothill (Cuyama)
- Jalama Road at Ramajal Creek (Bridge No 51C-0016) is listed as Scour Critical, with Unstable Foundation

#### South County

- East Mountain Drive at San Ysidro Creek (Bridge No 51C-0202) is listed as Scour Critical, with Extensive Foundation Scour
- Ashley Road at Montecito Creek (Bridge No 51C-0043) is listed as Scour Critical, with Extensive Foundation Scour

#### 5.4.1.6.4 Probability of Occurrence

As discussed above, the potential impacts of global warming and climate change include increased opportunities for severe weather that may result in sea level rise and erosion. Santa Barbara County's land mass includes more than 110 miles of coastline with varying geologic features including steep coastal bluffs, beaches, wetlands, bays, and deltas. It also supports varying levels of development and land use, including recreational, agricultural, industrial, commercial, and residential.

A growing consensus of scientists believes that sea level rise will continue and the rate of rise will increase. The Intergovernmental Panel on Climate Change (IPCC) suggests that global SLR on the order of 0.2 m (0.66 ft.) and 0.6 m (1.97 ft.) is possible by 2100 with other scientists indicating this rise could be over 1 meter (3.28 ft.). **Figure 5.16** depicts areas (dark blue along and near the Santa Barbara County coastline that may be vulnerable to sea level rise.



#### Figure 5.16 Sea Level Rise Santa Barbara Quadrangle

5.4.1.6.5 Climate Change Considerations

This entire section is dedicated to climate change hazards, and as such, is focused on climate change's effects on the community. However, it is important to highlight climate change's potential direct impact.

As mentioned above, SLR can be caused by three (3) different processes. Two (2) of which, melting of ice sheets and/or thermal expansion of water, are a result of climate change and/or global warming

Erosion can be increased by climate change in two (2) ways. First, sea level rise, over time, will cause more rapid erosion of more inland areas than in previous years. This will be chronic erosion, however it will reach new, more inland areas, in the future due to higher average sea levels. Secondly, while the topic of increased frequency of storms is up in debate, if more severe or frequent storms do occur, it will increase coastal erosion events. More frequent storms will impact how frequently acute coastal erosion events occur, while more intense events will cause the erosion to extend further inland than before.

# 5.4.1.7 Energy Shortage and Resiliency

# 5.4.1.7.1 Description of Hazard

Energy shortages (or disruptions) are considered a form of lifeline system failure. Disruptions can be the consequence of another hazard, or can be a primary hazard, absent of an outside trigger. A failure could involve one, or a combination of the potable water system, power system, natural gas system, wastewater system, communication system, or transportation system. Most power blackouts are not human caused. They are the result of situations involving unintended events, such as an overwhelming need for power due to weather conditions, equipment failure, or accidents. They may also fail due to natural hazards such as earthquakes, floods, and landslides. These outages can last anywhere from a few minutes to several weeks.

Santa Barbara County has two service providers. Pacific Gas and Electric (PG&E) provides electricity in the northern part of the County, with termination of services north of the Gaviota area. Southern California Edison (SCE) provides power to the Southern parts of the County, with termination of services in Gaviota. The two systems are not connected. Thus, is there is a major interruption of service in the Santa Barbara area, then all serviced could be denied in either direction.

Both power companies are well aware of the restrictions on their systems and are making planned systematic changes to address the shortcomings. SCE has temporarily deployed several portable generators in the Goleta Valley to mitigate any problems that may occur during the El Nino rain season.

# 5.4.1.7.2 Location and Extent of Hazard in Santa Barbara County

The entire county is subject to energy shortages.

# 5.4.1.7.3 History of Hazard in Santa Barbara County

Energy disruptions on a small scale have occurred on a regular basis in Santa Barbara County.

#### 5.4.1.7.4 Probability of Occurrence

In any given year, Santa Barbara County can be subject to energy shortages. A large disruption due to a power failure or rotating brown out highly likely.

#### 5.4.1.7.5 Climate Change Considerations

With increased changes in weather and climate, the demands on energy will shift too. This shift in demand could have significant impacts on energy supply and demand.

# 5.4.1.8 Oil Spills

## 5.4.1.8.1 Description of Hazard

An oil spill is a release of liquid petroleum hydrocarbon into the environment due to human activity or technological error that results in pollution of land, water, and air. Oil releases also occur naturally through

oil seeps either on land or under water. Marine oil spills, whether accidental or intentional, can result from the release of crude oil from offshore oil platforms, drilling rigs, wells, underwater pipelines, tank trucks, and marine tank vessels (tankers) and even supply pipelines on land. Refined petroleum products such as gasoline, diesel, and heavier fuels such as bunker fuel used by cargo ships are also sources of potential oil spill releases. Depending on the origin, size, and duration of the release, an oil spill can have serious impacts on air and water quality, public health, plant and animal habitat, and biological resources. Clean up and recovery is time and cost consuming, and dependent on weather conditions such as wind and rain. Tidal and Current conditions may also make the spill more dynamic.

## 5.4.1.8.2 Location and Extent of Hazard in Santa Barbara County

This hazard can occur in any part of Santa Barbara County where existing oil & gas operations are located, either on-shore through supply pipelines and well facilities or off-shore where there are several platforms and undersea pipelines. Currently, there are 11 Oil Platforms off of the Santa Barbara County Coast and approximately 2457 oil and gas wells in Santa Barbara County. **Figure 6.12** show the Oil Platforms and their proximity to Santa Barbara.



#### Figure 6.18 Oil Platform Map of Santa Barbara Coast

5.4.1.8.3 History of Hazard in Santa Barbara County

Santa Barbara County has experienced the following large oil spills:

- January 28, 1969 Platform A 80,000 to 100,000 barrels
- September 28, 1997 Platform Irene 163 barrels

• May 19, 2015 Pipeline 901 at Refugio - 3,400 barrels

## 5.4.1.8.4 Probability of Occurrence

In any given year, Santa Barbara County could be subject to oil spills onshore or offshore.

#### 5.4.1.8.5 Climate Change Considerations

With increased changes in weather, climate, and economics, the demands for oil & gas production may shift. This shift in demand could increase production, distribution, and transportation of oil products; thus increasing the potential oil spill occurrences.

## 5.4.2 Lower Priority Hazards of Interest

## 5.4.2.1 Severe Weather and Storms

This section assesses hazards that are related to climate and weather. NASA defines weather as the way the atmosphere is behaving, mainly with respect to its effects upon life and human activities. The difference between weather and climate is that weather consists of the short-term (minutes to months) changes in the atmosphere. Most people think of weather in terms of temperature, humidity, precipitation, cloudiness, brightness, visibility, wind, and atmospheric pressure, as in high and low pressure. In most places, weather can change from minute-to-minute, hour-to-hour, day-to-day, and season-to season. Climate, however, is the average of weather over time and space. Fifty-eight long-term changes in the climate, especially those driven by the accumulation of anthropogenic greenhouse gases in the atmosphere, are expected to change short-term weather patterns and thus change weather-related impacts, both short- and long-term. Most prominently, climate change is warming the average global temperatures, which will result in more frequent and intense extreme events related to changes in temperature and precipitation, such as heat waves, flooding.

In the State Hazard Mitigation Plan, climate change is treated as a condition that will change and potentially exacerbate the impact of other hazards rather than being treated as a distinct hazard with unique impacts. For example, extreme heat and heat waves is an existing hazard that will be exacerbated by climate change. Impacts of climate change on the frequency, timing, and magnitude of flooding varies with the geography throughout the state. Areas that experience early run off from snow melt coupled with intensified rain or coastal areas experiencing sea level rise may be more greatly impacted by flooding. Hazards that have the potential to be affected by climate change are grouped in this subsection.

#### 5.4.2.1.1 Extreme Heat

#### 5.4.2.1.1.1 Description of Hazard

Extreme Heat is a function of heat and relative humidity. A Heat Index describes how hot the heat-humidity combination makes the air feel. As relative humidity increases, the air seems warmer than it actually is because the body is less able to cool itself via evaporation of perspiration. As the Heat Index rises, so do health risks such as heat exhaustion, sunstroke, and heatstroke. Some Heat Index Program Alert procedures

are implemented when the high temperature is expected to exceed  $105^{\circ}$  to  $110^{\circ}$  (depending on local climate) for at least two consecutive days.

#### 5.4.2.1.1.2 Location and Extent of Hazard in Santa Barbara County

The entire county is subject to extreme heat conditions, particularly inland areas.

#### 5.4.2.1.1.3 History of Hazard in Santa Barbara County

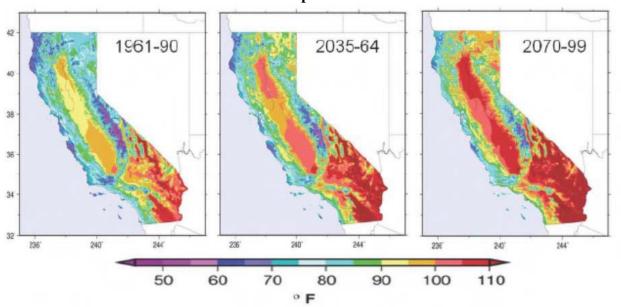
Santa Barbara County has experienced several extreme heat events in the past; however, they are not well documented. One documented event, Simoon, occurred in June 17, 1859 where a U.S. Coast Guard vessel recorded a record temperature of 133 degrees Fahrenheit in Goleta during a sundowner event on the Santa Barbara coast. This event set the world record for hottest temperature ever recorded on Earth, which held for 75 years until the record was broken by one degree in Death Valley, and then again in 1922 in Libya.

#### 5.4.2.1.1.4 Probability of Occurrence

In any given year, Santa Barbara County can be subject to extreme heat conditions.

#### 5.4.2.1.1.5 Climate Change Considerations

As temperatures rise due to climate change, Californians will face greater risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat. By mid-century, extreme heat events in urban centers could cause two to three times more heat-related deaths than occur today. By 2100, hotter temperatures are expected throughout the state, with an increase of 3 to 5.5°F under the lower emissions scenario and 8 to 10.5°F under the higher emissions scenario (**Figure 5.17**).



#### Figure 5.17 Comparison between Historic and Projected Temperature

#### 5.4.2.1.2 Freeze

#### 5.4.2.1.2.1 Description of Hazard

#### Freeze conditions are noted when there are sustained temperatures below 32 degree farenheit or below. 5.4.2.1.2.2 Location and Extent of Hazard in Santa Barbara County

The entire county is subject to freeze conditions; however, they are more prevalent with inland areas.

#### 5.4.2.1.2.3 History of Hazard in Santa Barbara County

There have been two federally declared freeze events in Santa Barbara County. The first occurred from December 19, 1990 through January 3, 1991 and was federally declared on February 11, 1991. The second occurred from January 11, 2007 through Janary 17, 2007 and was federally declared on March 13, 2007.

#### 5.4.2.1.2.4 Probability of Occurrence

In any given year, Santa Barbara County can be subject to freeze conditions.

#### 5.4.2.1.2.5 Climate Change Considerations

Freezing spells are likely to become less frequent as climate temperatures increase; if emissions follow higher pathways, freezing events could occur only once per decade in a sizable portion of the state by the second half of the 21st century.

#### 5.4.2.1.3 Hailstorm

#### 5.4.2.1.3.1 Description of Hazard

Hail is a type of precipitation in the form of pellets or balls of ice more than .19 inches in diameter. Out of all the types of Severe Weather, hail can pose the highest risk to the economy of the county with respect to crop and property damage.

#### 5.4.2.1.3.2 Location and Extent of Hazard in Santa Barbara County

The entire county is subject to hailstorms; however, they are more prevelant with inland areas.

#### 5.4.2.1.3.3 History of Hazard in Santa Barbara County

There is no current record of a hailstorm in the County.

#### 5.4.2.1.3.4 Probability of Occurrence

In any given year, Santa Barbara County can be subject to hailstorm condition.

#### 5.4.2.1.3.5 Climate Change Considerations

Hailstorms have the possibility of becoming more frequent with the climate temperatures increasing, and the atmosphere becomes more convective.

## 5.4.2.1.4 Hurricanes

## 5.4.2.1.4.1 Description of Hazard

A hurricane is an example of a tropical cyclone; they can be up to 600 miles across and have wind speeds between 75 to 200 miles per hour. Each hurricane usually lasts for over a week, moving 10-20 miles per hour over the open ocean. Hurricanes gather heat and energy through contact with warm ocean waters; Hurricanes only form over really warm ocean water of 80°F or warmer. Evaporation from the seawater increases their power. Hurricanes rotate in a counter-clockwise direction around an "eye" in the Northern Hemisphere and clockwise direction in the Southern Hemisphere. The center of the storm or "eye" is the calmest part.

Hurricanes also develop in stages; working their way up to hurricane status:

Tropical Wave	A low pressure trough moving generally westward with the trade winds.
Tropical Disturbance	An organized area of thunderstorms that usually forms in the tropics. Typically, they maintain their identity for 24 hours and are accompanied by heavy rains and gusty winds.
Tropical Cyclone	A generic term for any organized low pressure that develops over tropical and sometimes sub-tropical waters. Tropical depressions, tropical storms, and hurricanes are all example of tropical cyclones.
Tropical Depression	An organized area of low pressure in which sustained winds are 38 mph or less.
Tropical Storm	A tropical cyclone with maximum sustained wind speeds that range from 39 to 73 mph.
Hurricane	A tropical cyclone with sustained winds of at least 74 mph.

Hurricanes are categorized by characteristics (winds, pressure, and damage):

Category	Winds (MPH)	Pressure (Millibars)	Pressure (Inches)	Storm Surge (Feet)	Damage
1	74-95	<980	<28.94	4'-5'	Minimal
2	96-110	979-965	28.91-28.50	6'-8'	Moderate
3	111-130	964-945	28.47-27.91	9'-12'	Extensive
4	131-155	944-920	27.88-27.17	13'-18'	Extreme
5	>155	<920	<27.17	>18'	Catastrophic

# 5.4.2.1.4.2 Location and Extent of Hazard in Santa Barbara County

Although highly unlikely, the entire county is subject to be hit by a hurricane.

#### 5.4.2.1.4.3 History of Hazard in Santa Barbara County

No significant hurricanes have hit Santa Barbara County. This is largely due to the fact that tropical storm winds generally blow from east to west and the waters off the coast of Santa Barbara are cooler in nature.

#### 5.4.2.1.4.4 Probability of Occurrence

Although possible, Santa Barbara County is at very low risk of experiencing a significant hurricane event.

#### 5.4.2.1.4.5 Climate Change Considerations

Because climate change effects are still being studied it is difficult to say if changing climate conditions will increase the chance of a significant hurricane impacting Santa Barbara County in the future.

#### 5.4.2.1.5 Tornadoes

#### 5.4.2.1.5.1 Description of Hazard

A tornado is a violent rotating column of air extending from cloud to ground. The most violent tornadoes are capable of tremendous destruction with wind speeds of up to 300 mph. They can destroy large buildings, uproot trees and throw vehicles hundreds of yards. They can also drive straw into trees. Damage paths can be in excess of one mile wide to 50 miles long.

Most tornadoes form from thunderstorms. They need warm, moist air from the Gulf of Mexico and cool, dry air from Canada. When these two air masses meet, they create instability in the atmosphere. A change in wind direction and an increase in wind speed with increasing height creates an invisible, horizontal spinning effect in the lower atmosphere. Rising air within the updraft tilts the rotating air from horizontal to vertical. An area of rotation, 2-6 miles wide, now extends through much of the storm. Most strong and violent tornadoes form within this area of strong rotation.

Tornadoes are measured by the Fujita Tornado Scale which classifies tornadoes by intensity categories, based on the maximum winds occurring within the funnel.

Category	Wind Speed	Description		
F0	40-72 miles per	Gale Tornado. Light Damage: Some damage to chimneys;		
	Hour	breaks twigs and branches off trees; pushes over		
		shallow-rooted trees; damages signboards; some windows		
		broken; hurricane wind speed begins at 73 miles per hour.		
F1	73-112 miles	Moderate Tornado. Moderate Damage: Peels surfaces off		
	per hour	roofs; mobile homes pushed off foundations or overturned;		
		outbuildings demolished; moving autos pushed off the		

F2113-157 miles per hourSignificant Tornado. Considerable Damage: Roofs torn frame houses; mobile homes demolished; frame houses with weak foundations lifted and moved; boxcars pushe over; large trees snapped or uprooted; light-object missi generated.F3158-206 miles per hourSevere Tornado. Severe Damage: Roofs and some walls torn off well constructed houses; trains overturned; mos trees in forests uprooted; heavy cars lifted off the groun and thrown; weak pavement blown off roads.F4207-260 miles per hourDevastating Tornado. Devastating Damage: Well-constructed homes leveled; structures with weak	ĺ
per hourframe houses; mobile homes demolished; frame houses with weak foundations lifted and moved; boxcars pushe over; large trees snapped or uprooted; light-object missi generated.F3158-206 miles per hourSevere Tornado. Severe Damage: Roofs and some walls torn off well constructed houses; trains overturned; mos trees in forests uprooted; heavy cars lifted off the groun and thrown; weak pavement blown off roads.F4207-260 milesDevastating Tornado. Devastating Damage:	
F3158-206 miles per hourSevere Tornado. Severe Damage: Roofs and some walls torn off well constructed houses; trains overturned; most trees in forests uprooted; heavy cars lifted off the groun and thrown; weak pavement blown off roads.F4207-260 milesDevastating Tornado. Devastating Damage:	off
over; large trees snapped or uprooted; light-object missi generated.F3158-206 miles per hourSevere Tornado. Severe Damage: Roofs and some walls torn off well constructed houses; trains overturned; most trees in forests uprooted; heavy cars lifted off the groun and thrown; weak pavement blown off roads.F4207-260 milesDevastating Tornado. Devastating Damage:	
F3158-206 miles per hourSevere Tornado. Severe Damage: Roofs and some walls torn off well constructed houses; trains overturned; mos trees in forests uprooted; heavy cars lifted off the groun and thrown; weak pavement blown off roads.F4207-260 milesDevastating Tornado. Devastating Damage:	d
F3158-206 miles per hourSevere Tornado. Severe Damage: Roofs and some walls torn off well constructed houses; trains overturned; most trees in forests uprooted; heavy cars lifted off the groun and thrown; weak pavement blown off roads.F4207-260 milesDevastating Tornado. Devastating Damage:	les
per hourtorn off well constructed houses; trains overturned; most trees in forests uprooted; heavy cars lifted off the groun and thrown; weak pavement blown off roads.F4207-260 milesDevastating Tornado. Devastating Damage:	
Image: TermImage: TermImage: TermF4207-260 milesDevastating Tornado. Devastating Damage:	3
and thrown; weak pavement blown off roads.F4207-260 milesDevastating Tornado. Devastating Damage:	t
F4207-260 milesDevastating Tornado. Devastating Damage:	d
per hour Well-constructed homes leveled; structures with weak	
foundations blown off some distance; cars thrown and	
disintegrated; large missiles generated; trees in forest	
uprooted and carried some distance away.	
F5 261-318 miles Incredible Tornado. Incredible Damage: Strong frame	
per hour houses lifted off foundations and carried considerable	
distance to disintegrate; automobile-sized missiles fly	
through the air in excess of 300 feet (100 meters); trees	
debarked; incredible phenomena will occur.	
F6-12 >319 miles per The maximum wind speeds of tornadoes are not expected	ed
Hour to reach the F6 wind speeds.	

#### 5.4.2.1.5.2 Location and Extent of Hazard in Santa Barbara County

Although highly unlikely, the entire county is subject to be hit by a tornado.

#### 5.4.2.1.5.3 History of Hazard in Santa Barbara County

Santa Barbara County has experienced waterspouts (weaker tornadoes that form over water) and microburst (sinking air) but it has not experienced any significant tornadoes. As comparison, the state of California has experienced 316 tornadoes between 1950 and 2006; however, not of them have required a state and/or federal declaration. Of the 316, 2 reach F3; 22 reach F2, 84 were F1, and 208 were F0.

#### 5.4.2.1.5.4 Probability of Occurrence

Although possible, Santa Barbara County is at very low risk of experiencing a significant tornado event.

#### 5.4.2.1.5.5 Climate Change Considerations

Because climate change effects are still being studied it is difficult to say if changing climate conditions will increase the chance of a significant tornado impacting Santa Barbara County in the future.

#### 5.4.2.1.6 Windstorm

#### 5.4.2.1.6.1 Description of Hazard

Santa Barbara County is predominately known to have damaging hot winds known as Sundowners. These winds can reach up to 80 mph and fuel raging wildfires on the south coast. Sundowner events are most prevelant in the Spring and Summer months, but can strike at any time of the year. Their greatest frequency is typically in the late afternoon and early evening hours. Sundowner winds occur as a strong north-south pressure gradient developing between the central coast and the Los Angeles Basin, thus causing gusty north winds to blow over the Santa Ynez Mountain range and decending to down towards the water. As the winds come up and over the mountain, they warm and dry the air (which is typically cool and moist along the coast) and gain speed coming down through the passes and coastal canyons causing a high speed of wind.

Santa Barbara County can occasionally experience Santa Ana winds, which are warm, dry, and can exceed 40 mph. Santa Ana's are most prevelant in the autumn and winter months. These winds originate from cool, dry high pressure air masses in the Great Basin. They come up, over and are pulled southward down the eastern side of the Sierra Nevadas and into the Southern California region.

## 5.4.2.1.6.2 Location and Extent of Hazard in Santa Barbara County

All of Santa Barbara County is susceptible to Sundowner windstorms and south county is minimally susceptible to Santa Anas.

#### 5.4.2.1.6.3 History of Hazard in Santa Barbara County

Sundowner winds have a complex history in Santa Barbara County. They have caused Extreme Heat bringing record breaking temperatures to the area (such as the Simoon event in Goleta in 1859), as well as exacerbating fire weather and expanding already burning brush fires (such as the Painted Cave Fire in 1990, Gap and Tea Fire in 2008, Jesusita Fire in 2009, and Sherpa Fire in 2016). Beyond extreme heat and dangerous fire weather conditions, Sundowner winds can cause damage to critical infrastructure, crop and agriculture, and personal property.

#### 5.4.2.1.6.4 Probability of Occurrence

Santa Barbara County is at risk of windstorms at any given time during the calender year.

#### 5.4.2.1.6.5 Climate Change Considerations

Climate change effects, although still being studied, will have an affect on sundowner and santa ana windstorms in the future.

# 5.4.2.2 Dam Failure

#### 5.4.2.2.1 Description of Hazard

Dams fail due to old age, poor design, structural damage, improper siting, landslides flowing into a reservoir, or terrorist actions. Structural damage is often a result of a flood, erosion, or earthquake. A catastrophic dam failure could inundate the area downstream. The force of the water is large enough to carry boulders, trees, automobiles, and even houses along a destructive path downstream. The potential for casualties,

environmental damage, and economic loss is great. Damage to electric generating facilities and transmission lines could impact life support systems in communities outside the immediate hazard area.

# 5.4.2.2.2 History of Hazard in Santa Barbara County

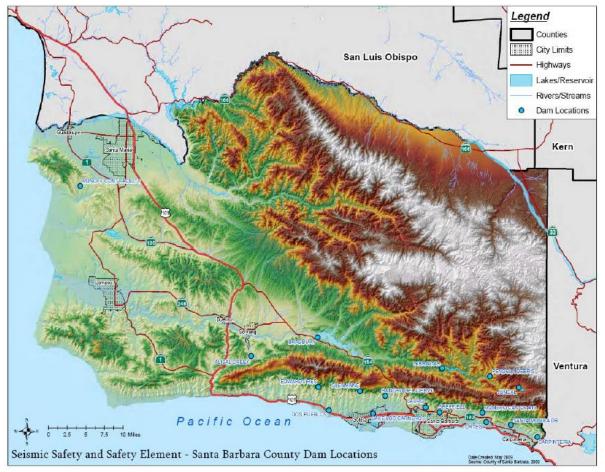
The State of California and the federal government have a rigorous Dam Safety Program. This is a proactive program that ensure proper planning in the event of failure but also sets standards for dam design and maintenance. Because of this, many potential issues have been addressed and/or resolved. Prior to the implementation of this program Santa Barbara did experience a dam related incident.

Built in 1917, the Sheffield Dam only survived for eight years, failing catastrophically during an earthquake in 1925. It was built on sandy soil which liquefied during the event. The center 300-feet of the 720-feet long dam broke off and was carried away on the liquefied soil, spilling 30 million gallons of water. Damage estimates are unavailable.

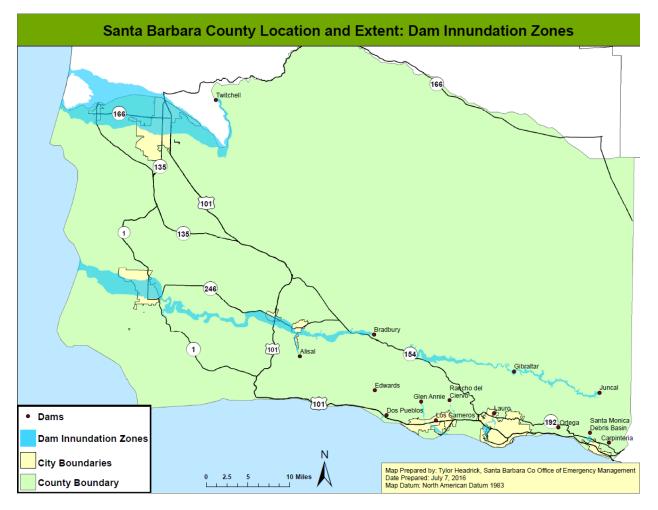
## 5.4.2.2.3 Location and Extent of Hazard in Santa Barbara County

There are 15 dams in the County. These dams range in purpose from water supply to flood control. Dam failure inundation zones mapped by the State of California indicate areas that would be inundated should a dam fail catastrophically. The inundation mapping is considered confidential by the State of California. **Figure 5.18 and Figure 5.19** display the dam locations and dam inundation areas.

#### **Figure 5.19 Dam Locations**



**Figure 5.20 Dam Inundation Zones** 



5.4.2.2.4 Probability of Occurrence

Dam failure events are infrequent and usually coincide with the events that cause them, such as earthquakes, landslides and excessive rainfall and snowmelt. There is a "residual risk" associated with dams; residual risk is the risk that remains after safeguards have been implemented. For dams, the residual risk is associated with events beyond those that the facility was designed to withstand. However, the probability of occurrence of any type of dam failure event is considered to be low in today's regulatory and dam safety oversight environment.

# 5.4.2.2.5 Climate Change Considerations

Increased rainfall from changing climate conditions could present a risk to dams in Santa Barbara County if volume of runoff is greater than the dam's capacity. This could cause the County to release stored water into the downstream water courses in order to ensure the integrity of the dam.

# 5.4.2.3 Agricultural Pests

# 5.4.2.3.1 Description of Hazard

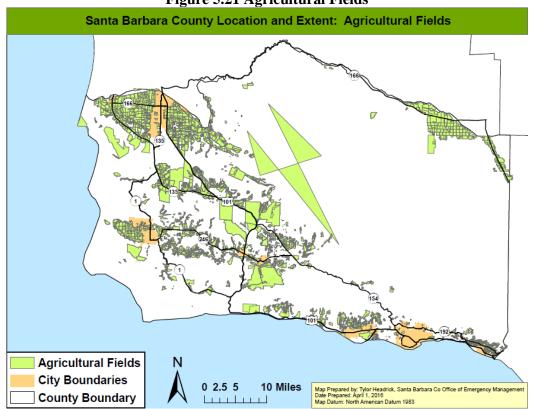
Agricultural pests and disease infestation occur when an undesirable organism inhabits an area in a manner that causes serious harm to agriculture crops, livestock or poultry, and wild land vegetation or animals. Countless insects and diseases live on, in, and around plants and animals in all environments. Most are harmless, while some can cause significant damage and loss. Under some conditions, insects and diseases that have been relatively harmless can become hazardous. For example, severe drought conditions can weaken trees and make them more susceptible to destruction from insect attacks than they would be under normal conditions.

# 5.4.2.3.2 History of Hazard in Santa Barbara County

Santa Barbara County has a demonstrated vulnerability to insect infestation. Infestations of Mediterranean Fruit Fly, Oriental Fruit Fly, Gypsy Moth, Glassy-winged Sharpshooter, Asian Citrus Psyllid, and Light-Brown Apple Moth have all occurred in the last 30 years. Diseases such as Chrysanthemum White Rust and Pierce's Disease of Grapes have caused significant losses to local growers.

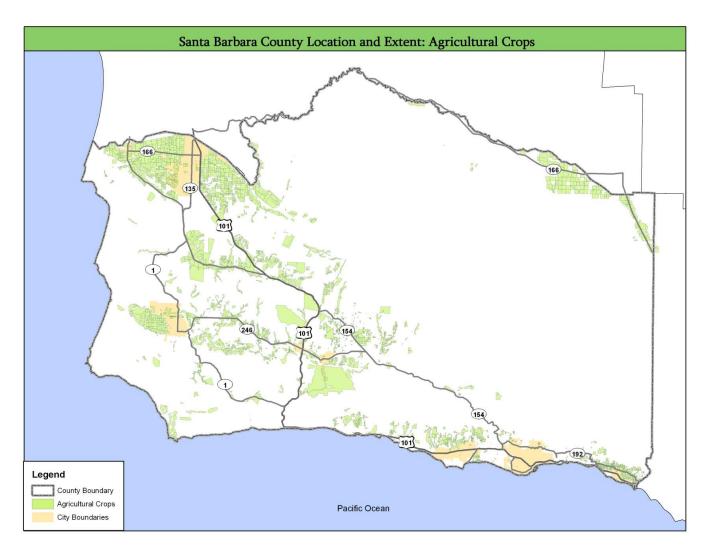
# 5.4.2.3.3 Location and Extent of Hazard in Santa Barbara County

**Figure 5.20** shows land that, under the Williamson Act, has been zoned as agricultural, open space, or recreational. These lands are susceptible to agricultural pests and diseases. **Figure 5.21** portrays crop land. These areas are also susceptible to agricultural pests and diseases.



**Figure 5.21 Agricultural Fields** 

**Figure 5.22 Agricultural Crops** 



#### 5.4.2.3.4 Probability of Occurrence

Due to its interaction with the global economy, its mild Mediterranean climate, and its diversified agricultural and native landscape, Santa Barbara County currently experiences and will continue to experience periodic losses due to agricultural pests and diseases.

# 5.4.2.3.5 Climate Change Consideration

California farmers contend with a wide range of crop-damaging pests and pathogens. Continued climate change is likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates. For example, the pink bollworm, a common pest of cotton crops, is currently a problem only in southern desert valleys because it cannot survive winter frosts elsewhere in the state. However, if winter temperatures rise 3 to 4.5°F, the pink bollworm's range would likely expand northward, which could lead to substantial economic and ecological consequences for the state.

Temperature is not the only climatic influence on pests. For example, some insects are unable to cope in extreme drought, while others cannot survive in extremely wet conditions. Furthermore, while warming speeds up the lifecycles of many insects, suggesting that pest problems could increase, some insects may

grow more slowly as elevated carbon dioxide levels decrease the protein content of the leaves on which they feed (California Climate Change Center 2006).

# 5.4.2.4 Epidemic/Pandemic/Vector Borne Disease

## 5.4.2.4.1 Description of Hazard

Infectious disease emergencies are circumstances caused by biological agents, including organisms such as bacteria, viruses or toxins, with the potential for significant illness or death in the population.

Infectious disease emergencies may be caused by:

- Naturally occurring diseases spread person to person (e.g., measles, mumps, meningococcal disease, tuberculosis)
- Foodborne (e.g.: salmonella, Ecoli, botulinum toxin, etc.)
- Vectors such as a mosquito that spread disease (e.g.: West Nile virus, dengue, Zika, malaria).
- Newly emerging infectious diseases (e.g.: Ebola, Zika, SARS, MERS, avian influenza).
- Intentionally caused spread of disease or toxins known as bioterrorism. Past bioterrorism events include the contamination of restaurant food with Ecoli in Oregon (1984) and the release of Sarin gas in the Tokyo subway (1995).

The impact of infectious disease emergencies on the local community and its critical infrastructure will depends on:

- The type of biological agent and availability of treatment for victims
- The availability of prophylaxis for responders and the public
- The scale of exposure and ongoing exposure
- The mode of transmission and whether transmission can be interrupted
- Whether the event is affecting staffing for critical infrastructure within and outside of the county such as transportation, law enforcement, health care, and the medical and food supply chains.

Outbreaks, Epidemics, and Pandemics

An **outbreak** is when there are more cases than would be normally expected, often suddenly, of an infectious disease in a community or facility.

An **epidemic** is when there are more cases than would be normally expected of an infectious disease, often suddenly, in a population of a large geographic area.

A **pandemic** refers to an epidemic that has spread over several countries or continents, usually affecting a large number of people. Examples include pandemic influenza and Severe Acute Respiratory Syndrome or "SARS".

Outbreaks, epidemics, or pandemics can occur when a new virus emerges to which the population has little immunity. The 20th century saw three such pandemics, the most notable of which was the 1918 Spanish influenza pandemic that was responsible for 20 million deaths throughout the world. Secondary impacts include significant economic disruption to a community's infrastructure due to loss of employee work time, essential services and products, and costs of treating or preventing spread of the disease.

Public health measures are used to control outbreaks, epidemics, or pandemics of infectious diseases, and are especially important for diseases with high morbidity or mortality and limited medical prophylaxis and/or rapid treatment.

#### Measures to control disease include:

- Legal measure such as isolation and quarantine of persons or products, and legal closure of food establishments.
- Control of contaminated food or water through recall of product or, for water, "Do Not Use", "Do Not Drink" or "Boil Water" orders issued by state or local health departments.

Vector control to eliminate vectors such as mosquitos that carry the disease from person to person. The Vector Borne Disease Section of the California Department of Public Health reports risk or potential risk of exposure to the following vector borne disease in California:

Typhus	Tulermia	Hantavirus Cardiopulmonary Syndrome
Plague	Lyme Disease	Scabies
Murine Typhus	Plague	Zika Virus
West Nile Virus	Dengue	
Swimmer's Itch	Chikungunya	

## 5.4.2.4.2 Location and Extent of Hazard in Santa Barbara County

An infectious disease hazard can occur throughout the entire County.

## 5.4.2.4.3 History of Hazard in Santa Barbara County

- 1. Foodborne outbreaks occur every year in Santa Barbara County, commonly the result of Norovirus, and have sickened up to 100 individuals at a single facility.
- 2. 2009 H1N1 "Swine Flu" pandemic required rationing and prioritization of influenza vaccine. Public was given 27,000 vaccinations at large and small scale clinics. One hundred thirty-two thousand (132,000) doses of vaccine were distributed Countywide through response partners. The Santa Barbara Public Health Department Operations Center was activated for more than three months.
- 3. 2013 Serogroup B meningococcal outbreak occurred at UCSB requiring a joint effort between the CDC, FDA, California Department of Public Health, the Santa Barbara County Public Health Department. FDA approved an investigational new drug (IND) to allow for a stand up of a CDC approved mass vaccination operation for students. 17,540 total vaccinations were given.

# 5.4.2.4.4 Probability of Occurrence

Disease outbreaks and flu epidemics occur on an ongoing basis. Occasionally these outbreaks require the initiation of the Santa Barbara County Public Health Department Infectious Disease Response Plan but have required little to no support from the County Emergency Operations Center. There is a continued threat from a novel influenza virus or other emerging epidemic or pandemic disease that would require a disaster response at the EOC level. The disease could affect the county infrastructure, and the ability of the EOC and other county departments to respond due to disease related loss of staff.

# 5.4.2.4.5 Climate Change Consideration

While many vector born and zoonotic diseases (VBZD), such as malaria, yellow fever, dengue, and murine typhus, are rarely seen in the United States, we are directly susceptible to VBZD that are found in warmer climates and vulnerable due to global trade and travel.

Many VBZD are climate sensitive and ecological shifts associated with climate change are expected to impact the distribution and incidences of these diseases.

Changes in temperature and precipitation directly affect vector born disease transmission through pathogen-host interaction, and indirectly through ecosystem changes and species composition. As temperatures increases vectors can spread into new areas that were previously too cold. For example, two mosquito vectors that carry malaria are now found at the U.S.-Mexico border.

# 5.4.2.5 Hazardous Materials Release

# 5.4.2.5.1 Description of Hazard

Hazardous Waste/Materials are widely used or created at facilities such as hospitals, wastewater treatments plants, universities and industrial/manufacturing warehouses. Several household products such as cleaning supplies and paint are also considered hazardous materials. Hazardous materials include:

- Explosives;
- Flammable, non-flammable, and poisonous gases;
- Flammable liquids;
- Flammable, spontaneously combustible, and dangerous when wet solids;
- Oxidizers and organic peroxides;
- Poisons and infectious substances;
- Radioactive materials; and
- Corrosive materials.

Both mobile and external hazardous materials releases can spread and affect a wide area, through the release of plumes of chemical, biological, or radiological elements or leaks or spills. Conversely, internal releases are more likely to be confined to the structure the material is store in.

Chemical may be corrosive or otherwise damaging over time. A hazardous materials release could also result in fire or explosion. Contamination may be carried out of the immediate area of the incident by people, vehicles, wind, and water. Weather conditions can increase the size and intensity of the Hazardous Materials Release. Typography, such as hills and canyons, can increase the size of the release or make it more difficult to contain.

# 5.4.2.5.2 Location and Extent of Hazard in Santa Barbara County

The locations and identity of facilities that store hazardous materials are reported to local and federal governments. Many facilities have their own hazardous materials guides and response plans, including transportation companies who transport hazardous materials.

The release of hazardous materials into the environment can cause a multitude of problems. Although these incidents can happen almost anywhere, certain areas of the County are at higher risk, such as near roadways that are frequently used to transport hazardous materials and locations with industrial facilities that use, store, and/or dispose of such materials. Areas crossed by railways, waterways, airways, and pipelines also have increased potential for mishaps.

# 5.4.2.5.3 History of Hazard in Santa Barbara County

No significant historical events to report to date

## 5.4.2.5.4 Probability of Occurrence

The release of hazardous materials can occur throughout the entire county. Incidences can occur during production, storage, transportation, use or disposal of hazardous materials. Communities can be at risk if a chemical is used unsafely or released in harmful amounts into the environment. Hazardous materials can cause death, serious injury, long lasting health effects, and damage to buildings, the environment, homes, and other property.

## 5.4.2.5.5 Climate Change Consideration

As mentioned above, weather can play a significant factor in hazardous material releases. While there is little evidence to link climate change increase occurrences of hazardous material releases, it could impact the response and recovery efforts.

# 5.4.2.6 Radiological Accidents

## 5.4.2.6.1 Description of Hazard

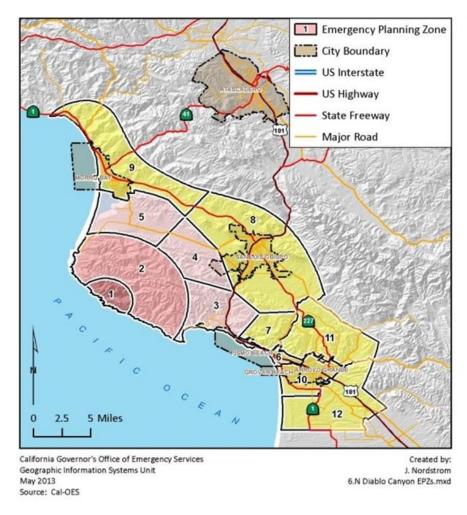
Radioactive materials are routinely transported in California. These materials include the medical and industrial sources described below, as well as wastes that have radioactive components. Many of the radioactive waste shipments come from research and cleanup efforts at national laboratories and nuclear power plants. Radiological accidents that result in the release of radioactive materials may result in long-term health risks and contamination of the state resources, including air, water supply, groundwater, and agricultural lands.

Four (4) Emergency Classification Levels (ECLs) have been established in federal regulations to characterize the severity of the emergency and the response actions required. The ECLs must be used as the foundation for emergency response planning, training and exercises.

#### 5.4.2.6.2 Location and Extent of Hazard in Santa Barbara County

There are a few medical and industrial sources within the county that generate radioactive material; and because of the transport of the material this hazard can occur throughout most of the county. Diablo Canyon Power Plant in San Luis Obispo County is the only operating nuclear power plant (NPP) in California. The Diablo Canyon plant is undergoing seismic studies to identify the location and potential hazards associated with a recently identified off-shore earthquake fault zone as part of relicensing by the California Public Utilities Commission (CPUC) and the federal Nuclear Regulatory Commission (NRC).

State and local governments having jurisdiction within ten miles of an operating nuclear power plant in the U.S. must plan, train, and conduct emergency exercises annually in accordance with federal regulations. Emergency Planning Zone (EPZ) for Diablo Canyon Nuclear facility is shown in **Figure 5.22**. As part of the planning basis, affected agencies must establish EPZs, which consist of areas within an approximate ten mile radius drawn around each plant site. The exact EPZ size is established to provide for substantial reduction in early severe health effects in the event of a worst-case core melt accident.



# Figure 5.23 A Emergency Planning Zone (EPZ) for Diablo Canyon Nuclear Facility

## 5.4.2.6.3 History of Hazard in Santa Barbara County

No significant radiological release have occurred to date in Santa Barbara or the state of California.

#### 5.4.2.6.4 Probability of Occurrence

Due to strict regulation of nuclear power plants in the United States, significant nuclear power incidents that can cause harm to the public have low probability of occurrence. The probability of a catastrophic event involving a nuclear power plant is low and these plants are extremely well protected. However, as evidenced by the March 2011 events at the Fukushima Daiichi plant in Japan, caused by the Tohoku Earthquake and Tsunami, the consequences of a severe accident or a successful terrorist attack on a nuclear power plant that results in a release of radioactive materials could be very significant.

#### 5.4.2.6.5 Climate Change Consideration

While there is little evidence to link climate change increase occurrences of radiological material releases, it could impact the response and recovery efforts.

# 5.4.2.7 Terrorism

# 5.4.2.7.1 Description of Hazard

The term terrorism refers to intentional, criminal malicious acts. There is no single, universally accepted definition of terrorism, and it can be interpreted in many ways. Terrorism is defined in the Code of Federal Regulations as "*…the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.*" (28 CFR, Section 0.85). For the purposes of this plan, terrorism refers to the use of weapons of mass destruction, including biological, chemical, nuclear, and radiological weapons; arson, incendiary, explosive, and armed attacks; industrial sabotage and intentional hazardous materials releases; and cyber terrorism. Conventional Attacks/Active Shooter incident is initiated by humans. It can be a well-planned coordinated attack with multiple suspects, or the result of a lone individual on a rampage.

# 5.4.2.7.2 Location and Extent of Hazard in Santa Barbara County

Terrorism can occur throughout the entire county but due to its intended purpose would most likely happened in more populous urban areas where more devastation (and fear) will ensue.

# 5.4.2.7.3 History of Hazard in Santa Barbara County

While the county has seen serval recent events of mass casualties brought on by disgruntled or distraught individuals; none of them can be categorized as terrorism.

#### 5.4.2.7.4 Probability of Occurrence

All County businesses and facilities are perceived as a soft target resulting in increased property crimes by criminals who live outside the County. However, as the history shows, Isla Vista is on the largest soft targets in the County. Isla Vista is on the most densely populated areas in the western United States. During the weekend nights, it has historically been the location of several street parties inviting thousands of people to the community. Halloween has been a problem in the past, bringing up to forty-thousand street partygoers. Although in 2014 the celebration was subdued to local efforts on the part of students and community members to keep it smaller in nature.

# 5.4.2.7.5 Climate Change Consideration

While there is little evidence to link climate change increase occurrences of terrorism, depending on the type of attack, it could impact the response and recovery efforts.

# 5.4.2.8 Cyber Threats

# 5.4.2.8.1 Description of Hazard

A cyber security threat is a circumstance or event that has or indicates the potential to exploit vulnerabilities and to adversely impact organizational operations, organizational assets (including information and information systems), individuals, other organizations, or society. Critical infrastructure, such as utilities and

telecommunications, are also potential targets. Examples of cyber threats include malware, phishing, denial of service attacks, ransomware, and state-sponsored hacking.

#### 5.4.2.8.2 Location and Extent of Hazard in Santa Barbara County

This hazard can happen anywhere within the County but will generally be targeted towards larger corporations or government.

#### 5.4.2.8.3 History of Hazard in Santa Barbara County

While there have been several smaller cyber threats and hacking, none have reached a level of significance.

#### 5.4.2.8.4 Probability of Occurrence

Cyber threats are on the rise globally, national, and locally. The probability of occurrence of cyber threats is rapidly increasing, especially with increased reliance on the Internet and cloud-based computing.

#### 5.4.2.8.5 Climate Change Consideration

While there is little evidence to link climate change to increase in occurrences of cyber threats, the target could be related to persons/groups with issues with individuals or companies they perceive to have effect on the climate (i.e., greenhouse gas producers).

# 5.4.2.9 Aircraft Crashes

# 5.4.2.9.1 Description of Hazard

Aircraft crashes are defined as any accident of private, commercial, or military aircraft on land or over sea. Aircraft crashes, like other transportation accidents, are less likely to lead to a state or federal disaster declaration, than other hazards previously and afore mentioned.

# 5.4.2.9.2 Location and Extent of Hazard in Santa Barbara County

In addition to being within the flight pattern of many airports providing regional flights (i.e., Los Angeles International, San Francisco International, Oakland, San Jose International, Burbank Airport, John Wayne Airport, Long Beach Airport, Ontario International Airport), Santa Barbara has four (4) general aviation airports: 1) Lompoc, 2) Santa Barbara, 3) Santa Maria Public, and 4) Santa Ynez.

The Santa Barbara Airport (SBA) is located near Goleta, west of Santa Barbara. On any given day, an average of 2,100 passengers arrive and depart from the airport. Santa Barbara is the busiest airport on the California coast, between Los Angeles and San Jose; serving more than 700,000 passengers annually. Five passenger airlines and one cargo carrier operate approximately 40 daily flight departures at the airport.

The Santa Maria Airport (SMX) is located just southwest of downtown Santa Maria. The airport provides facilities for one regional airline and serves as home base for over 200 general aviation aircraft. With the longest runway on the Central Coast, and with continued improvements geared toward growth, SMX is a welcome location for future businesses and expansion.

The Lompoc Airport (LPC) is located on the north side of Lompoc. For the 12 month period ending May 8, 2009, the airport had 30,100 general aviation aircraft operations and 200 military aviation operations; with an average of 83 general aviation operations per day and 17 military operations per month. 71 single-engine and 4 ultra-light aircraft were based at the airport during that time. Skydiving operations are held daily at Skydive Santa Barbara.

The Santa Ynez Airport (IZA) is located just southeast of Santa Ynez. As of 2014, the airport serves three main functions: Private aircraft owners use it as a hub for storing their planes and for refueling, the airport boasts one of the best gliding locations in Southern California, and the airport serves as the staging ground for the Santa Barbara County Air Support Unit.

# 5.4.2.9.3 History of Hazard in Santa Barbara County

No significant historical events to report to date

## 5.4.2.9.4 Probability of Occurrence

With the amount of general aviation operations, military flights, and its position between Los Angeles/San Diego and the Bay Area, there is a notable possibility of Santa Barbara County experiencing an airline crash.

## 5.4.2.9.5 Climate Change Consideration

There is no none linkage between climate change and airline crashes. Although bad weather does play a factor in some airline crashes, current technology does a good job of forecasting potential conditions.

# 5.4.2.10 Train Accidents

#### 5.4.2.10.1 Description of Hazard

Train accidents are defined as any accidents involving public or private trains carrying passengers or cargo along the rail corridor. Train accidents, like other transportation accidents, are less likely to lead to a state or federal disaster declaration, than other hazards previously and afore mentioned.

#### 5.4.2.10.2 Location and Extent of Hazard in Santa Barbara County

Trains running through Santa Barbara County, and in close proximity to U.S. Highway 101, carry both commuters and commodities. Such commodities include hazardous materials, fuel (including oil), agriculture, meats, and non-consumables. A hazardous materials incident on the rails or roadway has the potential to shut down both rail and highway transportation routes where the two are within close proximity to another.

## 5.4.2.10.3 History of Hazard in Santa Barbara County

In 1991 the Seacliff Incident, in neighboring Ventura County, occurred when a train released 440 gallons of aqueous hydrazine. The accident required the evacuation of the nearby Seacliff Community along with the shutting down of Highway 101, and took 5 days to cleanup.

#### 5.4.2.10.4 **Probability of Occurrence**

Train accidents are generally localized and the incidents result in limited impacts at the community level. However, if there are volatile or flammable substances on the train and the train is in a highly populated or densely forested area, death, injuries, and damage to homes, infrastructure, and the environment, including forest fires can occur.

#### 5.4.2.10.5 **Climate Change Consideration**

There is no none linkage between climate change and train accidents; however, because of rail road track proximity along the Pacific Ocean, sea level rise could impact service. It is expected that conditions would be gradual in nature and would not create unforeseen problems or complications.

# 5.4.2.11 Natural Gas Pipeline Rupture & Storage Facilities

#### 5.4.2.11.1 **Description of Hazard**

The United States is heavily dependent on transmission pipelines to distribute energy and fuel sources. Virtually all natural gas, which accounts for about 28 percent of energy consumed annually, is transported by transmission pipelines. Energy demand in the United States continues to increase. Although California is a leader in exploring and implementing alternative energy sources such as wind and solar, the expansion of traditional energy sources, such as natural gas, continues.

Most of the natural gas used in California comes from out-of-state natural gas basins. It is delivered to California via the interstate natural gas pipeline system. In 2012, California customers received 42 percent of their natural gas supply from basins in the Southwest, 22 percent from Canada, 23 percent from the Rocky Mountains, and 12 percent from California.

Generally speaking, transmission lines are large-diameter steel pipes carrying natural gas at high pressure and compressed to provide higher carrying capacity. Transmission lines are both interstate and intrastate, with the latter connecting to smaller distribution lines delivering gas directly to homes and businesses.

#### 5.4.2.11.2 Location and Extent of Hazard in Santa Barbara County

Natural gas transported via the interstate pipelines, and some of the California-produced natural gas, is delivered into the Pacific Gas & Electric (PG&E) and Southern California Gas (SoCal Gas) intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. PG&E and SoCal Gas own and operate several natural gas storage fields that are located in Northern and Southern California.

Southern California Gas Company operates a natural gas storage field, La Goleta Storage Field, located on More Ranch Road in the Goleta area. SoCal Gas purchases market quality natural gas when prices are low and stores it in a depleted gas reservoir located at the La Goleta.

Data compiled by the Pipeline and Hazardous Materials Safety Administration (PHMSA) report a total of 115,292 miles of gas pipelines in California, of which 12,414 miles are classified as gas transmission lines, 403 miles are gas-gathering lines, and the majority, 102,475 miles, are for gas distribution. Nearly 40 percent of gas transmission lines are located in Los Angeles, Kern, and San Bernardino counties.

**Figure 5.23** shows the location and ownership of the natural gas pipeline system. Many of the pipelines are located in areas with high seismic activity, crossing the San Andreas and other active faults.



Figure 5.24 Natural Gas Pipeline and Service Providers in California

5.4.2.11.3 History of Hazard in Santa Barbara County

No significant historical events to report to date.

# 5.4.2.11.4 Probability of Occurrence

Increased urbanization is resulting in more people living and working closer to existing gas transmission pipelines that were placed prior to government agencies adopting and implementing land use and other pipeline safety regulations. Compounding the potential risk is the age and gradual deterioration of the gas transmission system due to natural causes. Significant failure, including pipe breaks and explosions, can result in loss of life, injury, property damage, and environmental impacts. Causes of and contributors to pipeline failures include construction errors, material defects, internal and external corrosion, operational errors, control system malfunctions, outside force damage, subsidence, and seismicity. Growth in population, urbanization, and land development near transmission pipelines, together with addition of new facilities to

meet new demands, may increase the likelihood of pipeline damage due to human activity and the exposure of people and property to pipeline failures.

## 5.4.2.11.5 Climate Change Consideration

Climate change will not have a direct effect on natural gas pipelines; however, climate change could increase the demand for natural gas. This increase in demand may require the development of new pipelines; which could increase potential complications.

# 5.4.2.12 Levee Failure

#### 5.4.2.12.1 Description of Hazard

There are several areas in California that use levees to protect land from peak flood levels and/or to protect land that is below sea level. The first type of levee should be designed to withstand peak flood levels that are caused by rapid snow melt or intense rainfall within the watershed. The second type of levee should be designed to withstand nominal water levels on a continuous basis as well as peak flood levels. Failure of levees is defined as conditions that breach and/or degrade the levees.

In California, levees protect farmland, ranchland, rural residential areas, urban residential areas, and infrastructure such as roads, highways, and waterways or canals.

## 5.4.2.12.2 Location and Extent of Hazard in Santa Barbara County

The Santa Maria River Levee runs along the left bank (looking downstream) of the Santa Maria River approximately 17 miles from Fugler Point (at the junction of the Cuyama and Sisquoc Rivers) to approximately 600 feet downstream to the State Highway 1 Bridge near the City of Guadalupe. Approximately 5 miles of levee run along the right bank of the Santa Maria River from a point about 1 ¼ miles downstream from US Highway 101 to a point about 1 ½ miles upstream from the Southern Pacific Railroad Bridge at Guadalupe. Also, approximately 1.8-2.06 miles of channel and levees extend from the mouth of Bradley Canyon to Santa Maria River to divert flood waters. This levee system provides protection to the City of Santa Maria; including the main business district, commercial, industrial and residential property, as well as agricultural lands in the Santa Maria Valley.

Figure 5.25 Santa Maria River Levee



5.4.2.12.3 History of Hazard in Santa Barbara County

The construction of the Santa Maria River Levee was completed in 1963 by the U.S. Army Corps of Engineers. The levee was constructed to provide protection against flooding and debris flow from the City of Santa Maria; including the main business district (overflow area), adjacent agricultural lands in the Santa Maria Valley, and valuable residential, commercial, industrial, and public properties which would likely be subject to flooding. In addition, protection is available for US Highway 101, State Highway 1, Southern Pacific Railroad, Santa Maria Valley Railroad, three highway bridges, and one railroad bridge; all of which were previously subject to overflow in the Santa Maria Valley. Without protection from the levees, the standard project flood would inundate most of the Santa Maria Valley, including 80% of the city of Santa Maria.

The Santa Maria River Levee was designed to protect Santa Maria Valley from a standard project flood ranging in magnitude from 150,000 cubic feet per second (cfs) at the downstream end of the left levee to up to 160,000 cfs at Fugler Point. The Bradley Canyon Levees and channel improvements were designed to accommodate the standard project flood, which can range in magnitude from 7,000 to 9,000 cfs. However, flood flows much less than the design discharges significantly damanged the levee system in 1966, 1969, 1980 and 1998. Damages from each of these floods occurred at different locations, under relatively low flow conditions, and were caused by flow impingement on the levee structure. In 1981 about a fourth of the project was protected from further undermining with groins andother features but a subsequent 600 ft breach in 1998 in a reach without groins indicating that future damage was likely.

In 2009, the Army Corps of Engineers improved the riverside slope of south levee with soil cement revetment and steel sheet pile wall protection from Blosser Road to the Bradley Canyon confluence. A portion of the Bradley Canyon levee was also improved in 2013.

# 5.4.2.12.4 Probability of Occurrence

Several floods have occurred since the levees were constructed, each with relatively low peak discharges. Because the natural channel averages about 2,000' in width, the floods did not fill the channel but meandered and impinged against the existing levees. This impingement undermined the levee toe causing considerable damage and jeopardized adjacent properties, demonstrating that the levee was vulnerable to smaller discharges and as a result would not provide the protection for which it was designed. The levee improvements by the Corps will reduce the probability of impinging flows undermining the levee in critical areas. Those portions of the levee that were not improved will still be subject to the possibility of undermining and failure.

# 5.4.2.12.5 Climate Change Consideration

Increased rainfall, runoff, and snow pack melt from climate change could generate more water than the levees were designed to support. Additionally, climate change conditions could damage earthen levees creating weaknesses that would also reduce its level of protection.

# 5.4.2.13 Tsunami

# 5.4.2.13.1 Description of Hazard

A tsunami is a series of long waves generated in the ocean by a sudden displacement of a large volume of water. Underwater earthquakes, landslides, volcanic eruptions, meteoric impacts, or onshore slope failures cause this displacement. Tsunami waves travel at speeds averaging 450 to 600 miles per hour. As a tsunami nears the coastline, its speed diminishes, its wavelength decreases, and its height increases. Depending on the type of event that creates the tsunami, as well the remoteness of the event, the tsunami could reach land within a few minutes or after several hours. Low-lying areas could experience severe inland inundation of water and deposition of debris more than 3,000 feet inland.

# 5.4.2.13.2 Location and Extent of Hazard in Santa Barbara County

The Cities of Santa Barbara and Carpinteria are located on or near several offshore geological faults, the more prominent faults being the Mesa Fault, the Santa Ynez Fault in the mountains, and the Santa Rosa Fault. There are other unnamed faults in the offshore area of the Channel Islands. These faults have been active in the past and can subject the entire area to seismic action at any time.

# 5.4.2.13.3 History of Hazard in Santa Barbara County

The relative threat for local tsunamis in Santa Barbara can be considered low due to low recurrence frequencies. Large, locally-generated tsunamis are estimated to occur once every 100 years. Thirteen possible tsunamis have been observed or recorded from local earthquakes between 1812 and 1988. There have been no recorded Tsunamis in Santa Barbara County since 1988. These tsunami events were poorly documented and some are very questionable. There is no doubt that earthquakes occurring along submarine faults off Santa Barbara could generate large destructive local tsunamis

(<u>http://www.drgeorgepc.com/Tsunami1812SantaBarbara.html</u>). Internet research provides some documentation that two tsunamis were generated from two major earthquakes in the Santa Barbara region in December of 1812. The size of these tsunamis may never be known with certainty, but there are unconfirmed

estimates of 15 feet waves at Gaviota, 30-35 feet waves at Santa Barbara, and waves of 15 feet or more at Ventura. These estimates are found in various literature and based on anecdotal history only.

Major faults of the San Andreas zone, although capable of strong earthquakes, cannot generate any significant tsunamis. Only earthquakes in the Transverse Ranges, specifically the seaward extensions in the Santa Barbara Channel and offshore area from Point Arguello, can generate local tsunamis of any significance. The reason for this may be that earthquakes occurring in these regions result in a significant vertical displacement of the crust along these faults. Such tectonic displacements are necessary for tsunami generation.

Two separate events, occurring in 1877 and 1896, are listed in NOAA's online database as having heights of 1.8 and 2.5 feet waves. However, tsunami heights from historical records are estimated and should not be regarded as exact. Other recorded tsunamis affecting Santa Barbara during the 20th century are in the 0.1 - 1.0 foot range.

On February 27, 2010, a magnitude 8.8 earthquake occurred along the central coast of Chile and produced a tsunami. For the coast of Southern California, it was one of the largest tsunami episodes since 1964. In general, tsunami waves between 2 and 4 feet were reported. Tsunami waves of around 3 feet were reported by tide gauges across the Santa Barbara Channel. At Santa Barbara Pier, significant beach erosion was reported along with displacement of buoys. The tsunami surge lasted in excess of 20 hours. The most significant damage occurred along the coasts of Ventura and southern Santa Barbara counties. Numerous reports of dock damage were reported along with beach erosion.

On March 11, 2011, a magnitude 9.0 earthquake occurred off the Pacific coast of Tohoku, Japan. This earthquake devastated many communities in Japan and caused tsunami effects across the ocean in Santa Barbara County. The only significant impact to Santa Barbara County was to the dredging contractor for the harbor. The City harbor operations documented approximately \$1,500 of damages (Public Assistance). The dredging contractor may pursue SBA funding.

#### 5.4.2.13.4 Probability of Occurrence

The University of Southern California (USC) Tsunami Research Group has modeled areas in Santa Barbara County that could potentially be inundated in the event of a tsunami. This model is based on potential earthquake sources and hypothetical extreme undersea, near-shore landslide sources. The data was mapped by Cal OES for the purpose of Tsunami Evacuation Planning. Extreme tsunami inundation areas were mapped and used to profile maximum potential exposure. The figure below (**Figure 5.24**) shows tsunami run up limits for Santa Barbara County. The tsunami inundation map helps to assist cities and counties in identifying their tsunami hazard areas. The inundation line represents the maximum considered tsunami run up from a number of extreme, yet realistic, tsunami sources.

#### **Figure 5.26 Tsunami Inundation Area**



Based on the tsunami inundation map above, several areas along the coast of Santa Barbara have the potential to be inundated by a tsunami. However, since the probability of an earthquake occurring is rare, the probability of a tsunami is also rare.

# 5.4.2.13.5 Climate Change Consideration

Tsunamis are created by earthquakes or other earth movements, to date, no relationship has been made between climate change and the occurrences of earthquakes or other earth movements.

# 5.4.2.14 Civil Disturbance

# 5.4.2.14.1 Description of Hazards

Civil Disturbance is a term generally used to describe disorderly conduct or a breakdown of orderly society by a large group of people. Civil Disturbance can range from a form protest against major socio-political problems to riots.

# 5.4.2.14.2 Location and Extent of Hazard in Santa Barbara County

Civil Disturbance can occur in any part of Santa Barbara County; however, it will generally be located within larger metropolitan areas.

# 5.4.2.14.3 History of Hazard in Santa Barbara County

No significant historical events to report to date

## 5.4.2.14.4 Probability of Occurrence

There are no studies that predict the probability of civil disturbance occurrences.

## 5.4.2.14.5 Climate Change Consideration

While there is no direct linkage between climate change and civil disturbances, there could be indirect linkages. As climate change impacts are either felt or perceived to be felt it could ignite passions within people to demonstrate against possible causes or enablers.

# 5.4.2.15 Well Stimulation and Hydraulic Fracturing

#### 5.4.2.15.1 Description of Hazard

"Well stimulation" is an oil industry term which describes various techniques used to increase oil and gas production by the addition of heat (through steam), chemicals and/or pressure to the oil-bearing formation. Hydraulic fracturing, commonly called "fracking", is a specific type of well stimulation treatment that involves high - pressure injection of water, sand and chemical additives to cause fracturing of subsurface rock resulting in release of gas or oil trapped inside. Acid well stimulation introduces one or more acids (applied at any pressure) to a well or geologic formation either alone or in combination with hydraulic fracturing treatments. Steam injection (e.g., cyclic steaming, steam flooding), is a technique that heats the targeted production zone to make heavy oils flow more readily to the well bore. The intent is not to break (i.e., fracture) the oil-holding formation (which is usually sandy in composition so doesn't need to be broken), but to heat it and make the oil therein less viscous. Possible environmental impacts that could result from well stimulation treatments include effects on water and air quality and seismic safety, which are considered potential hazards and require further study.

Well stimulation treatments have occurred for many years throughout oilfields in California, mostly within Kern, Ventura and Los Angeles Counties. The State legislature passed Senate Bill (SB) 4 on September 20, 2013, which directed the State Department of Oil, Gas and Geothermal Resources (DOGGR) to begin regulating well stimulation treatments, including fracking, by amending the State Public Resources and Water Codes. On July 1, 2015, pursuant to the regulations included in SB 4, DOGGR completed the following:

• Certified the Final Environmental Impact Report (EIR) titled "Analysis of Oil and Gas Well Stimulation Treatments in California."Adopted permanent rules and regulations specific to well stimulation treatments.

SB4 specifically requires:

- Well operators to apply for a permit that includes a water management plan and a groundwater monitoring plan before performing well stimulation activities.
- DOGGR to post issued permits on the publicly accessible portion of its internet web site.
- Suppliers claiming trade secret protection for the chemical composition of additives used in hydraulic fracturing to disclose the composition of these materials to DOGGR as part of permit applications.

#### 5.4.2.15.2 Location and Extent of Hazard in Santa Barbara County

County Planning and Development confirms that, to date, no onshore oil operators have proposed to use fracking to extract oil. Cyclic steaming techniques have been used in Santa Barbara County, mainly in the Cat Canyon oilfield in the Santa Maria Valley. More recently, cyclic steaming has also been used in the Orcutt oilfield.

#### 5.4.2.15.3 History of Hazard in Santa Barbara County

Oil producers have generally not used hydraulic fracturing onshore in Santa Barbara County so there is no history to identify. Cyclic steaming has been used in the Cat Canyon oilfield in the Santa Maria Valley since the 1960's. Cyclic steaming has also been used in the Orcutt oilfield since 2007.

#### 5.4.2.15.4 Probability of Occurrence

County Planning and Development confirms that hydraulic fracturing is not currently being conducted onshore in Santa Barbara County. An operator proposing to frack is required to go through an extensive environmental analysis and obtain a discretionary permit prior to implementing this technique. The probability of occurrence for fracking is low. Cyclic steaming is currently in use, as mentioned above; its probability of occurrence is high.

#### 5.4.2.15.5 Climate Change Consideration

There are no known direct linkages between climate change and well stimulation techniques used in Santa Barbara County.

## 5.4.2.15 Marine Invasive Species

#### 5.4.2.15.1 Description of Hazard

The introduction of non - indigenous species (NIS) into coastal marine and estuarine waters can cause significant and enduring economic, human health, and environmental impacts. In coastal environments, commercial shipping is the most important vector for species introductions. Commercial ships transport organisms through two primary mechanisms (vectors): ballast water and vessel biofouling. Ballast water is taken on and released by a vessel during cargo loading and discharging operations to maintain the vessel's trim and stability. Biofouling organisms are aquatic species attached to or associated with submerged or wetted hard surfaces. Ships transfer organisms to California waters from throughout the world. The transfer of ballast water from "source" to "destination" ports results in the movement of many organisms from one region to the next. Additionally, as vessels move from port to port, biofouling communities are transported along with their "host" structure. Once introduced, invasive species are likely to become a permanent part of an ecosystem and may flourish, creating environmental imbalances, presenting risks to human health, and causing significant economic problems. Examples include the zebra and quagga mussel infestations in the Colorado River Aqueduct System and California waterways, and the propagation of aquatic weeds, such as water hyacinth, in the California Delta.

#### 5.4.2.15.2 Location and Extent of Hazard in Santa Barbara County

All water bodies that are subject to recreational/commercial vessels and/or hydraulically connected to potential sources of infestation.

# 5.4.2.15.3 History of Hazard in Santa Barbara County

The County of Santa Barbara Community Services Department Parks Division has been conducting Aquatic Invasive Species inspections on vessels being launched at Cachuma Lake since 2008. To date, staff has no indications that Cachuma Lake has been exposed to Quagga or Zebra Mussels, and early detection monitoring has detected no mussels.

# 5.4.2.15.4 Probability of Occurrence

In December 2013, the operator at Lake Piru in Ventura County notified the State of California Department of Fish and Wildlife that Quagga Mussels are present in Lake Piru. This is a significant finding because it is the first lake infected by the Quagga Mussel that is not fed by the Colorado River system.

# 5.4.2.15.5 Climate Change Consideration

Climate change can directly affect Marine Invasive Species and their ability to thrive off our coast.

# Section 6 VULNERABILITY ASSESSMENT

# 6.1 OVERVIEW

The purpose of this section is to estimate the potential vulnerability (impacts) of hazards within the county on the built environment (residential, non-residential, critical facilities, etc.) and population. To accomplish this three (3) different approaches will be used: 1) application of scientific loss estimation models; 2) analysis of exposure of critical facilities to hazards; and 3) a qualitative estimate of the impacts to hazards. It is important to note that the first two approaches can only be applied to hazards that have an exposure area (footprint). For those hazards where an exposure layer does not exist, a brief qualitative assessment of the potential vulnerability will be presented. This will be done for hazards that are countywide or can occur anywhere within the county.

# 6.1.1 Scientific Loss Estimation Models

The scientific loss estimation modeling efforts will include the utilization of the Federal Emergency Management Agency (FEMA) Hazus-MH 3.0 model. Hazus-MH is a nationally applicable standardized methodology that estimates potential losses from earthquakes, hurricane winds and floods. Hazus-MH uses state-of-the-art Geographic Information Systems (GIS) software to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. It also allows users to estimate the impacts of earthquakes, hurricane winds and floods on populations. Estimating losses is essential to decision-making at all levels of government, providing a basis for developing mitigation plans and policies, emergency preparedness and response and recovery planning. This modeling will be done for Earthquake and Flood hazards only.

Hazus standard configuration allows for "out-of-the-box" regional or community-wide loss assessment using default ("Level 1) building inventory databases, aggregated to the census tract (earthquake) or census block (flood) level. A summary of Hazus default building inventory data for Santa Barbara County, and the unincorporated areas of the County, are given in **Table 6-1** (by general occupancy) and **Table 6-2** (by general building type). The distribution of buildings across the various construction classes given in Table 2 is estimated using Hazus default relationships (e.g., x percent of offices may be built of concrete frame, y% of offices may be built of reinforced masonry, etc.). The actual distribution of building across these construction types may be different. For example, the California Seismic Safety Commission (CSSC) published results of unreinforced masonry building surveys (CSSC, 2006), which indicate that the 23 URM buildings in Unincorporated Santa Barbara County have been retrofitted (vs. 185 URM buildings predicted by the default database).

Jurisdiction	General Occupancy	Building Replacement Value (\$1,000)	Contents Replacement Value (\$1,000)	Building Square Footage (1,000 Sq. Ft.)	Building Count
Santa Barbara	Residential	\$34,724,716	\$17,364,871	231,312	116,304
County	Commercial	\$6,387,442	\$6,837,941	38,617	7,325
	Industrial	\$1,307,134	\$1,815,947	9,609	1,934
	Other	\$1,805,563	\$1,905,059	11,455	1,810
	TOTAL	\$44,224,855	\$27,923,818	290,993	127,373
Unincorporated	Residential	\$12,555,887	\$6,278,776	80,881	41,690
County	Commercial	\$1,409,147	\$1,519,231	8,436	1,905
	Industrial	\$329,603	\$447,815	2,520	626
	Other	\$638,808	\$648,426	4,486	615
	TOTAL	\$14,933,445	\$8,894,248	96,323	44,836
	%	33.8%	31.9%	33.1%	35.2%

# Table 6.1 Hazus-MH 3.0 Default Building Inventory Data for Santa Barbara County by General Occupancy

# Table 6.2 Hazus-MH 3.0 Default Building Inventory Data for Santa Barbara County byGeneral Building Type

Jurisdiction	General Building Type	Building Replacement Value (\$1,000)	Building Replacement Value (%)	Estimated Building Count	% of Building Count
Santa Barbara	Concrete	\$2,492,739	5.6%	2,396	2%
County	Manufactured Housing	\$415,023	0.9%	7,669	6%
	Precast Concrete	\$1,556,413	3.5%	2,005	2%
	Reinforced Masonry	\$3,088,459	7.0%	3,858	3%
	Steel	\$2,461,502	5.6%	2,614	2%
	Unreinforced Masonry	\$614,394	1.4%	727	1%
	Wood Frame (Other)	\$1,733,790	3.9%	2,001	2%
	Wood Frame (Single- family)	\$31,862,522	72.0%	106,108	83%
	TOTAL	\$44,224,842		127,378	
	Concrete	\$595,812	4.0%	623	1%

Unincorporated County	Manufactured Housing	\$149,010	1.0%	2,734	6%
	Precast	\$379,548	2.5%	561	1%
	Concrete				
	Reinforced	\$772,503	5.2%	1,120	2%
	Masonry				
	Steel	\$627,345	4.2%	731	2%
	Unreinforced	\$145,716	1.0%	185	0%
	Masonry				
	Wood Frame	\$396,156	2.7%	563	1%
	(Other)				
	Wood Frame	\$11,867,350	79.5%	38,324	85%
	(Single-				
	family)				
	TOTAL	\$14,933,440		44,841	
	%	33.8%		35.2%	

**Table 6-3** provides a summary of the Hazus-MH essential facilities default data (police stations and public schools) for anta Barbara County, and the unincorporated County Areas. The Hazus-MH essential facilities default data for fire station was augmented to account for a significant number of missing facilities for Santa Barbara County. Table 6-3 also indicates the construction type and design level assumed by Hazus-MH for these facilities; all are assumed to be wood frame of either High or Moderate code design level. A more accurate risk assessment could be conducted if additional facility information was collected, such as structural system, number of stories, year of construction/seismic code used for design, building square footage, building replacement value, and content replacement value. It should be noted that the Hazus-MH default database represents each school campus with a single building record of an assumed construction type. In reality, most public schools are multi-building campuses, built over a period of years (i.e., buildings may be designed to different seismic codes). To improve the risk assessment for public schools, information on each individual building would need to be collected.

Essential Facility Type	HAZUS-MH Default Structural Class and Design Level	Santa Barbara County	Unincorporated County Areas
Fire Stations*	W1 (Wood Frame $\leq$	41	17
	5,000Sq.Ft.), Moderate		
	Code Design Level		
Police Stations	W1 (Wood Frame $\leq$	16	12
	5,000Sq.Ft.), Moderate		
	Code Design Level		
Public Schools	W1 (Wood Frame $\leq$	123	34
	5,000Sq.Ft.), High Code		
	Design Level		

\* For the current assessment, the default fire station data has been revised to include missing stations.

The lifeline inventory within HAZUS-MH is divided between transportation and utility lifeline systems. There are seven transportation systems that include highways, railways, light rail, buses, ports, ferries and airports; and six utility systems that include potable water, wastewater, natural gas, crude & refined oil, electric power, and communications. The lifeline inventory data are provided in **Tables 6-4** and **Table 6-5**.

System	Component	# Locations/ # Segments	<b>Replacement value</b> (millions of dollars)
Highway	Bridges	360	407.90
	Segments	270	3,299.40
	Tunnels	1	1.70
		Subtotal	3,709.10
Railway	Bridges	6	0.60
	Facilities	5	13.30
	Segments	157	263.90
	Tunnels	0	0.00
		Subtotal	277.80
Light Rail	Bridges	0	0.00
	Facilities	0	0.00
	Segments	0	0.00
	Tunnels	0	0.00
		Subtotal	0.00
Bus	Facilities	5	6.40
		Subtotal	6.40
Ferry	Facilities	3	4.00
		Subtotal	4.00
Port	Facilities	0	0.00
		Subtotal	0.00
Airport	Facilities	5	53.30
	Runways	8	303.70
		Subtotal	357.00
		TOTAL	4,354.30

# Table 6.4 Transportation System Lifeline Inventory

System	Component	# Locations / Segments	Replacement value (millions of dollars)
Potable Water	Distribution Lines	NA	323.20
	Facilities	0	0.00
	Pipelines	0	0.00
		Subtotal	323.20
Waste Water	Distribution Lines	NA	193.90
	Facilities	8	628.70
	Pipelines	0	0.00
		Subtotal	822.60
Natural Gas	Distribution Lines	NA	129.30
	Facilities	0	0.00
	Pipelines	0	0.00
		Subtotal	129.30
Oil Systems	Facilities	2	0.20
	Pipelines	0	0.00
		Subtotal	0.20
<b>Electrical Power</b>	Facilities	4	519.20
		Subtotal	519.20
Communication	Facilities	42	5.00
		Subtotal	5.00
		TOTAL	1,799.50

#### Table 6.5: Utility System Lifeline Inventory

# 6.1.2 Analysis of Exposure of Critical Facilities to Hazards

Santa Barbara County Planning Team and the Mitigation Advisory Committee (MAC) reviewed and updated its list critical facilities and a generated a summary of the facilities by major categories: Law, Fire, Public Works, Health and Human Services, Administrative, Communications, and Other (**Table 6-6**). This list of critical facilities presents the buildings and structures that are the County's primary concern for ensuring resiliency; they include both County owned or operated facilities as well as some privately owned and

operated facilities. Information for County owned or operated facilities (building replacement cost and building content costs) were reviewed and updated as needed; where available the same information was reviewed and updated for the privately owned or operated facilities.

Using Geographic Information Systems (GIS) software, each critical facilities was geolocated on maps to illustrate the geographic location of each facility. Based on each facility's geolocation, GIS software was then used to identify facilities within the hazard exposure area (footprint). The results were a map and a table summarizing the total number of exposed critical facilities by the major categories; and a total of the building replacement cost and building content costs for county owned or operated facilities. This approach was done for Wildfire, Sea Level Rise, Dam Failure, Tsunami, Landslides/Earth Movements, Climate-related (some), and Levee Failure.

Category of Facility	Total Structures	Total Real Property	Total Personal Property	
Administration	17	112,862,099	14,469,801	
Communications	21	194,369	1,317,359	
Fire	29	19,492,626	2,695,113	
Health and Human Services	113	127,116,743	21,247,992	
Law	37	137,472,148	14,310,865	
Public Works	35	52,656,525	4,696,012	
Other	20	46,572,863	3,822,269	
Total	272	496,367,373	62,559,411	

## Table 6.6 Critical Facilities in Santa Barbara County

\*Numerous critical facilities in the County are privately owned, but fulfill our County mission, house County property, and/or house County personal. Most privately owned critical facilities have not provided Total Real Property and Total Personal Property figures, therefore these numbers are not fully reflective of the true total property values of all critical facilities in Santa Barbara County.

# 6.1.3 Qualitative Estimate of Impacts

The approach used to complete this effort involves utilizing readily available data (i.e., Census) to extrapolate and estimate potential vulnerability. In some cases, the estimation will build upon historic events but it may also include projecting worst case potentials. The MAC and the County Planning Team

summarized the remaining hazards which the County is vulnerable and assessed the amount and type of damage that could be expected. This approach was done for Droughts/Water Shortage, Energy Shortage, Agricultural Pest, Hazardous Material Release, Terrorism, Aircraft Crashes, Civil Disturbance, Climate-related (some) Oil Spill, Epidemic/Pandemic, Radiological Incident, Cyber Threat, Train Accident, Well Stimulation/Fracking, and Marine Invasive Species.

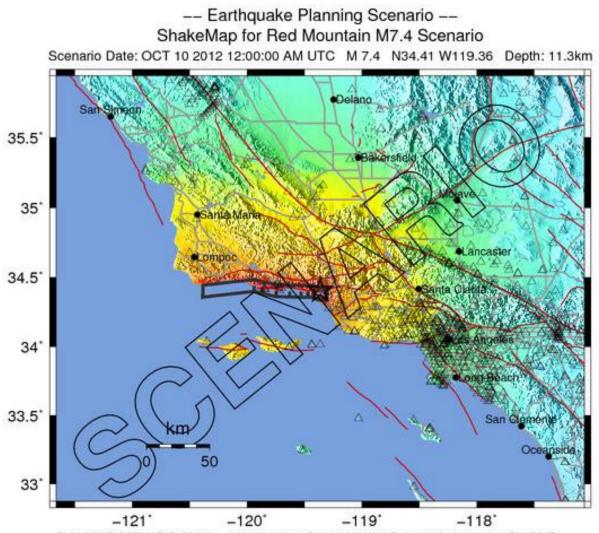
# 6.2 SCIENTIFIC LOSS ESTIMATION ANALYSIS

# 6.2.1 Earthquake and Liquefaction (High Impact/Medium Probability)

The entire geography of Santa Barbara County is exposed to some risk of shaking from an earthquake. The many fault lines, soil types, and construction types lead to a complicated assessment of vulnerability to earthquake. However, most of the land-based faults are either inactive or potentially active. Nearly all of the seismicity has been in the Santa Barbara Channel.

# 6.2.1.1 HAZUS-MH Earthquake Risk Assessment

Two earthquake scenarios developed by the United States Geological Survey (USGS), as shown in **Figure 6.1** and **Figure 6.2**, were selected to assess the range of impacts across the county. County-level maps of ground shaking for the same scenarios are shown in **Figure 6.3** and **Figure 6.4**.

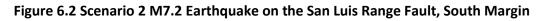


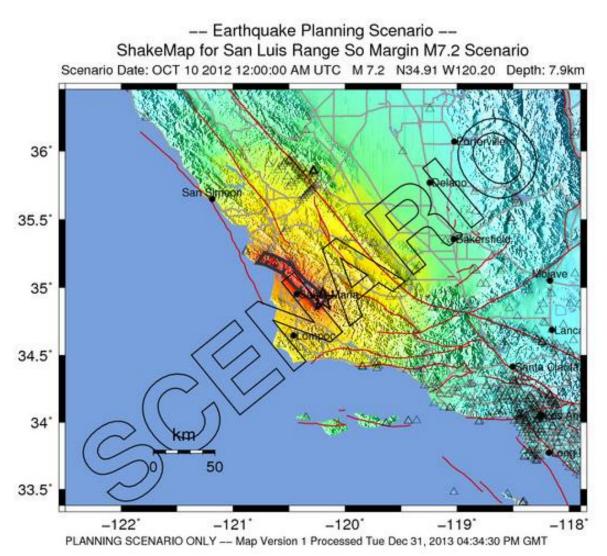
# Figure 6.1: Scenario 1 – M7.4 Earthquake on the Red Mountain Fault

PLANNING SCENARIO ONLY --- Map Version 1 Processed Wed Dec 18, 2013 08:42:43 PM GMT

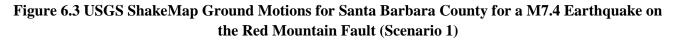
INSTRUMENTAL INTENSITY	1	11-111	IV	V	VI	VII	VIII	IX	Xe
PEAK VEL.(cm/s)	<0.07	0.4	1.9	5.8	11	22	43	83	>160
PEAK ACC.(%g)	<0.1	0.5	2.4	6.7	13	24	44	83	>156
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heav
PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme

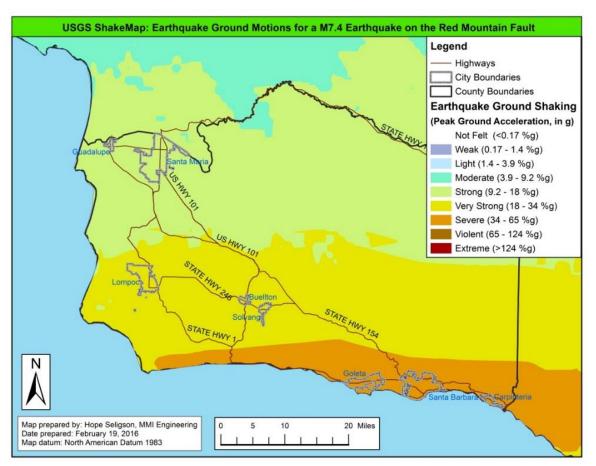
Scale based upon Wald, et al.; 1999

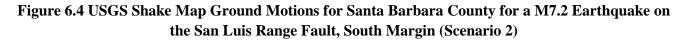


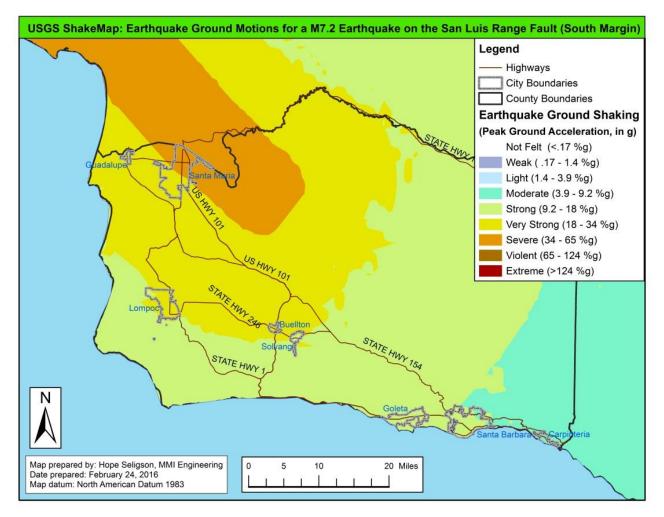


INSTRUMENTAL INTENSITY	1	11-111	IV	V	VI	VII	VIII	1X	X+
PEAK VEL.(cm/s)	<0.07	0.4	1.9	5.8	11	22	43	83	>160
PEAK ACC.(%g)	<0.1	0.5	2.4	6.7	13	24	44	83	>156
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme









As noted above, the latest version of Hazus (Hazus 3.0, released in November, 2015) was used to conduct county-wide earthquake risk assessments. The Hazus results, computed at the census tract level, were aggregated to produce city-level impact summaries. An overview of the county-wide results for both scenarios is provided in **Table 6.7**, along with the sub-set of results that represent the unincorporated county areas. As shown, the M7.4 Red Mountain Fault earthquake scenario (which impacts the southern part of the county) generates more building damage and loss in the County and in the unincorporated county areas, than the M7.2 San Luis Range Fault earthquake scenario (which impacts the northern part of the County).

**Table 6.8** provides a breakdown of estimated building damage (building count by Hazus damage state) by general building type, allowing for an understanding of the distribution of predicted damage in the modeled scenarios.

Functionality of essential facilities included in the Hazus default database (with additional fire station facilities added) in the two scenario earthquakes is summarized in **Table 6.9** for Santa Barbara County and the unincorporated county areas.

		Santa B	arbara	Unincorp	orated
		Cou	nty	Cour	nty
		M7.4 Red Mountain	M7.2 San Luis Range	M7.4 Red Mountain	M7.2 San Luis
			South Margin		Range South Margin
	Direct Economic Losse	s for Buildin	gs (\$1,000)		0
	Total Building Exposure Value	44,224	4,855	14,933	,445
	Cost of Structural Damage	434,128	92,238	128,706	13,032
ock	Cost of Non-Structural Damage	1,782,698	431,791	523,679	74,652
ital Sto	Total Building Damage	2,216,826	524,029	652,385	87,684
Capital Stock Losses	Building Loss Ratio %	5.0%	1.2%	1.5%	0.2%
Cap	Cost of Contents Damage	688,049	176,643	203,969	33,472
	Inventory Loss	15,507	3,463	4,589	572
	Relocation Loss	186,261	39,827	50,432	3,947
ses	Capital-Related Loss	129,318	23,692	28,078	1,716
Income Losses	Rental Income Loss	116,283	21,160	27,103	1,772
	Wage Losses	157,673	31,615	36,784	1,953
	Total Direct Economic Loss	3,509,917	820,429	1,003,339	131,116
	% Of Countywide Loss	100.0%	100.0%	28.6%	16.0%
	Casu	alties			
	Casualties - 2 pm				
ties	Level 1 - minor injuries, basic first aid	1,163	288	335	21
ual	Level 2 - hospital treat & release	297	63	82	3
Day Casualties	Level 3 - injuries requiring hospitalization	47	9	13	0
D2	Level 4 - fatalities	87	17	23	0
	Total Casualties	1,594	377	453	24
Š	Casualties - 2 am	·			
lltie	Level 1 - minor injuries, basic first aid	467	138	162	12
ISUa	Level 2 - hospital treat & release	94	20	31	1
Night Casualties	Level 3 - injuries requiring hospitalization	11	2	3	0
Nig	Level 4 - fatalities	21	3	6	0
	Total Casualties	593	163	202	13
		elter	0.5.5		
lter	Displaced Households	2,485	355	669	6
Shelter	People Requiring Short-term Shelter	1,719	367	528	3

# Table 6.7 Estimated Impacts for Two Earthquake Scenario Events Affecting Santa Barbara County

	Debris (thousands of tons)								
IS.	Brick, Wood & Other (Light) Debris	240	61	76.4	8.0				
Jebris	Concrete & Steel (Heavy) Debris	592	99	153.3	7.8				
D	Total Debris	832	160	229.7	15.8				

# Table 6.8 Estimated Building Damage (Building Count by General Building type, by Damage State) for Two Earthquake Scenario Events Affecting Santa Barbara County

		Santa Bar	bara County	Unincorpo	orated County
		M7.4 Red Mountain	M7.2 San Luis Range South Margin	M7.4 Red Mountain	M7.2 San Luis Range South Margin
	None	1,035	1,922	248	547
o	Slight	502	258	144	51
Concrete	Moderate	479	140	136	20
onc	Extensive	255	59	68	5
	Complete	125	18	27	1
	TOTAL	2,396	2,397	623	624
ас	None	3,266	3,767	836	1689
Manuf. Housing	Slight	1,044	1,320	263	478
Hot	Moderate	991	1,560	395	457
lf.]	Extensive	1,705	841	869	102
lanı	Complete	665	184	370	7
Z	TOTAL	7,671	7,672	2,733	2,733
fe	None	795	1,524	207	469
Precast Concrete	Slight	320	242	103	58
Con	Moderate	541	178	161	28
ist (	Extensive	265	48	71	5
rece	Complete	80	10	18	0
- L	TOTAL	2,001	2,002	560	560
	None	1,978	3,231	567	1019
ed y	Slight	672	330	212	68
orc	Moderate	815	222	241	29
Reinforced Masonry	Extensive	300	64	82	5
Re Re	Complete	93	12	19	0
	TOTAL	3,858	3,859	1,121	1,121
	None	977	1,985	249	604
-	Slight	322	260	106	69
Steel	Moderate	605	241	190	42
	Extensive	534	101	140	9
	Complete	170	22	41	1

	TOTAL	2,608	2,609	726	725
	None	259	534	56	152
y v	Slight	110	99	32	23
forc	Moderate	154	63	46	10
Unreinforced Masonry	Extensive	119	23	33	1
N II C II	Complete	84	8	19	0
	TOTAL	726	727	186	186
	None	888	1,604	240	491
me	Slight	521	257	160	55
Wood Frame (Other)	Moderate	419	111	121	16
Oth	Extensive	139	25	35	1
Mo (	Complete	32	4	7	0
	TOTAL	1,999	2,001	563	563
	None	64,022	86,952	23217	33919
me nily	Slight	34,839	17,301	12745	4214
Wood Frame (Single-family)	Moderate	7,180	1,846	2342	191
od gle-	Extensive	68	12	20	1
Vo	Complete	1	0	0	0
	TOTAL	106,110	106,111	38,324	38,325
IJ	None	73,220	101,519	25,620	38,890
NIC	Slight	38,330	20,067	13,765	5,016
ALL BUILDING TYPES	Moderate	11,184	4,361	3,632	793
BU	Extensive	3,385	1,173	1,318	129
	Complete	1,250	258	501	9
[A]	TOTAL	127,369	127,378	44,836	44,837

# Table 6.9 Predicted Essential Facility Functionality in Two Earthquake Scenario Events Affecting Santa Barbara County

			Santa Barbara County		ated County
		M7.4 Red Mountain	M7.2 San Luis Range South Margin	M7.4 Red Mountain	M7.2 San Luis Range South Margin
Fire	Functionality < 50 % on Day 1	20	5	8	1
Stations Functionality 50 - 75% on Day 1		1	6	0	2
	Functionality >75% Day 1	20	30	9	14
Police	Functionality < 50 % on Day 1	6	2	5	1
Stations	Functionality 50 - 75% on Day 1	1	2	1	1

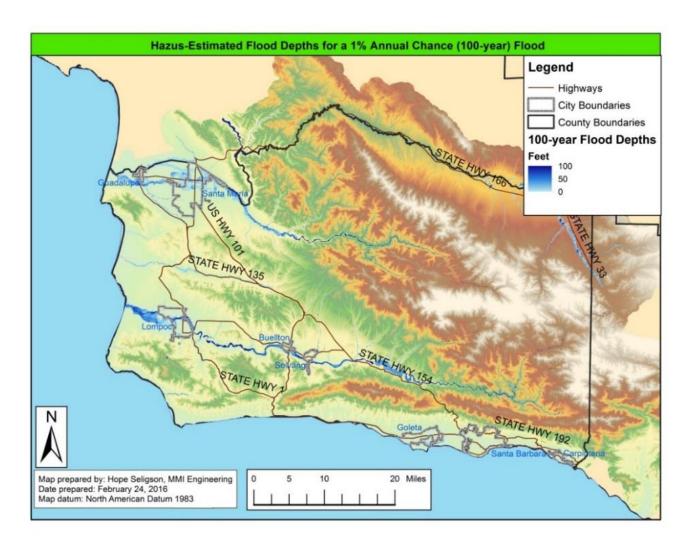
	Functionality >75% Day 1	9	12	6	10
Public	Functionality < 50 % on Day 1	54	18	10	2
Schools	Functionality 50 - 75% on Day	1	17	1	8
	1				
	Functionality >75% Day 1	68	88	23	24

# 6.2.2 Flood and Coastal Storm Surge (Medium Impact/High Probability)

Hazus 3.0 was used to develop a flood depth grid for the 1-percent annual chance (100-year) flood, using Hazus 3.0 built-in, basic (i.e., Level 1) flood depth estimation methodology. The Hazus 3.0 flood hazard assessment methodology uses available information and local river and floodplain characteristics, such as frequency, discharge and ground elevation to estimate flood elevation, and ultimately flood depth. Digital elevation model (DEM) data with 30-meter resolution, available from the USGS' National Elevation Dataset (see: <a href="http://nationalmap.gov/elevation.html">http://nationalmap.gov/elevation.html</a>) has been utilized in the current assessment.

It should be noted that the flood depth grid generated by Hazus 3.0 *is not* equivalent to regulatory floodplain data contained in FEMA's Digital Flood Insurance Rate Maps (DFIRMs), which are the result of extensive, detailed engineering study. The Hazus-generated flood depth grid is a hypothetical representation of a potential flooding scenario, intended for non-regulatory uses. Further, it should also be noted that the DEM data used in the default analysis do not reflect the presence of channels and levees. A more detailed assessment would utilize higher resolution DEM data, such as LIDAR-based DEM data, and/or would require GIS-based revisions to the DEM to better reflect local flood control structures. Given that the Hazus 3.0 Level 1 approach does not consider the presence of levees, Hazus 3.0 loss and damage estimates produced for areas with levees (e.g., along the Santa Maria River) should be considered "worst-case" flood losses, reflecting potential flood damage that could occur in the event that the levees fail. Hazus-estimated flood depths across Santa Barbara County are provided in **Figure 6.5**.

An overview of the county-wide Hazus results for the 100-year flood scenario is provided in **Table 6.10**, along with the sub-set of results that represent the unincorporated county areas. **Table 6.11** provides a breakdown of estimated building damage (building count by percent damage range) by general occupancy. As shown, most of the flood-damaged buildings are single family homes. Functionality of essential facilities included in the Hazus default database (with additional fire station facilities added) in the flood scenario is summarized in **Table 6.12** for Santa Barbara County.



#### Figure 6.5 Hazus-Estimated Flood Depths for a 1-percent Annual Chance (100-year) Flood

		Santa Barbara County	Unincorporated County		
	Direct Economic Losses for Building	ngs (\$1,000)			
	Total Building Exposure Value	44,224,855	14,933,445		
ses	Total Building Damage	549,710	55,476		
ital Los	Building Loss Ratio %	1.2%	0.1%		
Capital Stock Losses	Cost of Contents Damage	566,373	58,465		
Sto	Inventory Loss	9,022	1,397		
	Relocation Loss	1,624	112		
Income Losses	Capital-Related Loss	1,736	196		
ncc	Rental Income Loss	472	34		
	Wage Losses	2,880	220		
	Total Direct Economic Loss	1,131,817	115,900		
	% Of Countywide Loss	100.0%	10.2%		
	Shelter				
Shelter	Displaced Population	57,963	2,918		
She	Number of People Requiring Short-term Shelter	54,248	2,262		
	Debris (thousands of tons)				
	Finishes	41.3	4.6		
oris	Structures	7.8	2.3		
Debris	Foundations	7.7	2.0		
	Total Debris	56.7	8.9		

# Table 6.10 Hazus -Estimated Impacts for the 1-Percent Annual Chance (100-Year) Flood Scenario Affecting Santa Barbara County

 Table 6.11 Estimated Building Damage (Building Count by General Occupancy, by Percent Damage Range) for a 1-percent Annual Chance (100-year) Flood Scenario Affecting Santa Barbara County

		Santa Barbara County	Unincorporated County
	<b>Building Damage Count in Flooded</b>	l Census Blocks by	<b>Occupancy</b>
es	None	2,344	95
lom	1 - 10%	1,775	88
y H	11 - 20%	2,472	134
limi	21 - 30%	867	48
E Fa	31 - 40%	662	35
Single Family Homes	41 - 50%	276	11
Sil	Substantial Damage	196	9

6-17

Santa Barbara County
2017 Multi-Jurisdictional Hazard Mitigation Plan

	TOTAL	8,592	420
50	None	208	11
sing	1 - 10%	14	1
Iou	11 - 20%	29	1
H pa	21 - 30%	31	1
ture	31 - 40%	0	0
Manufactured Housing	41 - 50%	19	1
ant	Substantial Damage	76	5
Σ	TOTAL	377	20
	None	70	0
al	1 - 10%	8	0
enti	11 - 20%	23	0
side	21 - 30%	8	0
Re	31 - 40%	0	0
Other Residential	41 - 50%	0	0
ŏ	Substantial Damage	0	0
	TOTAL	109	0
	None	16	1
	1 - 10%	42	0
ial	11 - 20%	47	0
Commercial	21 - 30%	4	0
mn	31 - 40%	0	0
C	41 - 50%	0	0
	Substantial Damage	0	0
	TOTAL	109	1
	Building Damage Count in Flooded	Census Blocks by	<b>Occupancy</b>
	None	0	0
	1 - 10%	1	0
al	11 - 20%	4	0
stri	21 - 30%	0	0
Industrial	31 - 40%	0	0
PI	41 - 50%	0	0
	Substantial Damage	1	1
	TOTAL	6	1
s	None	4	0
Other Occupancies	1 - 10%	6	0
Ipai	11 - 20%	1	0
)cc1	21 - 30%	0	0
er C	31 - 40%	0	0
)th(	41 - 50%	0	0
	Substantial Damage	1	0

	TOTAL	12	0
$\sim$	None	2,642	107
Ë	1 - 10%	1,846	89
OCCUPANCIES	11 - 20%	2,576	135
l∏PA	21 - 30%	910	49
CI	31 - 40%	662	35
	41 - 50%	295	12
ALL	Substantial Damage	274	15
<b>A</b>	TOTAL	9,205	442

# Table 6.12 Predicted Essential Facility Functionality for a 1-percent Annual Chance (100-year) Flood Scenario Affecting Santa Barbara County

		Santa Barbara County	Unincorporated County Areas
Fire	# facilities located within flooded areas	5	1
Stations	# facilities with Moderate or Greater Damage	2	1
	# facilities expected to be non-functional on Day 1	4	1
Police	# facilities located within flooded areas	2	0
Stations	# facilities with Moderate or Greater Damage	2	0
	# facilities expected to be non-functional on Day 1	2	0
Public	# facilities located within flooded areas	12	2
Schools	# facilities with Moderate or Greater Damage	2	0
	# facilities expected to be non-functional on Day 1	5	0

# 6.3 CRITICAL FACILITIES ANALYSIS

# 6.3.1 Flood and Coastal Storm Surge (Medium Impact/High Probability)

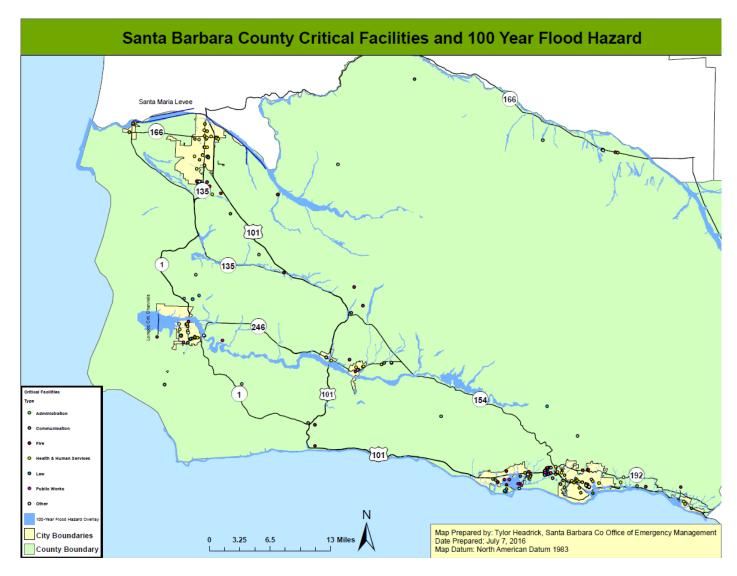
Although Flood and Coastal Surge damage was well delineated in the previous section (Scientific Loss Estimation modeling), the County Planning Team and the MAC wanted to include additional vulnerability data for the Critical Facilities. The exposure of the critical facilities to flood zones is summarized in **Table 6.13** and depicted on **Figure 6.6**.

Critical Facility Category	100-Year	500-Year
Administrative	2	3
Communications	0	0
Fire	5	5
Health and Human Services	6	19
Law	9	9
Public Works	7	8
Other	0	4

# Table 6.13 Critical Facilities by Category in Flood Zones

\*Some Critical Facilities are located in both a 100-year and 500-year Flood Zone.

# Figure 6.6 Critical Facilities in 100 Year Flood Zone



## 6.3.1.1 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. Currently, there are 35 repetitive loss structures in Santa Barbara County's unincorporated areas. Thirty three (33) of the 35 are located in the South Coast Flood Zone. The other repetitive loss property is a mobile home in the Lompoc Valley Flood Zone. An overview of repetitive loss areas in the County is presented in the map (**Figure 6.7**).

The RL properties in the South Coast Flood Zone are built on a narrow coastal strip which fronts on the Pacific Ocean. The seven mile long strip extends from Olive Mill Road in Montecito, east to Sandyland Cove Road near Carpinteria

Most of the land within this narrow coastal strip is designated Zone VE on the FIRMs. There is also V-Zone fronting the entire strip. Between these zones there is a small land area designated as A-Zones at the locations where six coastal creeks and the Carpinteria Slough empty into the ocean. This portion of the coast is periodically subject to high velocity wave action as was experience in January and March of 1983. The Base Flood Elevation (BFE) ranges from 11 to 27 feet NAVD88 along the coastal strip.

On the portion of the coastal strip RL area in the vicinity of the Carpinteria Slough, the V-Zone BFE is 11 feet NAVD88. During past flooding events, County personnel have observed flood elevations of approximately 10 to 11 feet (USGS MSL Datum) in the vicinity of the Carpinteria Slough. Since 1988 the County has been requiring lowest horizontal structural member to be elevated to 13.6 feet NAVD88 datum.

The 33 RL structures are among over 300 homes built in the area. With the exception of homes that have been substantially improved or razed and rebuilt, most of these homes were built prior to the County's participation in the CRS. Due to the very high value of homes in this area, it is infrequent that the substantial improvement threshold is met, requiring pre-FIRM structures to be brought into compliance with NFIP standards. There is little new development on the strip since the area is essentially built out. Because the parcels are small and the land amongst the most valuable in California there is a trend to maximize space in accordance with zoning regulations by addition additions, remodeling and occasionally tearing structures down and rebuilding.

Currently, there is one repetitive loss area in the Lompoc Valley Flood Zone. It is a post-FIRM elevated manufactured home in an un-numbered A- Zone. It was constructed in 1989 and elevated in accordance with the County NFIP Ordinance. The parcel on which the structure is situated is only partially within the SFHA. The owner of the property is not interested in relocating the manufactured home to a different location on the parcel.

Currently, there is one repetitive loss area in the Santa Ynez Valley Flood Zone. The parcel on which the structure is situated is not within the SFHA. There is an unmapped water course which is likely cause of flooding for this structure. The loss was a result of a significant storm event that occurred in the area in 2005.

**Floodplain Management and Flood Mitigation Education and Outreach**: The largest losses to the NFIP in Santa Barbara County are the 33 RL structures in the South County Coastal Basin. Options for dealing

with those properties structurally are very limited. Hard protection such as groins, revetments, sea walls, etc. is economically unfeasible and generally not able to gain environmental permit approval. Acquisition and demolition is also not feasible, as these are among the most expensive and most desirable properties in California. Elevation and less extensive retrofits may be an alternative. However, with view-shed restrictions and the political implications of providing grant assistance to this type of property is unlikely. For these reasons, the County has developed multiple outreach and education strategies to encourage self- responsible actions in these areas and other flood prone areas in general. The County will target education and outreach programs to a variety of audiences to not only encourage retrofit and flood loss reduction activities but to encourage flood resistant future development.

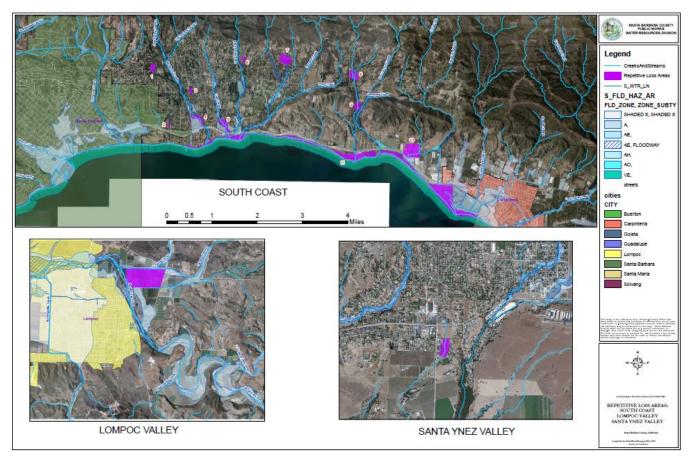


Figure 6.7 Repetitive Loss Areas: South Coast, Lompoc Valley, Santa Ynez Valley

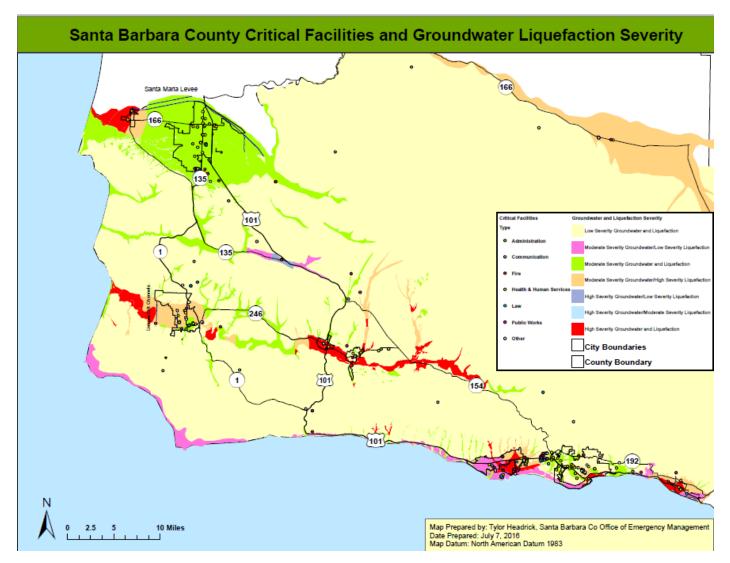
# 6.3.2 Groundwater Liquefaction (High Impact/Medium Probability)

Although Earthquake damage was well delineated in the previous section (Scientific Loss Estimation modeling), the County Planning Team and the MAC wanted to include additional vulnerability data for Groundwater Liquefaction Severity for Critical Facilities. The exposure of the critical facilities to flood zones is summarized in in **Table 6.14** and depicted in **Figure 6.7**.

#### Table 6.14 Critical Facilities by Category in Groundwater Liquefaction Zones (Level of Severity Groundwater/Level of Severity Liquefaction)

Critical Facility Category	moderate/low	moderate/moderate	moderate/high	high/low	high/high
Administrative	0	4	3	0	2
Communications	1	1	0	0	1
Fire	4	3	9	2	3
Health and	3	44	29	0	9
Human Services					
Law	4	14	7	0	1
Public Works	0	10	11	0	5
Other	0	2	5	0	2

## Figure 6.8 Groundwater Liquefaction Severity Zones

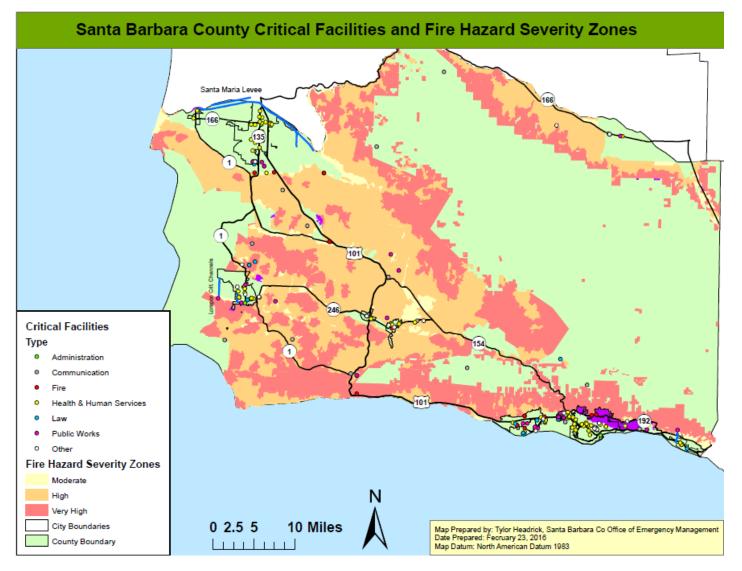


# 6.3.3 Wildfire (Medium Impact/High Probability)

In looking at critical facilities' vulnerability to wildfire, there were three measures that were evaluated. The first is whether a critical facility is within the Fire Severity Zone (FSZ). The FSZ is mapped by the CA Department of Forestry and Fire Protection. It shows the geographic extents for areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. The second measure for vulnerability is the Wildland Urban Interface which is the potential treatment zone where projects could be conducted to reduce wildland fire threats to people. For the purposes of this analysis, "within the WUI" represents those critical facilities that are in the geographical area where the three factors of "threat to people", "communities at risk", and "distance to developed areas" intersect. The final measure is that of "Fire Threat". Fire Threat is a combination of the factors of fire frequency and potential fire behavior. The two factors are combined to create five (5) threat classes ranging from "Little or No Threat" to "Extreme". The exposure of the critical facilities to these three measures is indicated in the tables (**Table 6.14**, **Table 6.15**, and **Table 6.16**) and figures (**Figure 6.7**. **Figure 6.8**, and **Figure 6.9**) below. It is worth noting that all critical facilities have at least some threat from one or more of the three measures. Because of this, the exposure has been color coded low too high in a yellow, orange, red scheme to make it easier for the reader to discern the different designations.

Critical Facility Category	Moderate	High	Very High
Administrative	0	0	0
Communications	0	5	1
Fire	3	1	6
Health and	2	0	2
Human Services			
Law	0	0	3
Public Works	4	5	2
Other	2	3	2

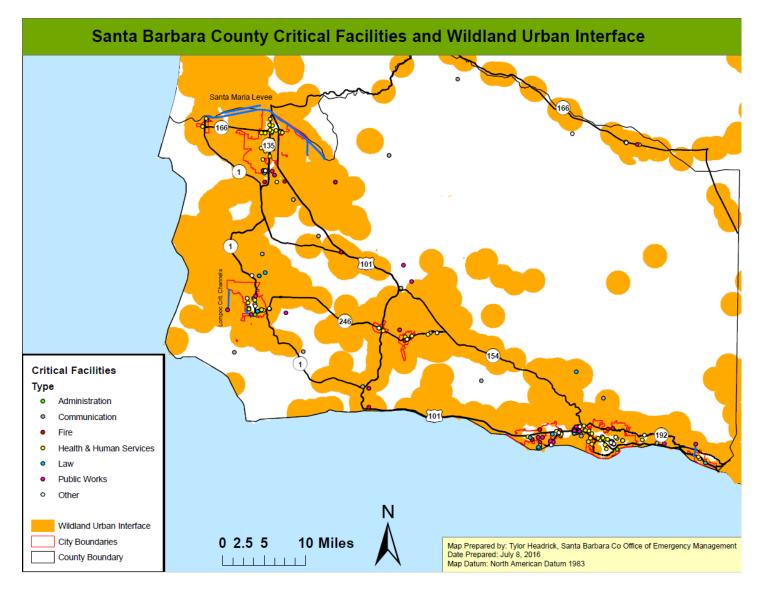
#### Table 6.14 Critical Facilities by Category in Fire Hazard Severity Zone



## Figure 6.9 Critical Facilities in Fire Hazard Severity Zone

#### Table 6.15 Critical Facilities by Category in Wildland Urban Interface (WUI) Zone

Critical Facility Category	Within Zone
Administrative	11
Communications	14
Fire	28
Health and Human Services	87
Law	31
Public Works	32
Other	13

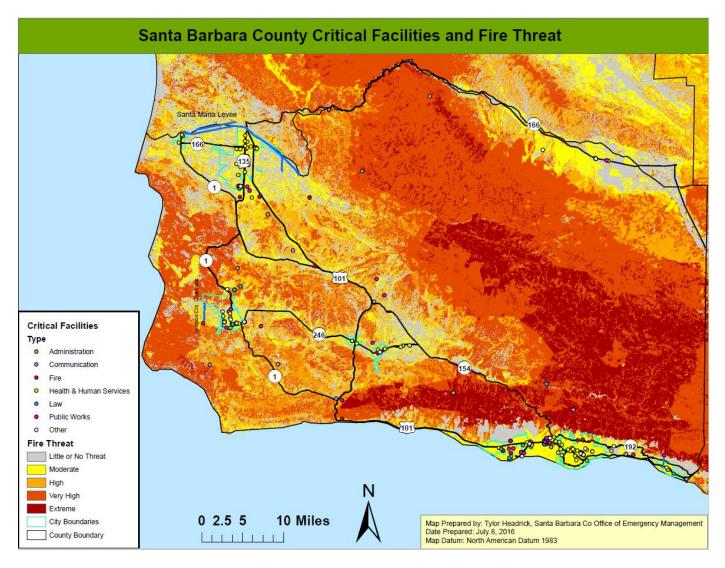


## Figure 6.10 Critical Facilities in Wildland Urban Interface (WUI)

Critical Facility Category	Moderate	High	Very High	Extreme
Administrative	14	0	0	0
Communications	6	9	4	2
Fire	19	4	0	0
Health and	95	3	0	0
Human Services				
Law	29	4	1	0
Public Works	26	5	0	0
Other	15	2	0	0

# Table 6.16 Critical Facilities by Category in Fire Threat Zones

## **Figure 6.11 Critical Facilities in Fire Threat Zones**

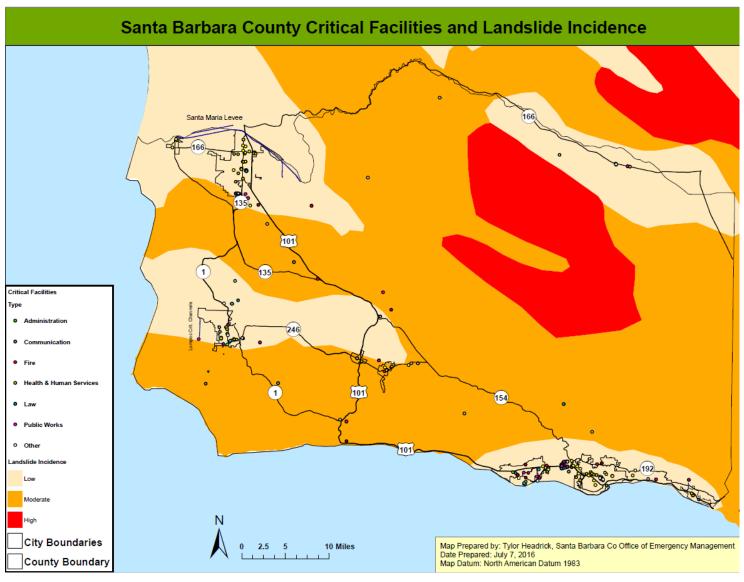


## 6.3.4 Landslide and other Earth Movement (Medium Impact/High Probability)

In an effort to assess vulnerability for landslides, data was collected from the United States Geological Survey (USGS) that represents landslide incidence and susceptibility. The geographies impacted are categorized into low, moderate, and high zones. These layers were intersected with the critical facilities to estimate exposure and show that there is approximately \$14.4 million in structure value and just under \$4 million in contents with at least moderate risk to landslides. The table below (**Table 6-17**) summarizes the total exposure and **Figure 6-10** depicts the location of those facilities that fall into a moderate risk. None of the County's critical facilities have a high risk of landslide vulnerability. All facilities not shown fall into the low risk category.

Critical Facility Category	Low	Moderate	High
Administrative	0	2	0
Communications	0	12	0
Fire	0	8	0
Health and	0	5	0
Human Services			
Law	0	2	0
Public Works	0	5	0
Other	0	4	0

#### Table 6.17 Critical Facilities by Category in Landslide Zones



#### Figure 6.12 Critical Facilities and Landslide Incidence

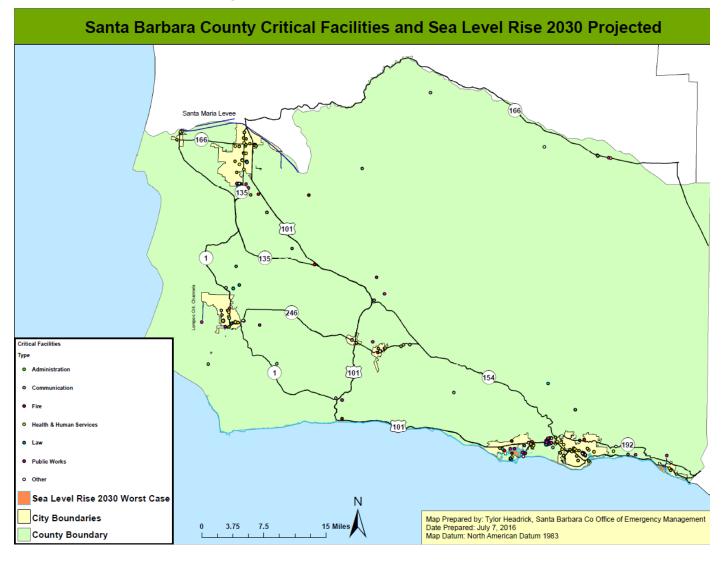
#### 6.3.5 Sea Level Rise, Coastal Storm Surge and Erosion (Medium Impact/High Probability)

Santa Barbara County will be vulnerable to Sea Level Rise (SLR) along its coastline. SLR coupled with increased frequency, severity, and duration of high tide and storm events related to climate change will result in more frequent and severe extreme events along the coast. These events could expose the coast to severe flooding and erosion, damage to coastal Critical Facilities and real estate, and salinity intrusion into delta areas and coastal aquifers (Projecting Future Sea Level, A Report from the California Climate Change Center, 2006).

**Table 6-18** illustrates the potential impact to Critical Facilitates from SLR, while **Figure 6.11** illustrates the vulnerability of the County's Critical Facilities to Sea Level Rise over the next 30 years.

Critical Facility Category	Moderate
Administrative	0
Communications	0
Fire	0
Health and Human Services	0
Law	0
Public Works	2
Other	1

# Table 6.18 Critical Facilities by Category in SLR Zones



#### Figure 6.13 Critical Facilities and Sea Level Rise

# 6.3.6 Dam Failure (High Impact/Low Probability)

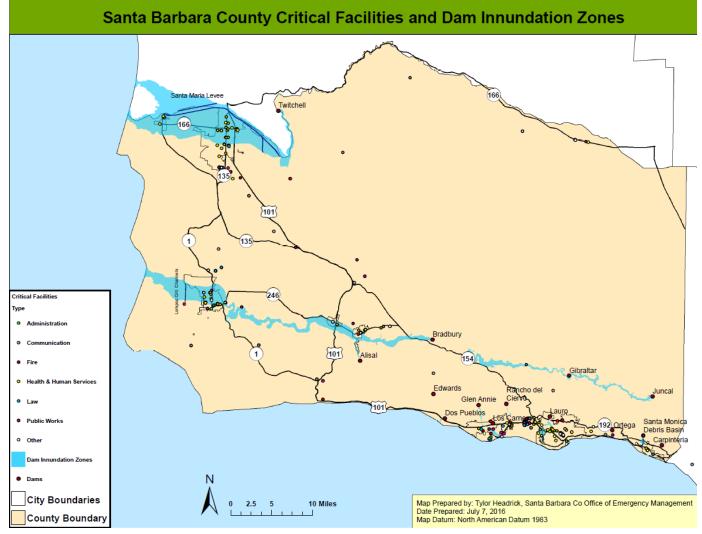
There are nine major dams in the County: Alisal Creek, Bradbury, Dos Pueblos, Gibraltar, Glen Anne, Juncal, Ortega, Rancho Del Ciervo, and Twitchell. Bradbury dam has the largest concern of failure because floodwaters from this dam would affect Cachuma Village, Solvang, Buellton, Lompoc City, Lompoc Valley, and south Vandenberg AFB. A failure of the remaining eight (8) dams would affect portions of populated cities and communities, forest and agricultural lands, roads, and highways. The dam failure vulnerability is simply a look at those critical facilities exposed to risk as indicated by whether they fall into a geographic region that represents a dam inundation zone. There are 39 County critical facilities within the dam inundation zones. The 39 critical facilities represent approximately \$400 million in building value and almost \$35 million in contents exposed to the risk (**Table 6-19**); however, over half of the critical facilities,

nineteen (19) of the 39 at risk facilities, did not have any dollar information available. **Figure 6-12** depicts the location of the critical facilities in relation to the dam failure inundation zones.

Critical Facility Category	Bradbury	Dos Pueblo	Gibraltar	Glenn Annie	Lauro	Rancho	Santa Monica	Twitchell
Administrative	0	0	0	0	0	0	0	1
Communications	0	0	0	0	0	0	0	1
Fire	2	0	0	0	0	0	0	0
Health and	10	0	0	0	2	0	0	22
Human Services								
Law	1	0	1	0	0	0	0	0
Public Works	1	0	0	1	0	0	0	0
Other	4	0	0	1	0	0	0	0

#### Table 6.19 Critical Facilities by Category in Dam Inundation Zones

#### **Figure 6.14 Critical Facilities and Dam Failure Inundation Areas**



# 6.3.7 Tsunami (Medium Impact/Low Probability)

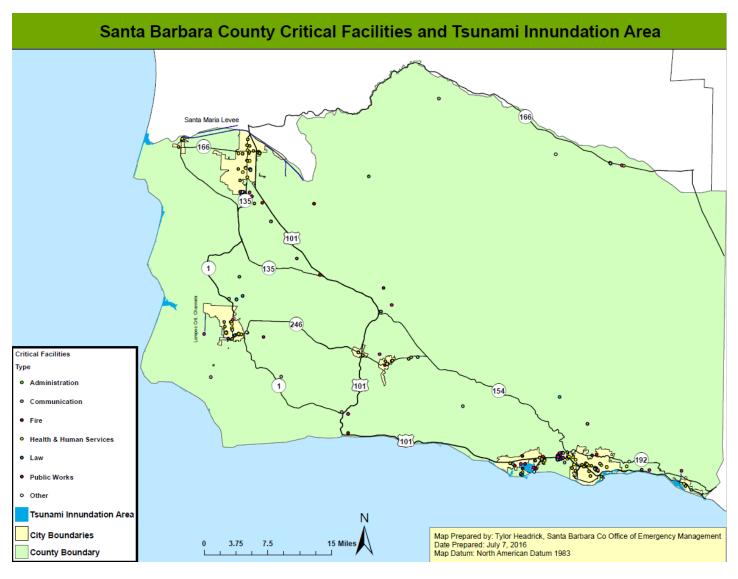
Tsunami waves travel at speeds averaging 450 to 600 miles per hour. As a tsunami nears the coastline, its speed diminishes, its wavelength decreases, and its height increases. Depending on the type of event that creates the tsunami, as well the remoteness of the event, the tsunami could reach land within a few minutes or after several hours. Low-lying areas could experience severe inland inundation of water and deposition of debris more than 3,000 feet inland.

The University Of Southern California Tsunami Research Group has modeled areas in Santa Barbara County that could potentially be inundated in the event of a tsunami. This model is based on potential earthquake sources and hypothetical extreme undersea, near-shore landslide sources were mapped and used to profile maximum potential exposure.

Critical facilities provided by the County were compared against the extreme tsunami inundation zone overlay to see whether they fell within the geographic extent of the hazard. When the structures were compared to the tsunami hazard areas, only one (the Goleta Pier) of the XXX facilities fell within the risk area. The Goleta Pier has an estimated structure value of approximately \$6.4 million with no dollar value provided for content costs (**Table 6-21**). **Figure 6-14** depicts the location of the critical facilities in relation to the extreme tsunami inundation zone.

Critical Facility Category	<b>Total Buildings</b>	<b>Building Value</b>	Content
Administrative	1	6,141,305	70,387
Communications	0	0	0
Fire	0	0	0
Health and Human Services	0	0	0
Law	0	0	0
Public Works	3	0	0
Other	1	6,386,203	0

#### Table 6.21 Critical Facilities by Category in Extreme Tsunami Inundation Zone



# Figure 6.15 Critical Facilities and Tsunami Inundation Areas

# 6.4 QUALITATIVE ESTIMATE OF IMPACTS ANALYSIS

# 6.4.1 Drought and Water Shortage (Medium Impact/High Probability)

A drought is present when a region receives below-average precipitation, resulting in prolonged shortages in its water supply, whether atmospheric, surface, or ground water. A drought can last for months or years, or may be declared after as few as 15 days. The effects of the drought are most visible in the Santa Barbara County when looking at the current capacity and maximum storage of the two main water reservoirs in the county, Lake Cachuma and Twitchell. On February 16, 2016, Cachuma was reported to be at 14.9% capacity, and Twitchell was at 0.2% capacity.

Climate change has the potential to make drought events more common in California, including Santa Barbara. Extreme heat creates conditions more conducive for evaporation of moisture from the ground,

increasing the possibility of drought. A warming planet could lead to earlier melting of winter snow packs, leaving lower stream flows and drier conditions in the late spring and summer. Snow packs in northern California are important for water storage and ensuring adequate supply in the summer months when water is most needed. Changing precipitation distribution and intensity have the potential to cause more of the fallen precipitation run-off rather than be stored. The result is an increased potential for more frequent and more severe periods of drought.

Past experience with Santa Barbara droughts tells us that drought impacts are felt first by those most dependent on or affected by annual rainfall – fire departments, ranchers engaged in dryland grazing, rural residents relying on wells in low-yield rock formations, or other small water systems lacking a reliable water source. Drought and water shortage can happen countywide; and have significant impacts on the populations and the economy. Significant economic impacts on Santa Barbara's agriculture industry can occur as a result of short- and long-term drought conditions; these include hardships to farmers, farm workers, packers, and shippers of agricultural products. In some cases, droughts can also cause significant increases in food prices to the consumer due to shortages. Drought can also result in lack of water and subsequent feed available to grazing livestock, potentially leading to risk of livestock death and resulting in losses to the Santa Barbara's agricultural economy.

Drought can have secondary impacts. For example, drought is a major determinant of wildfire hazard, in that it creates greater propensity for fire starts and larger, more prolonged conflagrations fueled by excessively dry vegetation, along with reduced water supply for firefighting purposes.

# 6.4.2 Levee Failure (Medium Impact/Low Probability)

The stability of levees is a function of several variables: water level change, ground shaking, and static loading. Water level changes can be due to peak flood levels or rapid draw-down; both are known to adversely affect the stability of levees. Ground shaking is a function of earthquakes in and around the levees but can occur up to 100 kilometers or more away and still affect levee performance. Static loading represents the nominal loading conditions that regularly exist, but documented levee failures have occurred with no adverse conditions other than static loading (for example, with the Jones Tract failure in 2004).

# 6.4.3 Severe Weather (Medium Impact/High Probability)

# 6.4.3.1 Extreme Heat

Extreme heat can have significant impacts on populations, lifeline infrastructure, and the economy. These events can highlight the importance of thoughtful social vulnerability analyses, consideration for socially isolated elderly populations, and illustrate how seemingly unrelated phenomena combine to create disaster. An example is when increased use of air conditioners during heat waves can lead to power outages, which makes the events even more deadly.

The California Climate Adaptation Strategy (CAS), citing a California Energy Commission study, states that "over the past 15 years, heat waves have claimed more lives in California than all other declared disaster

events combined." For example, the 1989 Loma Prieta Earthquake resulted in 63 deaths, the 1992 Northridge Earthquake was responsible for the loss of 55 lives, and the 2003 Southern California Firestorms resulted in 24 deaths; however, the worst single heat wave event in California occurred in Southern California in 1955, when an eight-day heat wave is said to have resulted in 946 deaths. The July 2006 heat wave in California caused the deaths of about 140 people over a 13-day period.

Because of this, the following groups could be considered vulnerable or at greater risk in a heat emergency:

- People with developmental/intellectual disabilities refers to a severe and chronic disability that is attributable to a mental or physical impairment that begins before an individual reaches adulthood. These disabilities include cerebral palsy, epilepsy, mobility and autism.
- Blind/low vision
- Deaf/Hard of hearing
- Mobility Injuries: from auto accidents, falls, sports, and or war. These injuries can cause damage to the brain, spinal cord, hearing, sight and mobility
- Chronic Conditions: Diabetes, Arthritis, dialysis, asthma and epilepsy
- Older adults: Have age-related limitations. (move slower, sight and sound limitations, etc.)
- Children: Challenges include dependency not only for care, but decision-making, processing information and trauma differently than adults, they may be unable to articulate their needs, may decompensate faster than adults, and are generally more susceptible to thirst, hunger, temperature, etc. than adults.
- Animals, including domestic pets, livestock, and poultry are also susceptible to extreme heat. For example, dogs and cats are in danger of heat stroke in temperatures of 110°F. The heat wave of 2006 resulted in 15 reported pet deaths and more than 25,000 cattle, and 700,000 fowl heat- related deaths. Heat wave impacts to livestock can lead to financial losses in California's agricultural economy.

The Spatial Hazard Events and Loss Data for the United States (SHELDUS), estimates that approximately 47 heat events occurred in California between the years 1960 and 2008. Adjusted to 2008 dollars, SHELDUS reports that severe heat events in California caused roughly \$1.8 million in property damage and \$531.7 million in crop damage.

# 6.4.3.2 Freeze

Sustained temperatures below freezing in Santa Barbara's generally mild weather regions can cause life loss and health risks to vulnerable populations; and have significant impacts on the lifeline infrastructure and the economy. Similar to Extreme Heat events, the same populations, lifeline infrastructure, and parts of the economy are vulnerable to and could be impacted by Freeze events.

Although infrequent, freezes can severely affect Santa Barbara agriculture. Freezing temperatures occurring during winter and spring growing seasons can cause extensive crop damage. Secondary impacts of freeze disasters can include major economic impacts on farmers, farm workers, packers, and shippers of agricultural products. Freezes can also cause significant increases in food prices to the consumer due to shortages. Freezing spells are likely to become less frequent as climate temperatures increase; if emissions follow higher pathways, freezing events could occur only once per decade in a sizable portion of the state by the second half of the 21st century. While fewer freezing spells would decrease cold-related health effects, too few freezes could lead to increased incidence of disease as vectors and pathogens do not die off.

## 6.4.3.3 Hailstorm

Hailstorms are rare in Santa Barbara County and as such represent a relatively low risk for most areas, compared to areas in the Midwest and southern United States where risk exposure is severe and many lives and millions of dollars are lost annually due to this hazard. In the event of a large hailstorm event, it is not expected to have significant impact on the population, built environment, lifeline infrastructure, or the economy.

### 6.4.3.4 Hurricane

Santa Barbara County is at very low risk of hurricanes, although it is possible for one to threaten the Southern California coast. No hurricanes have hit California in recorded history because tropical storm winds generally blow from east to west. California is affected by heavy rain resulting from tropical winds that blow north from Mexico and become colder by the time they hit California. In the future, monitoring is needed to determine whether present patterns of movement of such storms continue or are modified by the warming of waters off the Pacific Coast due to climate change. In the unlikelihood of a significant event, hurricanes would have a considerable impact on the population, built environment, lifeline infrastructure, and the economy.

## 6.4.3.5 Tornado

While Santa Barbara has tornadoes, such events represent a relatively low risk for most areas, compared to areas in the Midwest and southern United States where risk exposure is severe and many lives and millions of dollars are lost annually due to this hazard. However, in the unlikelihood of a significant tornado event it is expected to have a considerable impact on the population, built environment, lifeline infrastructure, and the economy.

#### 6.4.3.6 Windstorm

In the likelihood of a significant event, windstorms, especially Sundowner winds, could have a considerable impact on the population, built environment, lifeline infrastructure, and the economy. Sundowner winds adversely affect fire weather

# 6.4.4 Energy Shortage and Energy Resilience (Medium Impact/High Probability)

Energy disruptions are considered a form of lifeline system failure. Disruptions can be the consequence of another hazard, or can be a primary hazard, absent of an outside trigger. Santa Barbara County has two power providers. Pacific Gas and Electric provides electricity in the northern part of the county, with termination of services north of the Gaviota area. Southern California Edison provides power to the Southern part of the county, with service terminating in Gaviota. The two systems are not connected. Thus, if there is a major interruption of service in the Santa Barbara area, then all service is denied west of the outage to Gaviota. Likewise, if there is a major interruption of service defined.

Santa Barbara continues to experience both population growth and weather cycles that contribute to a heavy demand for power. Predicted increases in heat waves as well as increasingly severe winter storms will put ever greater strain on Santa Barbara's two electricity providers and the Southern California Gas Company. In

the event of a significant energy shortage it will have a significant impact on the population, built environment, lifeline infrastructure, and the economy.

# 6.4.5 Oil Spill (Medium Impact/High Probability)

In the event of a significant oil spill it will have a significant impact on the environment and the economy. The environmental impacts contribute to short- and long-term impacts on economic activities in areas affected by oil spills. Moratoriums may be temporarily imposed on fisheries, and tourism may decline in beach communities, resulting in economic hardship on individuals dependent on those industries for their livelihood and on the economic health of the community as well.

# 6.4.6 Agricultural Pests and Disease (Low Impact/High Probability)

A significant agricultural pest or disease event will have an impact on the environment and the local economy. The actual acreage of agriculture in Santa Barbara County exposed to pests and disease, as well as other hazards, is 546,512.61 acres including 138,723.18 acres of crop land.

# 6.4.7 Epidemic/Pandemic/Vector Borne Disease (Low Impact /Medium Probability)

The county, as well as the state and country, are vulnerable to epidemics or pandemics caused by either newly emerging or existing diseases spread person to person, through a vector such as a mosquito, or both. A significant epidemic or pandemic disease event can have considerable impact on the population, the economy, and essential public services. The county's pandemic influenza disease response plan, developed in 2007 through the coordination efforts of county departments and partner agencies, established a solid foundation for improved coordination and intervention by all participants. Implementation of this plan for an influenza pandemic or other epidemic or pandemic disease event would enable county departments to fulfill their significant roles and responsibilities through a coordinated strategy aimed at protecting the public's health and minimizing the impact on the economy and essential public services.

# 6.4.8 Hazardous Materials Release (Medium Impact/Medium Probability)

The release of hazardous materials into the environment can cause a multitude of problems for the population, built environment, lifeline infrastructure, environment, and the economy. Although these incidents can happen almost anywhere, certain areas of the County are at higher risk, such as near roadways that are frequently used to transport hazardous materials and locations with industrial facilities that use, store, and/or dispose of such materials. Aras crossed by railways, waterways, airways, and pipelines also have increased potential for mishaps.

Incidences can occur during production, storage, transportation, use or disposal of hazardous materials. Communities can be at risk if a chemical is used unsafely or released in harmful amounts into the environment. Hazardous materials can cause death, serious injury, long lasting health effects, and damage to buildings, the environment, homes, and other property.

The locations and identity of facilities that store hazardous materials are reported to local and federal governments. Security measures at these facilities can be heightened. Many facilities have their own hazardous materials guides and response plans, including transportation companies who transport hazardous materials.

# 6.4.9 Radiological Incident (High Impact/Low Probability)

Minor radiological accidents are possible at several facilities in Santa Barbara County that utilize some form of uranium including UCSB and area hospitals; however, a major concern for residents of Santa Barbara County is the Diablo Canyon Power Plant (DCPP). A significant radiological incident will have significant impacts on the population, built environment, lifeline infrastructure, environment, and the economy.

## 6.4.10 Terrorism (Medium Impact/Medium Probability)

In the unlikelihood of a significant terrorism event, there could be considerable impact on the population, built environment, lifeline infrastructure, environment, and the economy.

In the last fifteen years, three major incidents falling into the general category of Conventional Attacks/Active Shooter have occurred in the County. These types of events have an ability to impact the community on many levels, including ways that can undermine the quality of life within the County.

# 6.4.11 Cyber Threat (Low Impact/Medium Probability)

In the unlikelihood of a significant cyber event, there could be considerable impact on the population, built environment, lifeline infrastructure, environment, and the economy.

A cyber threat can infiltrate many institutions including banking, medical, education, government, military, and communication and infrastructure systems. The majority of effective malicious cyber-activity has become web-based. Recent trends indicate that hackers are targeting users to steal personal information and moving away from targeting computers by causing system failure. The duration of a cyber-attack is dependent on the complexity of the attack, how widespread it is, how quickly the attack is detected, and the resources available to aid in restoring the system. A cyber-attack could be geared toward one organization, one type of infrastructure and/or a specific geographical area. The affected area could range from small to large scale. Cyber-attacks generated toward large corporations can negatively affect the economy. A 2014 report from the MacAfee Corporation stated that the annual global loss to the global economy is between \$375B and \$500B. Attacks geared toward critical infrastructure and hospitals can result in the loss of life and the loss of basic needs, such as power and water, to the general public. Cyber-attacks can lead to the loss of operational capacity.

Most jurisdictions have several levels of security in place, dependent upon security levels of individuals and the geographical locations (onsite or remote). Redundant dispatch centers with separate systems that can function if the primary center isn't functioning are desirable.

Humans are the weakest link in a chain of cyber security. It remains difficult to continuously monitor and manage human/operator vulnerability. However, to address this weakness it is suggested the all jurisdictions

in the Santa Barbara County continue, or develop a security training program which all employees are required to complete or renew annually.

# 6.4.12 Aircraft Crash (Low Impact/Medium Probability)

In the unlikelihood of a significant aircraft crash, depending on the location, there could be considerable impact on the population and the built environment.

There are four airports in Santa Barbara County: Lompoc Airport, Santa Barbara Airport, Santa Maria Public Airport, and Santa Ynez Airport. Commercial flights are available at the Santa Barbara Airport and Santa Maria Public Airport. In addition to flights in and out of the municipal airports, commercial and private air traffic passes over the county. Military aircraft utilize Vandenberg Air Force Base. Each airport maintains emergency response plans that are tested at regular intervals with local government response agencies in accordance with FAA regulations.

A major air accident that occurs in a heavily populated residential area can result in considerable loss of life and property. Damage assessment and disaster relief efforts associated with an air accident will require support from other local governments, private organizations, and in certain instances, from the State and Federal governments.

It is anticipated that the mental health needs of survivors and surrounding residents will have to be addressed resulting from the trauma associated with the accident. A coordinated response team, comprised of mental health professionals, should take a proactive approach meeting the mental health needs from any traumatic disaster.

# 6.4.13 Train Accident (Low Impact/High Probability)

In the unlikelihood of a significant train accident there could be considerable impact on the population, economy, and the environment.

Trains running through Santa Barbara County, and in close proximity to U.S. Highway 101 in some areas, carry commuters and all other types of commodities including hazardous materials, fuel (including oil), agriculture, meats, and non-consumables. A hazardous material incident on rails or roadway has the potential to shut down both rail and highway transportation routes where the rail line and Highway101 are in close proximity.

This was the case in the 1991 Seacliff Incident, in neighboring Ventura County where a train accident released 440 gallons of aqueous hydrazine. The accident required the evacuation of the nearby Seacliff community along with the shutting down of Highway 101, and took 5 days to cleanup.

# 6.4.14 Natural Gas Pipeline/Storage Facility Accidents (Medium Impact/Low Probability)

In the unlikelihood of a significant natural gas pipeline or storage facility accident there could be considerable impact on the population, built environment, lifeline infrastructure, economy, and the environment.

Recently a large natural gas leak was discovered near the Porter Ranch area in Los Angeles County, prompting the evacuations of nearly 5,000 households that only recently were able to return to their homes.

6-40

Natural gas transported via the interstate pipelines, and some of the California-produced natural gas, is delivered into the Pacific Gas & Electric (PG&E) and Southern California Gas (SoCal Gas) intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. PG&E and SoCal Gas own and operate several natural gas storage fields that are located in Northern and Southern California.

Southern California Gas Company operates a natural gas storage field, La Goleta Storage Field, located on More Ranch Road in the Goleta area. SoCal Gas purchases market quality natural gas when prices are low and stores it in a depleted gas reservoir located at the La Goleta. The gas is withdrawn at times of high demand and sold to consumers located in 12 counties in central and southern California. SoCal Gas is currently moving forward with its plan to increase capacity of this storage field and provide additional supplies of locally produced natural gas to help meet customer demand. The project involved extracting native natural gas from previously untapped deep reservoirs by drilling two wells into known gas reserves and two exploratory wells into prospective reserves. After the native gas reserves are depleted, the reservoirs will be converted to storage use. The project does not involve hydraulic fracturing.

Generally speaking, transmission lines are large-diameter steel pipes carrying natural gas at high pressure and compressed to provide higher carrying capacity. Transmission lines are both interstate and intrastate, with the latter connecting to smaller distribution lines delivering gas directly to homes and businesses.

# 6.4.15 Civil Disturbance (Medium Impact/Low Probability)

In the unlikelihood of a civil disturbance, depending on the cause and effect, there could be considerable impact on the population, built environment, lifeline infrastructure, economy, and the environment.

While Santa Barbara County does not have a history of riots, it has had several events in Isla Vista that would qualify as a civil disturbance such as the annual Halloween Event and Flotopia which have attracted crowds of 20,000 or more and resulted in death, several injuries and widespread property damage.

# 6.4.16 Well Stimulation/Hydraulic Fracking (Medium Impact/Low Probability)

More information on the potential impacts from well stimulation/hydraulic fracking operations are being researched. There are several studies currently being conducted regarding the possible environmental impacts that could result from fracking and well stimulation, including effects on water and air quality and seismic safety (which are considered potential hazards).

## 6.4.17 Marine Invasive Species (Medium Impact/Low Probability)

The introduction of non-indigenous species (NIS) into Santa Barbara County coastal marine, estuarine and lake waters can cause significant and enduring economic, human health, and environmental impacts. Ships transfer organisms to California waters from throughout the world. The transfer of ballast water from "source" to "destination" ports results in the movement of many organisms from one region to the next.

The Santa Barbara Coast and Lake Cachuma are vulnerable to Marine Invasive Species and close monitoring of marine and lake vessels as well as water dropping (snorkeling) aircraft is needed.

# Section 7 County MITIGATION STRATEGIES

# 7.1 MITIGATION GOALS AND OBJECTIVES

The county-wide mitigation priorities are represented by identifying common goals and objectives. Using the 2011 HMP, the MAC reviewed and revised the goals and objectives to reflect the current county-wide capabilities, exposure to hazards, and vulnerability assessment findings. As part of the planning process, the County Planning Team reviewed and validated these goals and objectives.

### Table 7.1 Goals and Objectives

Goal 1: Promote disaster resiliency for future development to help them become less vulnerable to hazards
Objective 1.A Facilitate the development (or updating) of the County's Comprehensive Plan, City General Plans, and zoning ordinances to limit (or ensure safe) development in hazard areas
<i>Objective 1.B: Facilitate the incorporation and adoption of building codes and development regulations that encourage disaster resistant design</i>
<i>Objective 1.C: Facilitate consistent implementation of plans, zoning ordinances, and building and fire codes</i>
Goal 2: Promote disaster resiliency for existing assets (critical facilities/infrastructure and public facilities) and people to help them become less vulnerable to hazards
<i>Objective 2.A: Mitigate vulnerability of structures and public infrastructure including facilities, roadways, and utilities</i>
Objective 2.B: Mitigate vulnerable populations
Objective 2.C: Support a coordinated permitting processes and consistent enforcement

## Goal 3: Enhance hazard mitigation coordination and communication

Objective 3.A: Address data limitations identified in Hazard Profiling and Risk Assessment

*Objective 3.B: Increase awareness and knowledge of hazard mitigation principles and practice among local government officials* 

*Objective 3.C: Provide technical assistance to local governments to implement their mitigation plans* 

<i>Objective 3.D: Educate the public to increase awareness of hazards, potential impact, and opportunities for mitigation actions</i>
Objective 3.E: Monitor and publicize the effectiveness of mitigation actions implemented countywide
<i>Objective 3.F: Educate the professional community on design and construction techniques that will minimize damage from the identified hazards</i>
<i>Objective 3.G: Participate in initiatives that have mutual hazard mitigation benefits for the County, cities, state, tribal, and federal governments</i>
<i>Objective 3.H: 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.I: Continue partnerships between the state, local, and tribal governments to identify, prioritize, and implement mitigation actions</i>
<i>Objective 3.J: Continuously improve the County's capability and efficiency at administering pre- and post-disaster mitigation programs, including providing technical support to cities and special districts</i>

# 7.2 MITIGATION ACTION/PROGRESS

The County planning team reviewed the mitigation actions identified in the 2004 and 2011 HMP to determine the status of each mitigation action. **Table 7.2** provides an overview and the status of each mitigation actions. All incomplete projects will be reassessed by the County planning team and if deemed necessary will be included in the new mitigation actions section (Section 7.4).

2004 Plan Action #	Mitigation Action Description	Status	Comments
2004-9	Las Vegas and San Pedro Creeks Culvert Additions	Completed	<ol> <li>The Caltrans portion, UPRR bridges, conform grading work, and floodwall work are complete.</li> <li>The transition structure will be constructed June- August 2016.</li> </ol>
2004-14	Santa Maria Levee Protection Project	Completed	Project started 2010 and completed in 2014

2004-22	Evaluate Enhancements to Defensible Space Program	Completed	Policy has been updated by County Fire and reflects PRC 4291.
2004-23	Continue Update to Santa Barbara County Fire Unit Fire Plan	Completed	The SBC Unit Strategic Fire Plan has been updated to 2015 and reflects Cal Fire State Template.
2004-24	Increase GIS Capabilities within Fire Department	Completed	Permanent GIS Technician hired. County Fire is also developing a GIS Intern program to add Extra Help GIS Technicians. New GIS software acquired to reflect latest technologies.
2004-1	Enhance the dissemination of risk data	In Progress	
2004-2	Obtain better data on the impacts of hazards on future development	In Progress	
2004-3	Enhance Post-Disaster Damage Inspections to Include Mitigation Strategies	In Progress	

2004-4	Seismic Rehabilitation of Existing Bridge Structures	In Progress	Caltrans has identified all bridge structures requiring upgrades - Currently the Bridges are being brought up to code by FHWA and CalTrans programs and funding.
2004-25	Tsunami Plan Consistency and Outreach	In Progress	A draft county-wide plan was drafted in 2008. Key components still working are signage placement for impacted jurisdictions and notification protocols for response agencies and the public. A Tsunami Working Group and Executive Committees continue to address planning issues and possible solutions.
2004-8	Atascadero Creek Channel Liner Improvements (Goleta)	Not started- consideration for future	
2004-11	San Ysidro Creek Realignment	Not started- consideration for future	
2004-12	Padaro Lane Ditch Improvements	Not started- consideration for future	

2004-13	Foster Road Storm Drainage Improvements	Not started- consideration for future	
2004-15	Los Alamos Storm Drainage Project	Not started- consideration for future	
2004-16	Expand Kovar Regional Basin	Not started- consideration for future	
2004-17	San Antonio Creek Improvements	Not started- consideration for future	
2004-19	Repetitive Loss Structure Voluntary Audits	Not started- consideration for future	
2004-21	Update Fire Hazard Severity Zone Mapping	Ongoing	Map adopted by State and County in 2007; and updated by the State of California with input from local jurisdictions in the future.

2004-20	Provide Incentives for RL and other flood prone property owners to retrofit homes to be safer from flooding or to construct new homes to higher standards	On-going	New and substantially improved structures in the RL area along the coast have a minimum elevation requirement regardless of FEMA's published Base Flood Elevation (BFE). This requirement helps to get discounted flood insurance rates in the unincorporated county.
2004-5	Increase Participation in Floodplain Re- mapping Initiative	On-going	Currently, the Flood Control is in a process of preparing notices to the public in regards of the new FEMA remapping along the coastal line.
2004-6	Floodplain Management and Flood Mitigation Education and Outreach	On-going	Participation in an Annual Flood Awareness week and presenting the information to the public at 2 County's locations: the Santa Barbara and the Santa Maria and advertising on the Public Works website.

2004-7	Adding Community Volunteers to Creek Walk Committees	The District engages the community on an annual basis during development of the Annual Routine Maintenance Plan. A Draft Summary is posted on the District's website, notices are sent out to interested parties, and a notice is posted in several local newspapers announcing the availability of the Draft Summary as well as the dates and times of the two public workshops individuals are welcome to attend to ask questions about the plan and/or provide comments. The public is also welcome to provide public comment when the Final Annual Routine Maintenance Plan is at our Board of Directors for approval.
2004-10	Mission Creek Channel Improvements (Santa Barbara)	<ul> <li>Completed:</li> <li>1. The box culvert from the UPRR tracks to just downstream of Yanonali St.;</li> <li>2. Reach 2B-1- downstream from Montecito St. to the UPRR.</li> <li>3. Reach 1B- downstream of Yanonali St. to Mason St.;</li> <li>4. Reach 1A-Phase 1 - downstream from Mason St.</li> <li>5. Reach 1A-Phase 2- downstream from Mason St. to State St The project was contracted by the City of Santa Barbara.</li> <li>The next portion scheduled for constructed in Summer 2016 is Reach 2A.</li> </ul>

	1		
2004-18	Monitor RL properties for Substantial Improvement	On-going	The Flood Control District reviews all existing developments in the Special Flood Hazard Area (SFHA) and requires the applicant to determine whether or not the improvements are substantial. Developments which are substantial must be brought into compliance with the floodplain management ordinance.

2011 Plan Action #	Mitigation Action Description	Status	Comments
2011 - 1	Tecolote Tunnel rebuild	Not yet started	New in 2011
2011 - 2	Seismic Retrofit of 14 County Courthouse Facilities	Deferred from EQ-1 from 2004	Phase I and Phase II Seismic Analysis was completed. Buildings with a rating of 4 or higher were seismically retrofit for a total of 3 out of the 14 courthouse buildings. Hazard Mitigation Grant Program funding from FEMA and matching funds from the Courts were used.
2011 - 3	Inventory of Un- reinforced Masonry Structures	Deferred from EQ-6 from 2004	P&D's County Building Official is working on this project. General Services has supplied a list of County-owned unreinforced masonry structures that are in the unincorporated area of the County.
2011 - 4	Bradley Channel Improvements	Project Canceled	New in 2011

2011 - 5	'A' Street Basin	Project Canceled	New in 2011
2011 - 6	Unit II Ditch Improvements	Project Canceled	New in 2011
2011 - 7	Laguna County Sanitation District Earthquake Retrofit Project 1	Complete	Deferred EQ-4 from 2004
2011 - 8	Laguna County Sanitation District Earthquake Retrofit/Analysis Project 2	Project Canceled	Deferred EQ-5 from 2004
2011 - 9	Seismic Safety and Mitigation Outreach and Education	Project Canceled	Deferred EQ-7 from 2004
2011 - 10	Laguna County Sanitation District Flood Analysis and Protection	Ongoing w/ Plant Upgrade	Deferred FLD-34 from 2004
2011 - 11	Evaluate Expansion of Flood Warning System	Not yet started	Deferred FLD-40 from 2004
2011 - 12	GIS Multi-Hazard Disaster Management Information System	Not yet started	Deferred GEN-1 from 2004
2011 - 13	Old San Marcos Road Geotechnical Survey of Slope Stability	Complete	Deferred LSD/WDF-2 from 2004
2011 - 14	South County Geotechnical Survey of Slope Stability	Ongoing	Deferred LSD-3 from 2004

2011 - 15	North County Geotechnical Survey of Slope Stability	Ongoing	Deferred LSD-4 from 2004
2011 - 16	Ongoing Wildfire Education Campaign	Ongoing	New in 2011
2011-17	Staffing of Operations Division of Fire Department	Complete	Deferred WDF-6 from 2004
2011 - 18	Incorporate Dam inundation Area "Information Only" Layer in FEMA DFIRM Map Modernization Initiative	Complete	Deferred DF- 1 from 2004
2011 - 19	Construct Storm Drainage Improvements at Toro Canyon Park	Deferred	Deferred FLD-23 from 2004
2011 - 20	Tucker's Grove Park Interior Access Road Creek Crossing Improvements	Deferred	Deferred FLD-24 from 2004
2011 - 21	Cachuma Lake Mohawk Trail Bridge and Dock Abutment Rehabilitation and Access Improvements	Deferred	Deferred FLD-26 from 2004
2011 - 22	Cachuma Lake Mohawk Camping Area Bridge Abutment Protection	Deferred	Deferred FLD-27 from 2004
2011 - 23	Enhancements to Annual Culvert Inspection Program to Include Mitigation Strategies	Ongoing	Deferred FLD-31 from 2004

2011 - 24	University Circle Orean	Deferred	Deferred FLD-35 from 2004
2011 – 24	University Circle Open Spaces Berkeley Bike/Pedestrian Bridge Removal and	Deterred	Deferred FLD-55 from 2004
	Replacement		
2011 - 25	Jalama Beach Park Waterline Protection	Deferred	Deferred FLD-36 from 2004
2011-26	Live Oak Camp Access Road Protection	Deferred	Deferred FLD-37 from 2004
2011 - 27	Bridge Scour Abatement Program	Ongoing	Deferred FLD-44 from 2004
2011 - 28	Investigation of Low Capacity Bridges to Determine	Completed	Deferred FLD-45 from 2004
2011 – 29	Goleta Beach Park Embankment Protection for Park Maintenance Facilities	Deferred	Deferred LSD/CE-5 from 2004
2011 - 30	Wallace Avenue Bluff Re- Vegetation and Stabilization	Deferred	Deferred LSD/CE-7 from 2004
2011 - 31	Mountainous Road Rockfall Hazard Geotechnical Surveys	Completed	Deferred LSD/WDF-8 from 2004
2011 - 32	Parks - Guadalupe Dunes Park Entrance Road	Deferred	New in 2011

	Γ		
2011 – 33	Santa Barbara Bowl - Service Road Improvements (N. End Drive- Service Road off of Newton Rd) Entrance	Project Canceled	New in 2011
2011 - 34	Toro Canyon Park Gazebo Access Road Drainage	Deferred	Deferred FLD-39 from 2004
2011 - 35	Obtain National Weather Service "Storm Ready" Designation	Completed	Deferred FLD-42 from 2004
2011 - 36	Jalama Road Geotechnical Survey of Slope Stability	Completed	Deferred LSD/WDF-9 from 2004
2011 - 37	Relocate the Hearts Adaptive Riding Center	In-Progress	New in 2011
2011 - 38	Geotechnical Engineered Solution of Slope Failure on Glen Annie Road (South County)	Completed	Deferred LSD-1 from 2004
2011 - 39	Cachuma Lake Recreational Area Public Access Ramp Protection	Deferred	Deferred FLD-29 from 2004
2011 - 40	Cachuma Lake Water Treatment Plant Relocation	Deferred	Deferred FLD-28 from 2004
2011 - 41	Develop a Debris Management Plan for Public Works Infrastructure generated debris	Not Started (see new language in 4.2.1.7)	Deferred GEN-4 from 2004

2011 - 42	Goleta Beach Park Pier Abutment Protection	Deferred	Deferred LSD/CE-6 from 2004
2011 - 43	Enhance Fire Weather Forecasting and Predictive Services Program	Ongoing	Deferred WDF-2 from 2004
2011 - 44	Firewise Community Planning and Prevention Techniques Training	Not yet Started	Deferred WDF-7 from 2004

# 7.3 PRIORITIZING MITIGATION ACTION

The County planning team used the STAPLE/E Criteria (Social, Technical, Administrative, Political, Legal, Economic, and Environmental) to evaluate and prioritize the mitigation actions. Based on the evaluation score of each of STAPLE/E Criteria (**Table 7.3**), mitigation actions received a cumulative score. The cumulative score was then used to prioritize the mitigation actions. The following scale was used to evaluate each STAPLE/E Criteria:

0= Poor (negative impacts)

1= Fair (neutral or no impacts)

2= Good (positive impacts)

The intent of prioritizing mitigation actions is to help the County focus and concentrate their efforts; however, it should be noted that when and if specialized grants and/or funds are made available that could finance a mitigation action the County may adjust the ranking to enable them to implement the mitigation action.

## Table 7.3 STAPLE/E Criteria

SOCIAL	• Is the proposed action socially acceptable to the community?
	• Are there equity issues involved that would mean that one segment of the
	community are treated unfairly?
	• Will the action cause social disruption?
TECHNICAL	• Will the proposed action work?
	• Will it create more problems than it solves?
	• Does it solve a problem or only a symptom?
	• Is it the most useful action in light of other community goals?
ADMINISTRATIVE	• Can the community implement the action?
	• Is there someone to coordinate and lead the effort?
	• Is there sufficient funding, staff, and technical support available?
	• Are there ongoing administrative requirements that need to be met?
POLITICAL	• Is the action politically acceptable?
	• Is there public support both to implement and to maintain the project?
LEGAL	• Is the community authorized to implement the proposed action? Is there a clear legal basis or precedent for this activity?
	• Are there legal side effects? Could the activity be construed as a taking?
	• Is the proposed action allowed by the general plan, or must the general
	plan be amended to allow the proposed action?
	• Will the community be liable for action or lack of action?
	• Will the activity be challenged?
ECONOMIC	• What are the costs and benefits of this action?
	• Do the benefits exceed the costs?
	• Are initial, maintenance, and administrative costs taken into account?
	• Has funding been secured for the proposed action? If not, what are the potential sources (public, non-profit, and private)?
	• How will this action affect the fiscal capability of the community?
	• What burden will this action place on the tax base or local economy?
	• What are the budget and revenue effects of this activity?
	• Does the action contribute to other community goals, such as capital
	improvements or economic development?
	• What benefits will the action provide?
Environmental	• How will the action affect the environment?
	• Will the action need environmental regulatory approvals?
	• Will it meet local and state regulatory requirements?
	• Are endangered or threatened species likely to be affected?

# 7.4 MITIGATION ACTION

The following table (**Table 7.4**) presents the prioritized list of mitigation actions which will be considered and implemented during the life of this plan update.

Project Number	Project Title	STAPLE/E Rating
2016-31	Critical Infrastructure Threat Assessment ID Project	20
2016-6	Fire ECC Facility	20
2016-34	Assess and Mitigate Structure Ignition Vulnerabilities	19
2016-12	Montecito Creek Channel Improvements, Montecito	19
2016-32	Establish Drought Task Force	19
2016-7	South Coast Foothill Fuel Break	18
2016-13	North Ave Storm Drain Improvements, East Side Lompoc	18
2016-1	Establish Climate Change Task Force	18
2016-4	Ongoing Wildfire Education Campaign	18
2016-5	Enhance Fire Weather Forecasting Program	18
2016-33	Retrofit Water Supply System	17
2016-28	Airport Ditch Lining, Orcutt	17
2016-21	Maria Ygnacio East Debris Basin Modification, Goleta	16
2016-22	Maria Ygnacio Main Debris Basin Modification, Goleta	16
2016-23	San Ysidro Debris Basin Modification, Montecito area	16
2016-24	Cold Springs Debris Basin Modification, Montecito area	16
2016-25	Rattlesnake Debris Basin Modification, Upper Santa Barbara	16
2016-27	Unit II Channel Improvements, Santa Maria	16
2016-30	Implementation of County Energy and Climate Action Plan	16
2016-26	Faraday Storm Drain, Santa Ynez	14
2016-9	Romero Creek Capacity Improvements, Montecito	13
2016-10	Oak Creek Capacity Improvements, Montecito	13
2016-11	San Ysidro Creek Capacity Improvements, Montecito	13
2016-14	Cebada Canyon Channel Improvements, Lompoc Valley	12
2016-15	Sycamore Canyon Master Drainage Plan, Santa Barbara	12
2016-16	Mission Canyon Master Drainage Plan, Santa Barbara	12
2016-17	San Pedro Creek Fish Passage, Goleta	12
2016-2	Guadalupe Levee Project	12
2016-3	HWY 166 Drainage Project	12
2016-19	Bradley Channel Relining, Santa Maria	10
2016-20	Bradley Channel Improvements, Santa Maria	10
2016-29	Stockpile Area-South Coast	7

### Table 7.4 Prioritized and Recommended Mitigation Actions

Number#		STAPLE/E Rating:		
2016-1		18		
Action Title				
Establish Climate (	Change Task Force			
Action Description	1			
		ate Change Task Force to: 1) Ass	ess vulnerability	
		litions 3)Forecast short term and 1		
4) Develop related	mitigation projects and program	ns		
Relevant Objectiv	e			
	Promote disaster resiliance	/ for future development to	1	
	reduce/eliminate vulnerabi			
	1A	Inty to hazards	-	
_	1B		-	
	1B 1C		-	
	-	for existing development and	1	
	people to reduce/eliminate	<b>e</b> 1		
Σ			1	
	2B			
-	2D 2C			
		Enhance hazard Mitigation coordination and		
	communication			
	3A			
	3B			
-	3C			
2	3D			
	3E			
	3F			
2	3G			
	3Н		]	
2	x 3I		]	
2	3J			
Applicable Hazards				
Г	Forthquaka		1	
	Earthquake			
	Liquefaction			
	Landslides and Other Earth Movements			
	Expansive Soils/Land Subsidence		-	
2	Wildfire		1	
2	G 1 1 G G	Flood Coastal Storm Surga		
2			{	
2			{	
2		lottage		

		Severe Weather and Storms	
		Extreme Heat	
		Freeze	
		Hailstorm	
		Tornado	
		Hurricane	
		Windstorm	
		Energy Shortage and Energy Resilience	
		Oil Spill	
		Dam Failure	
	х		
		Epidemic/Pandemic/Vector Borne Disease	
		Hazardous Material Release	
		Radiological Incident	
		Terrorism	
		Cyber Threat	
		Aircraft Crash	
		Train Accident; Explosion and/or Chemical Release	
		Natural Gas Pipeline/Storage Facility Accidents	
		Levee Failure	
		Tsunami	
		Civil Disturbance	
		Well Stimulation/Hydraulic Fracking	
		Marine Invasive Species	
Estimated timeli	ine	to complete	
2018			
0	Cost/Funding Source		
Unknown/ Acquire HMA Grant, PDM Grant			
Responsible Agency/Department			
Planning and Dev	velo	opment	
Comments			

Number#		STAPLE/E Rating:
2016-2		12
Action Title		
Guadalupe Levee Pro	oject	
Action Description		
	and the benefits of building a Levee system	adjacent to the city of Guadalupe to
prevent chronic floor	ding.	
<b>Relevant Objective</b>		
	Promote disaster resiliency for future de	evelopment to
	reduce/eliminate vulnerability to hazard	s
	1A	
	1B	
	1C	
	Promote disaster resiliency for existing	development and
	people to reduce/eliminate vulnerability	
X	2A	
	2B	
	2C	
	Enhance hazard Mitigation coordination	and
	communication	
	3A	
	3B	
	3C	
	3D	
	3E	
	3F	
	3G	
	ЗН	
	31	
	3J	
Applicable Hazards	5	
	Earthquake	
	Liquefaction	
	Landslides and Other Earth Movements	
	Expansive Soils/Land Subsidence	
	Wildfire	
X	Flood	
	Coastal Storm Surge	
	Climate-Related	
	Sea Level Rise/Coastal Flooding and	Erosion
	Droughts and Water Shortage	
	Severe Weather and Storms	
	Extreme Heat	
	Freeze	

	Hailstorm	
	Tornado	
	Hurricane	
	Windstorm	
	Energy Shortage and Energy Resilience	
	Oil Spill Dam Failure	
	Agricultural Pests and Disease	
	Epidemic/Pandemic/Vector Borne Disease	
	Hazardous Material Release	
	Radiological Incident	
	Terrorism	
	Cyber Threat	
	Aircraft Crash	
	Train Accident; Explosion and/or Chemical Release	
	Natural Gas Pipeline/Storage Facility Accidents	
	Levee Failure	
	Tsunami	
	Civil Disturbance	
	Well Stimulation/Hydraulic Fracking	
	Marine Invasive Species	
Estimated timeline	to complete	
2026		
Cost/Funding Sour	ce	
100 million/ Acquire HMA Grant, PDM Grant		
Responsible Agency/Department		
County Flood Control/Army Core of Engineers		
Comments		

Number#		STAPLE/E Rating:
2016-3		12
Action Title		
HWY 166 Drainage	Project	
Action Description		
	ong both side s of Hwy 166 in the city of	of Guadalupe to mitigate chronic flooding
of roadway.		
Relevant Objective		
	Promote disaster resiliency for future	re development to
	reduce/eliminate vulnerability to ha	
	1A	
	1B	
	1C	
	Promote disaster resiliency for exist	ting development and
	people to reduce/eliminate vulnerab	
X	2A	
X	2B	
	2C	
	Enhance hazard Mitigation coordina	ation and
	communication	
	3A	
	3B	
	3C	
	3D	
	3E	
	3F	
X	3G	
	3H	
	3I	
	3J	
Applicable Hazard	s	
	Earthquake	
	Liquefaction	
	Landslides and Other Earth Movem	ents
	Expansive Soils/Land Subsidence	
v	Wildfire	
X		
	Coastal Storm Surge Climate-Related	
	Sea Level Rise/Coastal Flooding and Erosion	
	Droughts and Water Shortage Severe Weather and Storms	
	Extreme Heat	
	Freeze	
	176626	

	TT '1 /
	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
2021	
Cost/Funding Sour	
5 million/ Acquire H	IMA Grant, PDM Grant
Responsible Agency	y/Department
CALTRANS	
Comments	

Number#		STAPLE/E Rating:		
2016-4		18		
Action Title				
Ongoing Wildfire E	ducation Campaign			
Action Description				
-		n May of 2009. This campaign is	a new approach	
		he year-round threat of wildfire.		
		olvement in reducing life and prop		
		ncies in California Regional Mutu		
		is designed to be used by any agen	ncy and can be	
	specific jurisdiction's needs.			
Relevant Objective	<u>.</u>			
	Promote disaster resilience	y for future development to		
	reduce/eliminate vulnerab	-		
	1A			
	1B			
	1 <u>C</u>			
	-	y for existing assets and people		
	to reduce/eliminate vulner			
	2A	5		
	2B			
	2C			
	Enhance hazard mitigation	Enhance hazard mitigation coordination and		
	communication			
	3A			
	3B			
	3C			
X	3D			
	3E			
	3F			
	3G			
	3H			
	31			
	3J			
Applicable Hazard	S			
Г <sup></sup>				
	Earthquake			
	Liquefaction	h Movementa		
	Landslides and Other Eart			
	Expansive Soils/Land	Subsidence		
X				
	Flood			
	Coastal Storm Surge			
	Climate-Related	Flooding and Fragion		
	Sea Level Kise/Coasta	l Flooding and Erosion		

Droughts and Water Shortage	
Severe Weather and Storms	
Extreme Heat	
Freeze	
Hailstorm	
Tornado	
Hurricane	
Windstorm	
Energy Shortage and Energy Resilience	
Oil Spill	
Dam Failure	
Agricultural Pests and Disease	
Epidemic/Pandemic/Vector Borne Disease	
Hazardous Material Release	
Radiological Incident	
Terrorism	
Cyber Threat	
Aircraft Crash	
Train Accident; Explosion and/or Chemical Release	
Natural Gas Pipeline/Storage Facility Accidents	
Levee Failure	
Tsunami	
Civil Disturbance	
Well Stimulation/Hydraulic Fracking	
Marine Invasive Species	
<b>Estimated timeline for completion</b> Ongoing. Continually update education materials and provide educational program an annual basis.	ns to the public on
Estimated Cost/Funding Source	
\$20,000 annually/ Acquire Fire Safe Council Grant	
Responsible Agency/Department County Fire Department, Public Information Officer	
Comments	
Best way to prepare the public for emergencies is to provide education. This progra	am covers
everything from preparing your home to the actual evacuation.	

Number#	STAPLE/E Rating:
2016-5	18

#### Action Title Enhance Fire Weather Forecasting Program

### Action Description

The current fire weather program is based on the U.S. Forest Service system, which includes only 4 remote automated weather stations throughout the county. The stations are in areas that are not representative of the micro-climates that exist within the county. A larger and better network would allow the county to focus fire prevention efforts from year to year in the most accurate and threatened locations.

- Acquire 7 permanent and 4 portable automated fire weather stations. SBC Fire purchased and installed 3 permanent RAWS in 2014/2015. They are located at San Marcos Pass, Refugio Pass, and Tepusquet. Four additional units are proposed for Carpinteria Foothills, Gaviota, Santa Ynez Valley, and Cuyama. County Fire has two portable RAWS that need to be replaced due to age and legacy technology.
- Site the stations at optimum locations throughout the County, with the flexibility of moving the portables on an annual basis.

Cost is anticipated to be approximately \$110,000 for 4 new permanent stations and two portables, and a budget of approximately \$4,000 per year for maintenance will be needed. With more accurate forecasting, limited resources could be applied to more targeted locations for prevention and operational activities resulting in significant cost savings and likely losses avoided due to prevention activities.

### **Relevant Objective**

	Promote disaster resiliency for future development to	
	reduce/eliminate vulnerability to hazards	1
	1A	1
	1B	1
	1C	
	Promote disaster resiliency for existing assets and people	1
	to reduce/eliminate vulnerability to hazards	
	2A	
	2B	1
Х	2C	
	Enhance hazard mitigation coordination and	
	communication	
	3A	
	3B	
	3C	
	3D	
	3E	
	3F	
	3G	
	3Н	
	3I	
	3J	
Applicable Hazard	ls	

	Earth qualze	
	Earthquake	
	Liquefaction	
	Landslides and Other Earth Movements	
X	Expansive Soils/Land Subsidence	
X	Wildfire	
	Flood	
	Coastal Storm Surge	
X		
	Sea Level Rise/Coastal Flooding and Erosion	
	Droughts and Water Shortage	
X		
	Extreme Heat	
	Freeze	
	Hailstorm	
	Tornado	
	Hurricane	
	Windstorm	
	Energy Shortage and Energy Resilience	
	Oil Spill	
	Dam Failure	
	Agricultural Pests and Disease	
	Epidemic/Pandemic/Vector Borne Disease	
	Hazardous Material Release	
	Radiological Incident	
	Terrorism	
	Cyber Threat	
	Aircraft Crash	
	Train Accident; Explosion and/or Chemical Release	
	Natural Gas Pipeline/Storage Facility Accidents	
	Levee Failure	
	Tsunami	
	Civil Disturbance	
	Well Stimulation/Hydraulic Fracking	
	Marine Invasive Species	
Estimated timeline 2018		
Estimated Cost/Fu	nding Source	
	Fire Safe Council Grant, PDM Grant, Fire Act Grant	
Responsible Agency		
County Fire, Preven		
Comments		
	/eather Program will allow the implementation of a Fire Danger Operating Plan	
	ning Index values and Fire Danger adjective ratings for use in fire business	
decision support.		

Number#	S	TAPLE/E Rating:
2016-6	2	0
Action Title		
Fire Emergency Co	ommunications Center (ECC) Facility	ity
<b>Action Descriptio</b>	n	
Build second Fire	ECC in Battalion 2. This would pro	ovide redundancy in the event that the existing
South Coast combi	ined Sherriff/Fire ECC is comprom	ised by a natural disaster.
Relevant Objectiv	7 <b>e</b>	
	Promote disaster resiliency for	r future development to
	reduce/eliminate vulnerability	to hazards
	1A	
	1B	
	1C	
	Promote disaster resiliency for	r existing assets and people
	to reduce/eliminate vulnerabil	
	x 2A	· ·
	2B	
	2C	
	Enhance hazard mitigation co	ordination and
	communication	
	3A	
	3B	
	3C	
	3D	
	3E	
	3F	
	3G	
	3H	
31		
-	3J	
Applicable Hazar		
Γ	x Earthquake	
	Liquefaction	
	x Landslides and Other Earth M	ovements
	Expansive Soils/Land Sub	
	x Wildfire	
	x Flood	
	Coastal Storm Surge	
	Climate-Related	
-	Sea Level Rise/Coastal Flo	oding and Erosion
	x Droughts and Water Short	
	Severe Weather and Storm	
	Extreme Heat	~~
	Freeze	

	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
Х	Oil Spill
Х	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
Х	Hazardous Material Release
Х	Radiological Incident
	Terrorism
	Cyber Threat
X	Aircraft Crash
Х	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
X	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	for completion
2021	
Estimated Cost/Fur	
\$5,000,000/ Acquire	e Homeland Security Grant, PSWIN Grant
<b>Responsible Agency</b>	7/Department
County Fire/Sheriff	
Comments	
e	Coast ECC is located in a High Fire Hazard area and was evacuated during the
	ling a dedicated Fire ECC in the north or central county would allow redundancy
in the event of a disa	ster that compromised one facility. Personnel could be crossed trained to handle

both Fire and Law duties as needed.

Number#		STAPLE/E Rating:	
2016-7		18	
Action Title			
South Coast Foothill	Fuel Break		
Action Description	1		
		ty defensible space fuel break alo ty line to Telecote Canyon west of	
Relevant Objective		ity file to refective early on west of	of Goleta City.
	Promote disaster resiliency	for future development to	
	reduce/eliminate vulnerability to hazards		
	1A	•	-
	1B		-
	1C		
		for existing assets and people	
	to reduce/eliminate vulner		
Х	2A		
Х	2B		
	2C		
	Enhance hazard mitigation	coordination and	
	communication		
	3A		
	3B		
	3C		-
	3D		
	3E		
	3F		-
X	3G		
	3Н		-
X	31		1
	3J		1
Applicable Hazards			
	Earthquake		
	Liquefaction		
	Landslides and Other Eart	h Movements	
	Expansive Soils/Land	Subsidence	_
X	Wildfire		
	Flood		-
	Coastal Storm Surge		]
	Climate-Related		
	Sea Level Rise/Coasta	l Flooding and Erosion	1
	Droughts and Water S	hortage	
	Severe Weather and St		1

	Entrance Heat				
	Extreme Heat				
	Freeze				
	Hailstorm				
	Tornado				
	Hurricane				
	Windstorm				
	Energy Shortage and Energy Resilience				
	Oil Spill				
	Dam Failure				
	Agricultural Pests and Disease				
	Epidemic/Pandemic/Vector Borne Disease				
	Hazardous Material Release				
	Radiological Incident				
	Terrorism				
	Cyber Threat				
	Aircraft Crash				
	Train Accident; Explosion and/or Chemical Release				
	Natural Gas Pipeline/Storage Facility Accidents				
	Levee Failure				
	Tsunami				
	Civil Disturbance				
	Well Stimulation/Hydraulic Fracking				
	Marine Invasive Species				
Estimated timeline					
2021	-				
	Estimated Cost/Funding Source				
· · · · · ·	ire Safe Council Grant, SRA Grant				
Responsible Agency	//Department				
County File Comments	County Fire Comments				
This project would involve planning, designing, and creating a fuel break along the foothills of the					
Santa Barbara South Coast. Cost would include CEQA documentation, GIS work, and					
implementation using	g hand crews.				

<b>Number#</b> 2016-8		<b>STAPLE/E Rating:</b> 17	
Action Title		17	
	in Outlet reconstruction, Sant	a Barbara City	
Action Description	in Outlet reconstruction, Sant		
_	e existing box culvert at the C	Cean, installation of a new Tidal Gat	e
Relevant Objective	e existing box eurvert at the e	cean, instantion of a new Tidai Gat	с.
Kelevant Objective			
	Promote disaster resilience	y for future development to	
	reduce/eliminate vulnerab		
	1A		
	1B		
	10		
		y for existing development and	
	people to reduce/eliminate		
	2A	-	
	2B		
	2C		
X	2D		
X	2E		
	Enhance hazard Mitigation	n coordination and	
	communication		
	3A		
	3B		
X	3C		
	3D		
	3E		
	3F		
	3G		
	3H		
	31		
Annlinghle II.	3J		
Applicable Hazards	<b>j</b>		
<b></b>	Earthquake		
	Liquefaction		
	Landslides and Other Earth	n Movements	
	Expansive Soils/Land Subsidence		
	Wildfire	1	
X	Flood		
	Coastal Storm Surge		
	Climate-Related		
	Sea Level Rise/Coastal	Flooding and Erosion	
	Droughts and Water Sh		
	Severe Weather and Storms		
	Extreme Heat		

	Freeze		
	Hailstorm		
	Tornado		
	Hurricane		
	Windstorm		
	Energy Shortage and Energy Resilience		
	Oil Spill		
	Dam Failure		
	Agricultural Pests and Disease		
	Epidemic/Pandemic/Vector Borne Disease		
	Hazardous Material Release		
	Radiological Incident		
	Terrorism		
	Cyber Threat		
	Aircraft Crash		
	Train Accident; Explosion and/or Chemical Release		
	Natural Gas Pipeline/Storage Facility Accidents		
	Levee Failure		
	Tsunami		
	Civil Disturbance		
	Well Stimulation/Hydraulic Fracking		
	Marine Invasive Species		
Estimated timeline	to complete		
TBD	-		
Cost/Funding Source			
\$342,000/Acquire HMA Grant, PDM Grant			
Responsible Agency/Department			
Santa Barbara County Public Works, Flood Control			
Comments			

Number#		STAPLE/E Rating:
2016-9		13
Action Title		
	acity Improvements, Montecito	
Action Description		
		project consists of widening the channel from 30
feet and 18 feet cur		
Relevant Objectiv	e	
	Promote disaster resiliency	for future development to
	reduce/eliminate vulnerabil	
	1A	
	1B	
	1C	
		for existing development and
	people to reduce/eliminate	
	2A	
	2B	
	2C	
2	x 2D	
2	x 2E	
	Enhance hazard Mitigation	coordination and
	communication	
	3A	
	3B	
2	x 3C	
	3D	
	3E	
	3F	
	3G	
	ЗН	
	31	
	3J	
Applicable Hazar		
Г	Earthquake	
	Liquefaction	
	Landslides and Other Earth	Movements
	Expansive Soils/Land S Wildfire	
L.		
2		
	Coastal Storm Surge Climate-Related	
		Elooding and Erocion
	Sea Level Rise/Coastal Flooding and Erosion	
	Droughts and Water She	
	Severe Weather and Sto	THIS

Extreme Heat	
Freeze	
Hailstorm	
Tornado	
Hurricane	
Windstorm	
Energy Shortage and Energy Resilie	ence
Oil Spill	
Dam Failure	
Agricultural Pests and Disease	
Epidemic/Pandemic/Vector Borne D	Disease
Hazardous Material Release	
Radiological Incident	
Terrorism	
Cyber Threat	
Aircraft Crash	
Train Accident; Explosion and/or C	hemical Release
Natural Gas Pipeline/Storage Facilit	ty Accidents
Levee Failure	
Tsunami	
Civil Disturbance	
Well Stimulation/Hydraulic Frackin	lg
Marine Invasive Species	
Estimated timeline to complete	
TBD	
Cost/Funding Source	
\$25,197,000/ Acquire HMA Grant, PDM Grant	
Responsible Agency/Department	
Santa Barbara County Public Works, Flood Control	
Comments	

Number#		STAPLE/E Rating:	
2016-10	13		
Action Title			
	ty Improvements, Montecito		
Action Description			
		his project will replace 14 foot wide concrete-lined	
		n of two parcels. This would also necessitate the	
replacement of a p	0		
Relevant Objecti	ve		
	Promoto disaster resilion	cy for future development to	
	reduce/eliminate vulneral	-	
	1A		
	1B		
F	1B 1C		
		cy for existing development and	
		te vulnerability to hazards	
	2A	contracting to hazards	
F	2R 2B		
F	2D 2C		
	x 2D		
	$\frac{x}{x} = \frac{2B}{2E}$		
	Enhance hazard Mitigatio	on coordination and	
	communication		
	3A		
F	3B		
F	x 3C		
-	3D		
	3E		
	3F		
-	3G		
-	3Н		
F	31		
	3J		
Applicable Hazar	rds		
Γ	Earthquake		
F	Liquefaction	•	
F		Landslides and Other Earth Movements	
F	Expansive Soils/Land		
F	Wildfire		
	x Flood		
F	Coastal Storm Surge		
-	Climate-Related		
-	Sea Level Rise/Coastal Flooding and Erosion		
	Droughts and Water S		

Extreme Heat         Freeze         Hailstorm         Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD          Cost/Funding Source         S24.144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control         Comments		Severe Weather and Storms
Freeze         Hailstorm         Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD          Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		
Hailstorm         Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spil         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levce Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Epidemic/Pandemic/Vector Borne Disease Hazardous Material Release Radiological Incident Terrorism Cyber Threat Aircraft Crash Train Accident; Explosion and/or Chemical Release Natural Gas Pipeline/Storage Facility Accidents Levee Failure Tsunami Civil Disturbance Well Stimulation/Hydraulic Fracking Marine Invasive Species Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		
Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		
Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		
Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		Radiological Incident
Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		Terrorism
Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		Cyber Threat
Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		Aircraft Crash
Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		Train Accident; Explosion and/or Chemical Release
Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		Natural Gas Pipeline/Storage Facility Accidents
Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		Levee Failure
Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		Tsunami
Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		Civil Disturbance
Marine Invasive Species         Estimated timeline to complete         TBD         Cost/Funding Source         \$24,144,000/ Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Work, Flood Control		Well Stimulation/Hydraulic Fracking
Estimated timeline to complete TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control		
TBD Cost/Funding Source \$24,144,000/ Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Work, Flood Control	Estimated timeline	
\$24,144,000/ Acquire HMA Grant, PDM Grant <b>Responsible Agency/Department</b> Santa Barbara County Public Work, Flood Control		-
\$24,144,000/ Acquire HMA Grant, PDM Grant <b>Responsible Agency/Department</b> Santa Barbara County Public Work, Flood Control	<b>Cost/Funding Sour</b>	ce
Santa Barbara County Public Work, Flood Control	0	
	Responsible Agency	y/Department
Comments	Santa Barbara Coun	ty Public Work, Flood Control
	Comments	

Number#		STAPLE/E Rating:	
2016-11		13	
Action Title			
San Ysidro C	creek Capacity Impro	ovements, Montecito	
Action Desc	ription		
Improve the	capacity of the exist	ing facilities. That will include construction of a 70-foot wide	
		48-foot wide channel in the upper section of the creek; acquisition	
	l easements on the c	other lots.	
Relevant Ob	jective		
	Promote d	lisaster resiliency for future development to	
		minate vulnerability to hazards	
	1A		
	1B		
	1 <u>C</u>		
		lisaster resiliency for existing development and	
		reduce/eliminate vulnerability to hazards	
	2A		
	2B		
	2C		
	x 2D		
	x 2E		
		azard Mitigation coordination and	
	communic		
	3A		
	3B		
	x 3C		
	3D		
	3E		
	3F		
	3G		
	3H		
	31		
	3J		
Applicable 1	Iazards		
	Earthquak	e	
		Liquefaction	
	Landslides	Landslides and Other Earth Movements	
	Expans	sive Soils/Land Subsidence	
	Wildfire		
	x Flood		
	Coasta	al Storm Surge	
	Climate-R		
	Sea Le	evel Rise/Coastal Flooding and Erosion	
		hts and Water Shortage	

	Severe Weather and Storms		
	Extreme Heat		
	Freeze		
	Hailstorm		
	Tornado		
	Hurricane		
	Windstorm		
	Energy Shortage and Energy Resilience		
	Oil Spill		
	Dam Failure		
	Agricultural Pests and Disease		
	Epidemic/Pandemic/Vector Borne Disease		
	Hazardous Material Release		
	Radiological Incident		
	Terrorism		
	Cyber Threat		
	Aircraft Crash		
	Train Accident; Explosion and/or Chemical Release		
	Natural Gas Pipeline/Storage Facility Accidents		
	Levee Failure		
	Tsunami		
	Civil Disturbance		
	Well Stimulation/Hydraulic Fracking		
	Marine Invasive Species		
Estimated timeline	to complete		
TBD	-		
Cost/Funding Sour	Cost/Funding Source		
6	\$36,985,000/ Acquire HMA Grant, PDM Grant		
Responsible Agenc	y/Department		
Santa Barbara Coun	ty Public Works, Flood Control		
Comments			

Number#		STAPLE/E Rating:	
2016-12		19	
Action Title			
Montecito Creek C	hannel Improvement, Montecit	0	
Action Description	1		
The Project is locat	ed along Montecito Creek from	the Montecito Basin to the Casa Dorinda and will	
•	channel in order to improve cor	nveyance capacity.	
Relevant Objectiv	e		
	Promote disaster resiliency	for future development to	
	reduce/eliminate vulnerabil		
	1A		
	1B		
	1C		
	Promote disaster resiliency	for existing development and	
	people to reduce/eliminate		
	2A		
	2B		
Х	2C		
Х	2D		
	Enhance hazard Mitigation	coordination and	
	communication		
	3A		
	3B		
Σ	3C		
	3D		
	3E		
	3F		
	3G		
	3Н		
	31		
	3J		
Applicable Hazar	ls		
Г	Earthquake		
	Liquefaction		
	Landslides and Other Earth	Movements	
	Expansive Soils/Land S	Subsidence	
	Wildfire		
Х	171 1		
	Coastal Storm Surge		
	Climate-Related		
	Sea Level Rise/Coastal	Flooding and Erosion	
	Droughts and Water Sh		
	Severe Weather and Sto		
	Extreme Heat		

	<b>E</b> urope
	Freeze
	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
TBD	
Cost/Funding Sour	ce
\$8,350,000/ Acquire	e HMA Grant, PDM Grant
Responsible Agency	
	ty Public Works, Flood Control
Comments	

Number#	STAPLE/E Rating:	
2016-13	18	
Action Title		
North Avenue Storm	n Drain Improvements, East Side, Lompoc	
<b>Action Description</b>		
	uture second phase and will construct 30" and 24" storm drain with 4 catch	
	oncrete sidewalk, curb and gutter. The project is located at the intersection of	of
"H" street and North		
<b>Relevant Objective</b>		
	Promote disaster resiliency for future development to	
	reduce/eliminate vulnerability to hazards	
	1A	
	1B	
	1C	
	Promote disaster resiliency for existing development and	
	people to reduce/eliminate vulnerability to hazards	
	2A	
	2B	
	2C	
X		
	Enhance hazard Mitigation coordination and	
	communication	
	3A 3B	
	20	
X	3D	
	3D 3E	
	3F	
	3G	
	3H	
	31	
	3J	
Applicable Hazard		
	Cu	
	Earthquake	
	Liquefaction	
	Landslides and Other Earth Movements	
	Expansive Soils/Land Subsidence	
	Wildfire	
X		
	Coastal Storm Surge	
	Climate-Related	
	Sea Level Rise/Coastal Flooding and Erosion	
	Droughts and Water Shortage	

	Extreme Heat
	Freeze
	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
2019 (three years)	
<b>Cost/Funding Sour</b>	ce
\$582,000/ Acquire H	IMA Grant, PDM Grant
Responsible Agency	
Santa Barbara Count	ty Public Works, Flood Control
Comments	

Number#		STAPLE/E Rating:		
2016-14		12		
Action Title				
Cebada Canyon Ch	annel Improvements, Lompoc	Valley		
Action Description	n			
This Project is loca	ted in the vicinity of MCLaugh	lin Rd. The project will reconstruct a portion of		
	te lined rectangular channel.			
<b>Relevant Objectiv</b>	e			
	Promote disaster resiliency	for future development to		
	reduce/eliminate vulnerabi			
	1A			
-	1B			
	1B 1C			
		<sup>7</sup> for existing development and		
	people to reduce/eliminate			
	2A			
	2B			
	2B x 2C			
	x 20			
2	Enhance hazard Mitigation	coordination and		
	communication			
	3A			
-	3B			
	3D x 3C			
	3D			
	3E			
_	3E 3F			
-	3G			
-	3H			
-	31			
—	3J			
Applicable Hazar				
	Earthquake			
	Liquefaction			
	Landslides and Other Earth	n Movements		
	*	Expansive Soils/Land Subsidence		
	Wildfire			
2	K Flood			
	Coastal Storm Surge			
	Climate-Related			
	Sea Level Rise/Coastal			
	Droughts and Water Shortage			
	Severe Weather and Ste	orms		
	Extreme Heat			

	Freeze
	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
TBD	
Cost/Funding Sour	ce
\$250,000/ Acquire	HMA Grant, PDM Grant
Responsible Agenc	
Santa Barbara Coun	ty Public Work, Flood Control
Comments	

Number#		STAPLE/E Rating:	
2016-15		12	
Action Title			
	Master Drainage Plan, Santa Ba	ırbara	
Action Description			
	• •	the Pacific Ocean to the Five Points roundabout.	
		hat will widen the channel in order to improve	
conveyance capacit			
Relevant Objective	2		
	Promote disaster resiliency	for future development to	
	reduce/eliminate vulnerabil	-	
Х			
	1B		
	1C		
		for existing development and	
	people to reduce/eliminate		
	2A		
	2B		
	2C		
	Enhance hazard Mitigation	coordination and	
	communication		
	3A		
	3B		
X	3C		
	3D		
	3E		
	3F		
	3G		
	3H		
	31		
	3J		
Applicable Hazard	ls		
Γ	Fourthanaliza		
	Earthquake		
	Liquefaction	Movemente	
	Landslides and Other Earth		
	Expansive Soils/Land Subsidence		
	Wildfire		
X			
	Coastal Storm Surge Climate-Related		
		Flooding and Fresion	
	Sea Level Rise/Coastal		
	Droughts and Water Shortage Severe Weather and Storms		
	Extreme Heat	11115	
	Ехиете пеат		

	r.	
	Freeze	
	Hailstorm	
	Tornado	
	Hurricane	
	Windstorm	
	Energy Shortage and Energy Resilience	
	Oil Spill	
	Dam Failure	
	Agricultural Pests and Disease	
	Epidemic/Pandemic/Vector Borne Disease	
	Hazardous Material Release	
	Radiological Incident	
	Terrorism	
	Cyber Threat	
	Aircraft Crash	
	Train Accident; Explosion and/or Chemical Release	
	Natural Gas Pipeline/Storage Facility Accidents	
	Levee Failure	
	Tsunami	
	Civil Disturbance	
	Well Stimulation/Hydraulic Fracking	
	Marine Invasive Species	
Estimated timeline		
TBD		
Cost/Funding Sour	rce	
8	n/construct/ Acquire HMA Grant, PDM Grant	
Responsible Agenc		
	ity Public Works, Flood Control	
Comments	·	

Number#		STAPLE/E Rating:	
2016-16	12		
Action Title			
	aster Drainage Plan, Santa Bar	bara	
Action Description			
	velop a Master Drainage Plan	for the Mission Canyon area.	
<b>Relevant Objective</b>	2		
	Promote disaster resiliency		
	reduce/eliminate vulnerabi	lity to hazards	
Х			
	1B		
	1C		
		for existing development and	
	people to reduce/eliminate	vulnerability to hazards	
	2A		
	2B		
	2C		
	Enhance hazard Mitigation	a coordination and	
	communication		
	3A		
	3B		
X			
	3D		
	3E		
	3F		
	3G		
	3H		
	3I		
	3J		
Applicable Hazard	ls		
	Earthquake		
	Liquefaction		
	Landslides and Other Earth		
	Expansive Soils/Land	Subsidence	
	Wildfire		
X			
	Coastal Storm Surge		
	Climate-Related		
	Sea Level Rise/Coastal	Flooding and Erosion	
	Droughts and Water Sh	ortage	
	Severe Weather and St		
	Extreme Heat		
	Freeze		
	Hailstorm		

	Tornado	
	Hurricane	
	Windstorm	
	Energy Shortage and Energy Resilience	
	Oil Spill	
	Dam Failure	
	Agricultural Pests and Disease	
	Epidemic/Pandemic/Vector Borne Disease	
	Hazardous Material Release	
	Radiological Incident	
	Terrorism	
	Cyber Threat	
	Aircraft Crash	
	Train Accident; Explosion and/or Chemical Release	
	Natural Gas Pipeline/Storage Facility Accidents	
	Levee Failure	
	Tsunami	
	Civil Disturbance	
	Well Stimulation/Hydraulic Fracking	
	Marine Invasive Species	
Estimated timel		
2018 (two years)	-	
Cost/Funding So		
	re HMA Grant, PDM Grant	
	ency/Department	
- 0	ounty Public Works, Flood Control	
Comments		

Number#	STAPLE/E Rating:		
2016-17	12		
Action Title			
San Pedro Cree	ish Passage, Goleta		
Action Descrip	n		
	odify the existing concrete lined channel in order to accommodate	fish passage i	
	Avenida Gorrion and Calle Real.		
Relevant Obje	e		
	Promote disaster resiliency for future development to		
	reduce/eliminate vulnerability to hazards		
	1A		
	1B		
	1C		
	Promote disaster resiliency for existing development and		
	people to reduce/eliminate vulnerability to hazards		
	2A		
	2B		
	2C		
	Enhance hazard Mitigation coordination and		
	communication		
	3A		
	3B		
	x 3C		
	3D		
	3E		
	3F		
	3G		
	3H		
	31		
	3J		
Applicable Ha	ds		
	Earthquake		
	Liquefaction		
	Landslides and Other Earth Movements		
	Expansive Soils/Land Subsidence		
	Wildfire		
	x Flood		
	Coastal Storm Surge		
	Climate-Related		
	Sea Level Rise/Coastal Flooding and Erosion		
	Droughts and Water Shortage		
	Severe Weather and Storms		
	Extreme Heat		
	Freeze		

	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
TBD	-
Cost/Funding Source	ce
\$4,907,000/ Acquire	HMA Grant or PDM Grant
Responsible Agency	7/Department
Santa Barbara Count	y Public Work, Flood Control
Comments	

Number#	ST	APLE/E Rating:			
2016-18	10				
Action Title					
Blosser Basin, Santa Maria					
Action Descriptio	•				
_		installing a pipe to drain the runoff from the			
basin.					
Relevant Objectiv	ve				
_					
	Promote disaster resiliency for f	Promote disaster resiliency for future development to			
	reduce/eliminate vulnerability to	o hazards			
	1A				
	1B				
	1C				
	Promote disaster resiliency for e	<b>e</b> 1			
	people to reduce/eliminate vuln	erability to hazards			
	2A				
	2B				
	x 2C				
	x 2D				
		Enhance hazard Mitigation coordination and			
		ommunication			
	3A				
	3B				
	x 3C				
	3D				
	3E				
	3F				
	3G				
	3H				
_	31				
	3J				
Applicable Hazards					
[	Earthquake				
[	Liquefaction				
Γ	Landslides and Other Earth Mo	vements			
Γ	Expansive Soils/Land Subsi	dence			
Γ	Wildfire				
Γ	x Flood				
	Coastal Storm Surge				
	Climate-Related				
	Sea Level Rise/Coastal Floo	ding and Erosion			
1	$\mathbf{D} = 1 \mathbf{i} + 1 \mathbf{W} \mathbf{i} + 0 1 \mathbf{i}$				

Droughts and Water Shortage Severe Weather and Storms

Extreme Heat         Freeze         Hailstorm         Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
HailstormTornadoHurricaneWindstormEnergy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic FrackingMarine Invasive Species
TornadoHurricaneWindstormEnergy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic FrackingMarine Invasive Species
Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species
Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete
Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete
Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete
Marine Invasive Species       Estimated timeline to complete
Marine Invasive Species       Estimated timeline to complete
-
-
Cost/Funding Source
TBD/Acquire HMA Grant, PDM Grant
Responsible Agency/Department
Santa Barbara County Public Works, Flood Control
Comments

Number#		STAPLE/E Rating:		
2016-19		10		
Action Title				
Bradley Channe	l Relining, Santa Mari	ia		
Action Descript	tion			
		ng concrete lined channel between Jones St., and Main St.		
	e the risk of future str	ructural failure.		
Relevant Objec	tive			
	Promote disaste	Promote disaster resiliency for future development to		
		te vulnerability to hazards		
	1A			
	1B			
	1C			
	Promote disaste	er resiliency for existing development and		
		e/eliminate vulnerability to hazards		
	2A			
	2B			
	x 2C			
	x 2D			
	Enhance hazard	d Mitigation coordination and		
	communication			
	3A			
	3B			
	x 3C			
	3D			
	3E			
	3F			
	3G			
	3H			
	31			
	3J			
Applicable Haz	ards			
	Earthquake			
	Liquefaction	n		
		Other Earth Movements		
	Expansive S	Soils/Land Subsidence		
	Wildfire			
	x Flood			
	Coastal Stor	rm Surge		
	Climate-Related	-		
		Rise/Coastal Flooding and Erosion		
		nd Water Shortage		
		ther and Storms		
	Extreme	e Heat		

	Freeze
	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	e to complete
TBD	
Cost/Funding Sou	rce
\$2,037,000/HMA C	
Responsible Agene	cy/Department
	nty Public Works, Flood Control
Comments	

Number#		STA	PLE/E Rating:
2016-20		10	
Action Title			
		rovements, Santa Maria	
Action Descrip			
			ting channel: between HWY 101 and Route
			ompletion of this project will minimize the
flood hazard to		ent properties.	
<b>Relevant Objec</b>	ctive		
			1 1 44
		Promote disaster resiliency for fut	
		reduce/eliminate vulnerability to h	lazards
		1A 1D	
		1B	
		1C	ation description of a discussion of the discuss
		Promote disaster resiliency for exi	0 1
		people to reduce/eliminate vulnera	adding to nazards
		2A 2P	
		2B	
	X	2C	
	Х	2D	· · 1
		Enhance hazard Mitigation coordination and	
		communication	
		<u>3A</u>	
		<u>3B</u>	
	X	<u>3C</u>	
		3D	
		3E	
		3F	
		3G	
		<u>3H</u>	
		31	
A 10 11 TT		3J	
Applicable Haz	zards		
		Earthquake	
		Liquefaction	
		Landslides and Other Earth Move	monta
		Expansive Soils/Land Subside Wildfire	
	v	Flood	
	Х		
		Coastal Storm Surge Climate-Related	
			ng and Erosion
		Sea Level Rise/Coastal Floodi	
		Droughts and Water Shortage	
		Severe Weather and Storms	

	Extreme Heat
	Freeze
	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
TBD	
Cost/Funding Sour	ce
\$2,032,000/ Acquire	HMA Grant, PDM Grant
Responsible Agency	
	ty Public Works, Flood Control
Comments	

Number#	STAPI	LE/E Rating:
2016-21	16	-
Action Title		
Maria Ygnacio Eas	t Debris Basin Modification, upper area	of Goleta
Action Description	1	
This project will m	odify the existing basin: will include rem	noval of two berms currently blocking the
old creek, re-gradin	g of creek banks, native plants restoration	on.
Relevant Objectiv	e	
	Promote disaster resiliency for futur	re development to
	reduce/eliminate vulnerability to haz	
	1A	
	1B	
	1C	
	Promote disaster resiliency for exist	ing development and
	people to reduce/eliminate vulnerable	
	2A	
	2B	
	2C	
	Enhance hazard Mitigation coordina	ation and
	communication	
	3A	
	3B	
Х	3C	
	3D	
	3E	
	3F	
	3G	
	ЗН	
	31	
	3J	
Applicable Hazar		
	Earthquake	
	Liquefaction	
	Landslides and Other Earth Moveme	
	Expansive Soils/Land Subsidence	ce
	Wildfire	
2		
	Coastal Storm Surge	
	Climate-Related	
	Sea Level Rise/Coastal Flooding	g and Erosion
	Droughts and Water Shortage	
	Severe Weather and Storms	
	Extreme Heat	
	Freeze	

HailstormTornadoHurricaneWindstormEnergy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
HurricaneWindstormEnergy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
WindstormEnergy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Energy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Oil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Dam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Agricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Epidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Hazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Radiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
TerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Cyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Aircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
<ul> <li>Train Accident; Explosion and/or Chemical Release</li> <li>Natural Gas Pipeline/Storage Facility Accidents</li> <li>Levee Failure</li> <li>Tsunami</li> <li>Civil Disturbance</li> <li>Well Stimulation/Hydraulic Fracking</li> </ul>
Natural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunamiCivil DisturbanceWell Stimulation/Hydraulic Fracking
Levee Failure Tsunami Civil Disturbance Well Stimulation/Hydraulic Fracking
Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking
Civil Disturbance Well Stimulation/Hydraulic Fracking
Well Stimulation/Hydraulic Fracking
Marine Invasive Species
Estimated timeline to complete
2018
Cost/Funding Source
\$593,000/Acquire HMA Grant, PDM Grant
Responsible Agency/Department
Santa Barbara County Public Works, Flood Control
Comments

Number#		STAPLE/E Rating:
2016-22		16
Action Title	<u>.</u>	
Maria Ygnacio Ma	in Debris Basin Modification, upp	per area of Goleta
Action Description	n	
This project will re	move the existing debris basin dat	m embankment, to restore the fish passage. Also
	g and native plants restoration.	
Relevant Objectiv	e	
	Promote disaster resiliency for	or future development to
	reduce/eliminate vulnerability	
	1A	
	1B	
	1C	
	Promote disaster resiliency for	or existing development and
	people to reduce/eliminate vu	0 1
Γ	2A	
	2B	
	2C	
	Enhance hazard Mitigation co	oordination and
	communication	
	3A	
	3B	
2	x 3C	
	3D	
	3E	
	3F	
	3G	
	3Н	
	31	
	3J	
Applicable Hazar	ds	
	Earthquake	
	Liquefaction	
	Landslides and Other Earth N	Iovements
	Expansive Soils/Land Su	bsidence
	Wildfire	
2	K Flood	
	Coastal Storm Surge	
	Climate-Related	
	Sea Level Rise/Coastal Fl	ooding and Erosion
Γ	Droughts and Water Shor	
Γ	Severe Weather and Storr	ns
	Extreme Heat	
	Freeze	

	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
2018 (two years)	
Cost/Funding Sour	
\$885,000/Acquire H	MA Grant, PDM Grant
<b>Responsible Agency</b>	
	y Public Works, Flood Control
Comments	

Number#	STA	APLE/E Rating:	
2016-23		16	
Action Title			
San Ysidro Debris	Basin Modification, Montecito area		
Action Description	1		
		order to improve the fish passage; will	
	l native plants restoration.		
Relevant Objectiv	e		
	Promote disaster resiliency for fu	ture development to	
	reduce/eliminate vulnerability to		
	1A		
	1B		
	1C		
	Promote disaster resiliency for ex	sisting development and	
	people to reduce/eliminate vulner	•	
	2A		
	2B		
	2C		
	Enhance hazard Mitigation coord	lination and	
	communication		
	3A		
	3B		
Х	3C		
	3D		
	3E		
	3F		
	3G		
	3Н		
	3I		
	3J		
Applicable Hazaro	ls		
	Earthquake		
	Liquefaction		
	Landslides and Other Earth Move		
	Expansive Soils/Land Subsid	ence	
	Wildfire		
Х			
	Coastal Storm Surge		
	Climate-Related		
	Sea Level Rise/Coastal Flood		
	Droughts and Water Shortage	<u>,                                     </u>	
	Severe Weather and Storms		
	Extreme Heat		
	Freeze		

	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	
2021	•
Cost/Funding Sour	·ce
	HMA Grant, PDM Grant
Responsible Agenc	y/Department
- 0	ity Public Works, Flood Control
Comments	

Number#	STAPLE/E Rating:		
2016-24	16		
Action Title			
Cold Springs D	ris Basin Modification, Montecito area		
Action Descrip			
-	ither modify or remove the existing basin, in order to improve the fish passage	;	
	ng and native plants restoration.		
Relevant Obje	ve		
	Promote disaster resiliency for future development to		
	reduce/eliminate vulnerability to hazards		
	1A		
	1B		
	1C		
	Promote disaster resiliency for existing development and		
	people to reduce/eliminate vulnerability to hazards		
	2A		
	2B		
	2C		
	Enhance hazard Mitigation coordination and		
	communication		
	3A		
	3B		
	x 3C		
	3D		
	3E		
	3F		
	3G		
	3Н		
	31		
	3J		
Applicable Ha	rds		
	Earthquake		
Liquefaction			
	Landslides and Other Earth Movements		
	Expansive Soils/Land Subsidence		
	Wildfire		
	x Flood		
	Coastal Storm Surge		
	Climate-Related		
	Sea Level Rise/Coastal Flooding and Erosion		
	Droughts and Water Shortage		
	Severe Weather and Storms		
	Extreme Heat		
	Freeze		

HailstormTornadoHurricaneWindstormEnergy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee FailureTsunami
HurricaneWindstormEnergy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
WindstormEnergy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Energy Shortage and Energy ResilienceOil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Oil SpillDam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Dam FailureAgricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Agricultural Pests and DiseaseEpidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Epidemic/Pandemic/Vector Borne DiseaseHazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Hazardous Material ReleaseRadiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Radiological IncidentTerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
TerrorismCyber ThreatAircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure
Aircraft CrashTrain Accident; Explosion and/or Chemical ReleaseNatural Gas Pipeline/Storage Facility AccidentsLevee Failure
Train Accident; Explosion and/or Chemical Release Natural Gas Pipeline/Storage Facility Accidents Levee Failure
Natural Gas Pipeline/Storage Facility AccidentsLevee Failure
Levee Failure
Tsunami
Civil Disturbance
Well Stimulation/Hydraulic Fracking
Marine Invasive Species
Estimated timeline to complete
2021
Cost/Funding Source
\$2,299,000/Acquire HMA Grant, PDM Grant
Responsible Agency/Department
Santa Barbara County Public Works, Flood Control
Comments

Number#	STAP	LE/E Rating:	
2016-25	16	-	
Action Title	· · ·		
Rattlesnake Debris	Basin Modification, upper area of Santa	Barbara	
Action Description	1		
This project will eit	her remove or modify the existing basin	, on order to improve the fish passage;	
will include grading	g and native plants restoration.		
<b>Relevant Objective</b>	e		
	Dromete disector resilier or for fature	a development to	
	Promote disaster resiliency for futur reduce/eliminate vulnerability to has		
	1A		
	1B		
		· · · · · · · · · · · · · · · · · · ·	
	Promote disaster resiliency for exist		
	people to reduce/eliminate vulnerab	inty to nazards	
	2A		
	2B		
	2C		
	Enhance hazard Mitigation coordina	ation and	
	communication		
	3A		
	3B		
X			
	3D		
	3E		
	3F		
	3G		
	3H		
	31		
	3J		
Applicable Hazard	ls		
Г	Earthquake		
-	Liquefaction		
	Landslides and Other Earth Movem	ents	
	Expansive Soils/Land Subsidence		
	Wildfire		
x	151 1		
	Coastal Storm Surge		
	Climate-Related		
	Sea Level Rise/Coastal Flooding	and Erosion	
-	Droughts and Water Shortage		
-	Severe Weather and Storms		
-	Extreme Heat		

	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
2018	
<b>Cost/Funding Sour</b>	
	MA Grant, PDM Grant
<b>Responsible Agency</b>	-
	y Public Works, Flood Control
Comments	

Number#	STAPLE/E Rat	ing:	
2016-26 14			
Action Title			
Faraday Storm Drai	n, Santa Ynez		
Action Description			
This project consists	s of acquiring easements and constructing ~1920	feet of storm drain, west of	
Faraday St., betwee	n Olive St. and Pine St. in Santa Ynez. This futur	e project will reduce the	
flooding during rain	events.		
Relevant Objective			
	Dromoto disaster resilionay for future dayala	amont to	
	Promote disaster resiliency for future develop	pinent to	
	reduce/eliminate vulnerability to hazards		
X	1A 1B		
	1B 1C		
		lonmont and	
	Promote disaster resiliency for existing devel		
	people to reduce/eliminate vulnerability to hazards		
	2B		
	2D 2C		
	Enhance hazard Mitigation coordination and		
	communication		
	3A		
	3B		
X	20		
	3D		
	3E		
	3F		
	3G		
	3Н		
	31		
	3J		
Applicable Hazard	s		
	Earthquake		
	Liquefaction		
	Landslides and Other Earth Movements		
	Expansive Soils/Land Subsidence		
	Wildfire		
X			
	Coastal Storm Surge		
	Climate-Related	-1	
	Sea Level Rise/Coastal Flooding and Ero	sion	
	Droughts and Water Shortage		
	Severe Weather and Storms		
	Extreme Heat		

	Freeze		
	Hailstorm		
	Tornado		
	Hurricane		
	Windstorm		
	Energy Shortage and Energy Resilience		
	Dil Spill		
	Dam Failure		
	Agricultural Pests and Disease		
	Epidemic/Pandemic/Vector Borne Disease		
	Hazardous Material Release		
	Radiological Incident		
Т	Ferrorism		
	Cyber Threat		
Aircraft Crash			
Т	Frain Accident; Explosion and/or Chemical Release		
N	Natural Gas Pipeline/Storage Facility Accidents		
L	Levee Failure		
Г	<u>r</u> sunami		
0	Civil Disturbance		
V	Well Stimulation/Hydraulic Fracking		
N	Marine Invasive Species		
Estimated timeline to	complete		
2019			
<b>Cost/Funding Source</b>			
\$1,570,000/Acquire HN	MA Grant, PDM Grant		
Responsible Agency/D	Department		
Santa Barbara County I	Public Works, Flood Control		
Comments			

Number#		STAPLE/E Rating:			
2016-27		16			
Action Title					
Unit II Channel Imp	provements, Santa Maria				
Action Description	l				
		capacity of the existing channel by			
		ately 5,000 linear feet of channel.			
adjacent farm land.	y acquisition. The improvement	nts will provide additional flood p	rotection to the		
Relevant Objective	2				
			_		
		y for future development to			
	reduce/eliminate vulnerab	ility to hazards			
	1A				
	1B				
		C			
		y for existing development and			
	people to reduce/eliminate	vulnerability to hazards			
v	2B x 2C				
	$\begin{array}{c c} x & 2C \\ \hline x & 2D \end{array}$				
Α	Enhance hazard Mitigation coordination and				
	communication				
	3A				
	3B				
Х	3C				
	3D				
	3E				
	3F				
	3G				
	3H				
	31				
Applicable Harren	3J				
Applicable Hazard	IS				
	Earthquake		]		
	Liquefaction				
	Landslides and Other Eart	h Movements			
	Expansive Soils/Land				
	Wildfire				
Х	Flood		]		
	Coastal Storm Surge		]		
	Climate-Related				
	Sea Level Rise/Coasta				
	Droughts and Water S	nortage			

Extreme Heat         Freeze         Hailstorm         Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete 2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Kesponsible Agency/Department Santa Barbara County Public Works, Flood Control Comments		Severe Weather and Storms
Freeze         Hailstorm         Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Leve Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete           2018    Cost/Funding Source S3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		
Hailstorm         Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species		
Tornado         Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete 2018           Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant		
Hurricane         Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species		
Windstorm         Energy Shortage and Energy Resilience         Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete 2018 Cost/Funding Source S3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		
Energy Shortage and Energy Resilience Oil Spill Dam Failure Agricultural Pests and Disease Epidemic/Pandemic/Vector Borne Disease Hazardous Material Release Radiological Incident Terrorism Cyber Threat Aircraft Crash Train Accident; Explosion and/or Chemical Release Natural Gas Pipeline/Storage Facility Accidents Levee Failure Tsunami Civil Disturbance Well Stimulation/Hydraulic Fracking Marine Invasive Species Estimated timeline to complete 2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		
Oil Spill         Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete 2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		
Dam Failure         Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete 2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		
Agricultural Pests and Disease         Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete 2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		
Epidemic/Pandemic/Vector Borne Disease         Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete 2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		Dam Failure
Hazardous Material Release         Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Z018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		6
Radiological Incident         Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Z018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Ĩ
Terrorism         Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Hazardous Material Release
Cyber Threat         Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species    Estimated timeline to complete 2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		Radiological Incident
Aircraft Crash         Train Accident; Explosion and/or Chemical Release         Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Terrorism
Image: style styl		Cyber Threat
Natural Gas Pipeline/Storage Facility Accidents         Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Aircraft Crash
Levee Failure         Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Train Accident; Explosion and/or Chemical Release
Tsunami         Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Natural Gas Pipeline/Storage Facility Accidents
Civil Disturbance         Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Levee Failure
Well Stimulation/Hydraulic Fracking         Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Tsunami
Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Civil Disturbance
Marine Invasive Species         Estimated timeline to complete         2018         Cost/Funding Source         \$3,602,000/Acquire HMA Grant, PDM Grant         Responsible Agency/Department         Santa Barbara County Public Works, Flood Control		Well Stimulation/Hydraulic Fracking
2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control		
2018 Cost/Funding Source \$3,602,000/Acquire HMA Grant, PDM Grant Responsible Agency/Department Santa Barbara County Public Works, Flood Control	Estimated timeline	
\$3,602,000/Acquire HMA Grant, PDM Grant <b>Responsible Agency/Department</b> Santa Barbara County Public Works, Flood Control		*
\$3,602,000/Acquire HMA Grant, PDM Grant <b>Responsible Agency/Department</b> Santa Barbara County Public Works, Flood Control	<b>Cost/Funding Sour</b>	ce
Responsible Agency/Department Santa Barbara County Public Works, Flood Control	e	
Santa Barbara County Public Works, Flood Control		
	Comments	

Number#		STA	APLE/E Rating:	
2016-28		17		
Action Title				
Airport Ditch Lin	ning	, Orcutt		
Action Descript				
		ace a portion of the existing earthen		
			located along Skyway Drive, in Santa	
	ct w	ill reduce erosion and deposition in	downstream reaches that subsequentl	У
require cleaning. Relevant Object	ivo			
Kelevant Object	ive			
		Promote disaster resiliency for fu	iture development to	
		reduce/eliminate vulnerability to		
		1A		
		1B		
	-	10 1C		
		Promote disaster resiliency for ex	kisting development and	
		people to reduce/eliminate vulne		
		2A		
		2B		
	Х	2C		
	Х	2D		
		Enhance hazard Mitigation coord	lination and	
		communication		
		3A		
		3B		
	Х	3C		
		3D		
		3E		
		3F		
		3G		
		3H		
		31		
		3J		
Annligghla II.				
Applicable Haza	arus			
		Earthquake		
		Liquefaction		
		Landslides and Other Earth Mov	ements	
		Expansive Soils/Land Subsid		
		Wildfire		
	х	Flood		
		Coastal Storm Surge		
		Climate-Related		
		Sea Level Rise/Coastal Flood	ing and Erosion	
		Droughts and Water Shortage		

Severe Weather and Storms		
Extreme Heat		
Freeze		
Hailstorm		
Tornado Hurricane		
Windstorm		
Energy Shortage and Energy Resilience		
Oil Spill		
Dam Failure		
Agricultural Pests and Disease		
Epidemic/Pandemic/Vector Borne Disease		
Hazardous Material Release		
Radiological Incident		
Terrorism		
Cyber Threat		
Aircraft Crash		
Train Accident; Explosion and/or Chemical Release		
Natural Gas Pipeline/Storage Facility Accidents		
Levee Failure		
Tsunami		
Civil Disturbance		
Well Stimulation/Hydraulic Fracking		
Marine Invasive Species		
Estimated timeline to complete		
2018		
Cost/Funding Source		
\$1,135,000/ Acquire HMA Grant, PDM Grant		
Responsible Agency/Department		
Santa Barbara County Public Works, Flood Control		
Comments		

Number#		STAPLE/E Rating:	
2016-29		7	
Action Title			
Stockpile Area – So	uth Coast		
Action Description			
1 0		th Coast for use as a stockpile by Flood Co	
		y stockpile materials cleared out of channe The materials will then be disposed of by	is and
	ey need fill material for constr		
Relevant Objective			
U			
	Promote disaster resiliency	for future development to	
	reduce/eliminate vulnerabi	lity to hazards	
	1A		
	1B		
	1C		
		for existing development and	
	people to reduce/eliminate	vulnerability to hazards	
	2A 2P		
	2B 2C		
	Enhance hazard Mitigation	a coordination and	
	communication		
	3A		
	3B		
X	3C		
	3D		
	3E		
	3F		
	3G		
	3Н		
	31		
	3J		
Applicable Hazard	S		
Γ	Fouthqualta		
	Earthquake		
	Liquefaction Landslides and Other Earth	n Movements	
	Expansive Soils/Land		
	Wildfire		
X	Flood		
	Coastal Storm Surge		
	Climate-Related		
	Sea Level Rise/Coastal	Flooding and Erosion	
	Droughts and Water Sh		
	Severe Weather and St		
	Extreme Heat		

	Freeze
	Hailstorm
	Tornado
	Hurricane
	Windstorm
	Energy Shortage and Energy Resilience
	Oil Spill
	Dam Failure
	Agricultural Pests and Disease
	Epidemic/Pandemic/Vector Borne Disease
	Hazardous Material Release
	Radiological Incident
	Terrorism
	Cyber Threat
	Aircraft Crash
	Train Accident; Explosion and/or Chemical Release
	Natural Gas Pipeline/Storage Facility Accidents
	Levee Failure
	Tsunami
	Civil Disturbance
	Well Stimulation/Hydraulic Fracking
	Marine Invasive Species
Estimated timeline	to complete
TBD	
<b>Cost/Funding Sour</b>	
	HMA Grant, PDM Grant
Responsible Agency	-
	ty Public Works, Flood Control
Comments	

Number#	5	STAPLE/E Rating:		
2016-30	1	16		
Action Title				
Implementation of C	County Energy and Climate Actio	n Plan (ECAP)		
<b>Action Description</b>				
		by: 1) Conducting annual monitoring and		
		g baseline data for emissions, etc.; 3)		
Ŭ		groups that support ECAP implementation		
Relevant Objective				
	Promote disaster resiliency fo	r future development to		
	reduce/eliminate vulnerability	-		
	1A			
	1B			
	1C			
	Promote disaster resiliency fo	r existing development and		
	people to reduce/eliminate vul			
Х	2A			
	2B			
	2C			
	Enhance hazard Mitigation co	ordination and		
	communication			
		3A		
	3B			
		3C		
X	3D			
	3E			
	3F			
X	3G			
	3H			
X	31			
X	3J			
Applicable Hazard	S			
	Earthquake			
	Liquefaction			
	Landslides and Other Earth M	lovements		
	Expansive Soils/Land Sub	osidence		
	Wildfire			
X	Flood			
X	Coastal Storm Surge			
X	Climate-Related			
Х	Sea Level Rise/Coastal Flo			
X	Droughts and Water Short			
	Severe Weather and Storm	18		
	Extreme Heat			

	Freeze	
_		
	Hailstorm	
	Tornado	
	Hurricane	
	Windstorm	
	Energy Shortage and Energy Resilience	
	Oil Spill	
	Dam Failure	
Х	Agricultural Pests and Disease	
	Epidemic/Pandemic/Vector Borne Disease	
	Hazardous Material Release	
	Radiological Incident	
	Terrorism	
	Cyber Threat	
	Aircraft Crash	
	Train Accident; Explosion and/or Chemical Release	
	Natural Gas Pipeline/Storage Facility Accidents	
	Levee Failure	
	Tsunami	
	Civil Disturbance	
	Well Stimulation/Hydraulic Fracking	
	Marine Invasive Species	
Estimated timeline	e to complete	
Ongoing		
Cost/Funding Sou	rce	
Unknown/ County	General Fund (salaries) Acquire HMA Grant, PDM Grant	
Responsible Agen		
Planning and Development		
Comments		

Number#	-			PLEE#
2016-31			20	
Action Title				
		e Threat Assessment Identification Project		
Action Description				XX 71. '1
•		a countywide agreed upon list of Critical or Essential and Essential Facilities, the criteria are not s		
		sential Facilities lack the necessary meta data (i.e.		
		lue, content cost) that would be beneficial to asses		• •
hazards.				
Because there is n	not	a comprehensive list of Critical or Essential Facilit	ties, the HM	P utilized the
		While the Hazus default data provided better insigh		
		ptions (i.e. structural characteristics of building) de		
		f the facilities and/or the community. To remedy the		•
		comprehensive Critical or Essential Facilities List	t and utilize	it in Hazus and
		on into the secure IP Gateway portal.		
Relevant Objecti	lve			
		Promote disaster resiliency for future developm	nent to	]
		reduce/eliminate vulnerability to hazards		
		1A		
-		1B		-
-		1C		
		Promote disaster resiliency for existing develop	pment and	-
		people to reduce/eliminate vulnerability to haz		
	Х	2A		-
-		2B		-
		2C		
		Enhance hazard Mitigation coordination and		
		communication		
		3A		
		3B		
		3C		
-		3D		_
-		3E		_
-		3F		_
-		3G		-
-		3Н		
		31		4
		3J		
Applicable Haza	rds			
]	X	Earthquake		]
Ē	Х	Liquefaction		1
Ē	Х	Landslides and Other Earth Movements		1
	Х	Expansive Soils/Land Subsidence		]
	Х	Wildfire		

X			
X	6		
X			
X	8		
X	6		
X			
X			
Х			
X			
X			
X	Windstorm		
X			
X			
X	Dam Failure		
Х	Agricultural Pests and Disease		
Х	Epidemic/Pandemic/Vector Borne Disease		
Х	Hazardous Material Release		
Х	Radiological Incident		
Х	Terrorism		
Х	Cyber Threat		
Х	Aircraft Crash		
Х	Train Accident; Explosion and/or Chemical Release		
Х	Natural Gas Pipeline/Storage Facility Accidents		
Х			
Х	Tsunami		
Х	Civil Disturbance		
Х	Well Stimulation/Hydraulic Fracking		
Х	Marine Invasive Species		
Estimated timeline			
2018	-		
Cost/Funding Sour	·ce		
\$100,000/Acquire HMA Grant, PDM Grant			
Responsible Agenc	Responsible Agency/Department		
County Office of Emergency Management			
Comments			

Number#		STAPLE/E Rating:		
2016-32		19		
Action Title				
Establish Drought				
Action Descriptio				
		ught Task Force to: 1) Assess vulne		
	itigation projects and programs	onitor water supply; 4) Plan for dro	ugnt; 5)	
Develop related in	itigation projects and programs	•		
Relevant Objectiv	ve			
U				
	Promote disaster resilienc	y for future development to		
	reduce/eliminate vulnerab	ility to hazards		
	1A			
	1B			
	1C			
		y for existing development and		
	people to reduce/eliminate x 2A	e vulnerability to nazards		
-	$\begin{array}{c c} x & 2A \\ \hline & 2B \end{array}$			
_	2B 2C			
	Enhance hazard Mitigatio	n coordination and		
	communication			
	3A			
	3B			
	3C			
	x 3D			
	3E			
	3F			
	x 3G			
_	3Н			
_	x 3I			
	x 3J			
Applicable Hazar	'ds			
Г	Earthquake			
-	Liquefaction			
-	Landslides and Other Eart	h Movements		
	Expansive Soils/Land			
F	Wildfire			
F	Flood			
	Coastal Storm Surge			
	Climate-Related			
		l Flooding and Erosion		
	x Droughts and Water S			
	Severe Weather and S	torms		
	Extreme Heat			

	Freeze	
	Hailstorm	
	Tornado	
	Windstorm	
_	Energy Shortage and Energy Resilience	
	Oil Spill	
	Dam Failure	
X	A Agricultural Pests and Disease	
	Epidemic/Pandemic/Vector Borne Disease	
	Hazardous Material Release	
	Radiological Incident	
	Terrorism	
	Cyber Threat	
	Aircraft Crash	
	Train Accident; Explosion and/or Chemical Release	
	Natural Gas Pipeline/Storage Facility Accidents	
	Levee Failure	
	Tsunami	
	Civil Disturbance	
	Well Stimulation/Hydraulic Fracking	
	Marine Invasive Species	
Estimated timeline	e to complete	
Cost/Funding Sou	rce	
Unknown/ Ongoing	g Salaries, General Fund, Special District Budgets, Acquire HMA Grant, PDI	М
Grant		
Responsible Agence		
Chief Executive Of	fice	
Comments		
Once Task Force is	established, this will remain an on-going mitigation action.	

<b>Number#</b> 2016-33	STAPLE/E Rating: 17
Action Title:	11
Retrofit Water Supply Systems	
Action Description	
Improve water supply and delivery systems to say	ve water through actions as: 1) Design water
	; 2) Develop new or upgrade existing water delivery
system into and out of Lake Cachuma.	, , , , , , , , , , , , , , , , , , ,
Relevant Objective	
Promote disaster resilienc	y for future development to
reduce/eliminate vulnerab	ility to hazards
1A	
1B	
1C	
Promote disaster resilienc	y for existing development and
people to reduce/eliminate	
x 2A	
28	
2C	
Enhance hazard Mitigatio	n coordination and
communication	
3A	
3B	
3C	
3D	
3E	
3F	
x 3G	
ЗН	
x 3I	
x 3J	
Applicable Hazards	
Earthquake	
Liquefaction	
Landslides and Other Eart	th Movements
Expansive Soils/Land	
Wildfire	
Flood	
Coastal Storm Surge	
Climate-Related	
Sea Level Rise/Coasta	l Flooding and Erosion
x Droughts and Water S	
Severe Weather and S	
Extreme Heat	

	Freeze			
–	Hailstorm			
–				
	Tornado			
	Windstorm			
	Energy Shortage and Energy Resilience			
	Oil Spill			
	Dam Failure			
2	Agricultural Pests and Disease			
	Epidemic/Pandemic/Vector Borne Disease			
	Hazardous Material Release			
	Radiological Incident			
	Terrorism			
	Cyber Threat			
	Aircraft Crash			
	Train Accident; Explosion and/or Chemical Release			
	Natural Gas Pipeline/Storage Facility Accidents			
	Levee Failure			
	Tsunami			
	Civil Disturbance			
	Well Stimulation/Hydraulic Fracking			
Marine Invasive Species				
Estimated timeline to complete				
2021	-			
Cost/Funding Sou	rce			
100 million/ Acqui	re HMA Grant, PDM Grant			
Responsible Agen	cy/Department			
Drought Task Forc				
Comments				
Collaboration with	State Water Resources			

Number#		TAPLE/E Rating:			
2016-34	1	9			
Action Title:					
-	te structure ignition vulnerabilities				
Action Description					
them vulnerable to mitigate their own	vulnerable homes and communities, based o ignition during wildfires. Educate the pu o vulnerabilities to home loss, including the	ablic about the need to assess and			
mitigation activiti Relevant Objecti					
Kelevant Objecti	ve				
	Promote disaster resiliency for futur				
	reduce/eliminate vulnerability to haz				
-					
	1C Promote disaster resilionay for evist	ing development and			
	Promote disaster resiliency for existing development and people to reduce/eliminate vulnerability to hazards				
	<ul> <li>people to reduce/eliminate vulnerability to hazards</li> <li>x 2A</li> </ul>				
	x 2A 2B				
-	2D 2C				
	Enhance hazard Mitigation coordina	tion and			
	communication				
	x 3A				
	3B				
Ī	3C				
	x 3D				
	3E				
	3F				
	3G				
	x 3H				
	31				
	3J				
Applicable Haza	rds				
Γ	Earthquake				
F	Liquefaction				
	Landslides and Other Earth Moveme	ents			
	Expansive Soils/Land Subsidence	ce			
	x Wildfire				
	Flood				
	Coastal Storm Surge				
	Climate-Related				
	Sea Level Rise/Coastal Flooding	and Erosion			
	Droughts and Water Shortage				
	Severe Weather and Storms				
	Extreme Heat				

	Freeze		
-	Hailstorm		
	Tornado		
	Windstorm		
-	Energy Shortage and Energy Resilience		
	Oil Spill		
	Dam Failure		
	Agricultural Pests and Disease		
	Epidemic/Pandemic/Vector Borne Disease		
	Hazardous Material Release		
	Radiological Incident		
	Terrorism		
	Cyber Threat		
	Aircraft Crash		
	Train Accident; Explosion and/or Chemical Release		
	Natural Gas Pipeline/Storage Facility Accidents		
	Levee Failure		
	Tsunami		
	Civil Disturbance		
Well Stimulation/Hydraulic Fracking			
Marine Invasive Species			
Estimated timelin	e to complete		
0 0	ally assess structure vulnerabilities to ignition and seek support for retrofits to		
existing housing st			
Cost/Funding Sou			
	nt via Fire Safe Council, CalFire, and/or FEMA		
Responsible Agen			
County Fire Depar	tment		
Comments			
-	s exist to assess and mitigate structure vulnerabilities to ignition during wildfires,		
so this effort is critic	al to lowering home losses.		

# SECTION 8 PLAN MAINTENANCE

The County and its Departments have been continually implementing mitigation actions and monitoring their effectiveness since the last HMP update in 2011. Many deferred projects from 2004 were completed successfully, while others are on-going or newly in-progress. This section sets forth the intended process for monitoring and maintaining the 2016 Plan update.

After FEMA approval and Board adoption, the 2011 HMP was integrated into the Safety Element of the Santa Barbara County Comprehensive Plan by Board Resolution. County planning efforts and Capital Projects directed by the county were influenced by the information taken from the 2011 HMP. The 2011 HMP was also utilized and referenced to update the 2013 County Emergency Operations Plan, the County Comprehensive (General) Plan, and the recent 2016 THIRA.

The County of Santa Barbara Office of Emergency Management (OEM) will be responsible for ensuring that this plan is being monitored. County OEM will call the Mitigation Advisory Committee (MAC) and the County Planning Team to meet on an annual basis to review the mitigation actions set forth in this plan and to discuss progress. During these meetings, the MAC will develop a list of items to be updated, added, or removed in future revisions of this plan.

Major disasters affecting the County, any legal changes, and/or other events may trigger a meeting of the MAC or The Santa Barbara County Planning Team, at which point they will be responsible for determining if the plan needs be updated before the five year mark.

Department heads and other emergency preparedness staff who serve in the County's Emergency Operations Center (EOC) will focus on evaluating the HMP in light of technological, budgetary, political changes, or other significant events that may occur during the year.

In addition to holding at least one annual meeting, the MAC and County Planning Team will meet to update the HMP every five years. To ensure that this update occurs in a timely fashion, after completion of the third year following plan adoption, the MAC and County Planning Team will undertake or attempt to hire a consultant to support the following activities:

- Thoroughly analyze and update the risk of natural and human-caused hazards in the Planning Area.
- Complete a new Annual Review Questionnaire and review previous survey
- Provide a detailed review and revision of the mitigation strategy.
- Prepare a new mitigation action plan.
- Prepare an updated draft HMP and submit it to Cal OES and FEMA for preliminary review.
- Submit the updated draft HMP to the Board of Supervisors for adoption.
- Submit the updated HMP to FEMA for final approval.

Upon adoption, the 2016 HMP will be again be integrated into the Safety Element of the Santa Barbara County Comprehensive Plan by Board Resolution. This ensures that future county planning efforts and Capital Projects directed by the county are influenced by the updated Plan. The 2016 HMP will also be utilized and referenced to update the County's Emergency Operations Plan, when it is updated in 2018. The MAC and Local Planning Teams will also bring their experience from the HMP process to influence city and county wide planning efforts.

Santa Barbara County 2017 Multi-Jurisdictional Hazard Mitigation 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 County will provide multiple opportunities for the public to comment on the revisions. A public notice will be published prior to the meetings to announce the comment period and meeting locations.

## 8.1 POINT OF CONTACT

Comments or suggestions regarding this plan may be submitted at any time to Robert Lewin, Director, Office of Emergency Management, using the following information:

Robert Lewin, Director Office of Emergency Management 4408 Cathedral Oaks Road Santa Barbara, CA 93110 <u>rlewin@sbcoem.org</u> 805-681-5526



# MONTECITO FIRE PROTECTION DISTRICT

2018 HAZARD MITIGATION ANNEX

# TABLE OF CONTENTS

1.0 Planning Process	3
1.1 Planning Team / Public Involvement	4
1.2 Planning Team Meeting Descriptions	5
1.3 Review and incorporation of Existing Plans	7
2.0 Planning Area Profile	8
2.1 Development Trends1	0
3.0 Risk Assessment1	1
3.1 Hazard Identification	2
3.2 Earthquake Hazard Profile1	6
3.3 Wildfire Hazard Profile1	7
3.4 Earth Movement Hazard Profile1	9
3.5 Energy Shortage & Resiliency Hazard Profile2	1
3.6 Flood Hazard Profile2	2
3.7 Terrorism Hazard Profile23	3
3.11 Climate Change24	4
3.12 Loss Estimates	5
4.0 Mitigation Strategies20	8
4.1 Identification of Mitigation Recommendations2	8
4.2 Prioritization of Mitigation Recommendations	0
5.0 Plan Maintenance	2

5.1 Planning Mechanisms	32
5.2 Periodic assessment Requirements	40
	+0
5.3 Update Requirements	41

# LIST OF TABLES

Table 3.1: Hazard Identification Risk Factors	13
Table 3.2: Risk Ranking Matrix	14
Table 3.3: Risk Rank Categorization	15
Table 3.4: Hazard Ranking Summary	15
Table 3.5: Asset Inventory Summary	25
Table 3.6: Vulnerability Assessment Calculations	26
Table 3.7: Loss Estimate Summary	27
Table 4.1: Hazard Mitigation Planning Goals	28
Table 4.2: Mitigation Activity Worksheet	29
Table 4.3: Benefit Cost Review Summary	31
Table 5.1 Regulatory Tools Table	33
Table 5.2: Administrative/Technical Tools Table	33
Table 5.3: Fiscal Tools Table	34
Table 5.4 Grant Funding Tools Table	34
Table 5.5 Outreach and Partnerships Tools Table	39

## **1.0 PLANNING PROCESS**

**§201.6(b):** In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

**§201.6(c)(1):** [The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Hazard mitigation planning is a dynamic process built on realistic assessments of past and present information that engages Montecito Fire Protection District (District) personnel to anticipate future hazards and develop meaningful strategies to address possible impacts and identified needs. The hazard mitigation planning process involves the following tasks:



- Organizing resources
- Assessing risks
- Developing mitigation strategies, goals, and priorities
- Adopting a plan
- Implementing the plan
- Monitoring progress
- Revising the plan as necessary

The overall approach to the Hazard Mitigation Plan (HMP) Annex development included building off the baseline understanding of hazards as defined in the 2017 Santa Barbara County Multi-

Jurisdictional Hazard Mitigation Plan, determining ways to reduce those risks, and prioritizing those recommendations for implementation.

1.1 Planning Team / Public Involvement

While District personnel and Risk Management Professionals had lead responsibility for the development of the District's annex, neighboring communities, agencies, and other interested parties were invited to participate on the Planning Team to review the annex during each phase of the document development. Each participating member of the Planning Team had the opportunity to impact all aspects of the planning process. In addition, District and Risk Management Professionals personnel assessed community support through active community involvement. Engaging the public through open planning meeting invitations and online review opportunities

**§201.6(b):** In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and non-profit interests to be involved in the planning process; and

**§201.6(c)(1):** [The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

The District solicited participation in the HMP Annex Planning Team by contacting both internal and external stakeholders via email. Internal stakeholders included members of the various District departments. External stakeholders were comprised of representatives from local agencies and the public.

The Planning Team met once during the course of the project to discuss project progress and obtain valuable input and information for documenting the annex. In addition, a flyer was posted on the District website advertising the date and location of the initial meeting to allow the public an opportunity to learn more about the hazard mitigation planning process and provide feedback regarding the direction planning should go. No members of the public participated in the planning process. The meeting held by the Planning team are detailed over the subsequent pages.

### 1.2 Planning Team Meeting Descriptions

Planning Team Meeting #1 - Project Initiation, Hazard Identification, and Information Collections

August 14, 2018

Attendees:

- Ryan Bray
- Jeff Briner
- Cindy Dyer
- Brian Garter

During the Project Initiation, Hazard Identification, and Information Collection Risk Meeting, Management Professionals provided а project overview that detailed the objectives and scope of the annex development. After a review of the project schedule and key tasks, the Planning Team participant's areas of expertise, resultant member responsibilities, and the public meeting was discussed.

- Aaron Garter
- Mike Pontes
- Mike Salas
- Ryan Uhl

A	В	C	D
	HAZ	ARD IDENTIFICATION AND RISK RANKING	
	Hazard Rank Factors	Hazard Factor Description	Rank
	Probability/Frequency		<b>•</b> 0
	Consequence/Severity		× 0
Earthquake	Vulnerability	Probability/Frequency Infeasible event - not applicable due to geographic location characteristics	- 0
Landragan	Risk Rank	Rare event - occurs less than once every 50 years	0
	Commenta	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	
		Regular event - occurs between once a year and once every 7 years Frequent event - occurs more than once a year	
			-
	Hazard Rank Factors	Hazard Factor Description	Rank
	Probability		0
	Vulnerability		0
Wildfire	Consequence		0
	Risk Rank	Not a Hazard	0
	Comments		
	Hazard Rank Factors	Hazard Factor Description	Rank
	Probability		0
	Vulnerability		0
Flood	Consequence		0
11000	Risk Rank	Not a Hazard	0
	Comments		
	Risk Ranking Worksheet	1	

The Planning Team meeting also served as a mechanism to determine the hazards the annex would profile. To effectively characterize the District's risk and vulnerability, Risk Management Professionals facilitated a discussion of the historical hazards with the Planning Team during this meeting. This meeting also served as a forum to discuss any background information and obtain asset inventory specifics.

The Planning Team determined the initial hazard profile ranking through a facilitated exercise using an automated interactive spreadsheet that asked specific questions regarding potential hazards and then assigned a relative value to each potential hazard accordingly, including numerical rankings (1-5) for the following criteria:

- Consequence/Severity How wide spread is the impact area?
- Secondary Effects Could the event trigger another event and separate response?
- Probability/Frequency Historical view of how often this type of event occurs locally and projected recurrence intervals.
- Warning/Onset Advance warning of the event, or none.

- Duration Length of elapsed time where response resources are active.
- Recovery Length of time until lives and property return to normal.

Section 3 outlines the methodology used for hazard rankings. All Planning Team participants were requested to provide existing plans and technical studies and identify existing mitigation features as part of a detailed information request.

Additionally, the Plan's mitigation goals and objectives were updated with the intention of reducing or eliminating the potential hazard impacts, which also provided the bases for determining the associated mitigation projections. The Planning Team reviewed the goals and objects from the the California State Multi-Hazard Mitigation Plan, and the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan as a baseline for determining the District's current mitigation goals.

Also, during the initial meeting, the Planning Team brainstormed potential mitigation activities and then performed a high-level Benefit-Cost Review on each of the identified mitigation actions. The review consisted of identifying all benefits and costs associated with implementing a mitigation action. Typical benefits include:

- Avoided physical damages (e.g., to buildings, infrastructure, and equipment)
- Avoided Loss of Function Costs (e.g., loss of utilities and lifeline)
- Avoided Causalities
- Avoided emergency management costs (e.g., emergency operations center costs, evacuations/rescue costs, and other management costs)

#### **Example FEMA Benefit-Cost Analysis**

Actions	Benefits (Pros)	Costs (Cons)	Priority
Floodproof 10 businesses in the downtown area	<ul> <li>Avoidance of 1 loss of life every 20 years (casualties reduced by half)</li> <li>Saving of \$90,000 in private damages and \$5,000 in public cost</li> <li>Loss of use of 10 downtown businesses completely eliminated</li> <li>Community's problem of business interruption solved</li> <li>Federal grants like FMA and FDM can be applied for to implement the proposed floodproofing</li> <li>Will help improve CRS rating in the long term (so entire community's flood insurance premium will be reduced)</li> <li>More than half the members of the City Council are opposed to buy-outs; it mich be easier to get their support</li> </ul>	<ul> <li>Floodproofing cost = \$10,000 X 10 = \$100,000</li> <li>Need at least 3 people to administer (after obtaining technical assistance from the State)</li> <li>Need a year to implement</li> </ul>	High (Priority no. 1)
Build safe rooms for a neighborhood of 50 homes without basements	<pre>for an alternative to buy-outs - Avoidance of 5 lives lost every 20 years (casualties reduced by half) - Public and political support for mitigating this hazard exists (due to regular recurrence of tornadoes)</pre>	<ul> <li>City will share 50% of the cost per existing home = \$2,000 X 50 = \$100,000</li> <li>Administrative cost per home = \$1,000 X 50 = \$50,000</li> <li>Need 3 years to complete</li> <li>Tornadoes are unpredictable; they may never strike this exact area again</li> </ul>	Medium (Priority no. 2)
Broadcast educational video on local channel on hazard mitigation	<ul> <li>Local channel might be willing to broadcast free of cost</li> <li>Publicity would spread awareness about mitigation methods as well as what to do in an emergency</li> </ul>	<ul> <li>Cost of preparing video = \$5,000</li> <li>Only 5% of population might notice the broadcast</li> <li>Only 5% of that 5% might actually consider acting on individual mitigation methods</li> </ul>	Low (Priority no. 3)

Once the benefits and costs were calculated, a relative priority was assigned for each action based upon the evaluation.

#### 1.3 Review and incorporation of Existing Plans

**§201.6(b):** In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

While developing the District's annex, the Planning Team reviewed existing plans (detailed below) and incorporated relevant information into the planning efforts.

#### 2013 State of California Multi-Hazard Mitigation Plan

The State of California Multi-Hazard Mitigation Plan was reviewed to ensure consistency between the State and District plan with respect to identified hazards and vulnerability, goals and objectives, and mitigation actions. The State goals served as the basis for developing the goals at the District level. District goals and objectives are outlined in Section 4.

#### Santa Barbara County 2017 Multi-Jurisdictional Hazard Mitigation Plan

Like the California Multi-Hazard Mitigation Plan, the County HMP was reviewed to ensure consistency between the County Plan and the District annex. County Plan goals were adopted as the District's goals in addition to utilizing hazard profile information as the basis for determining the hazards which impact the District.

#### 2012 California Adaptation Planning Guide

FEMA, Cal OES, and the California Natural Resources Agency developed the California Adaptation Planning Guide to assist municipalities in recognizing local climate change and to provide guidance addressing potential vulnerabilities. The information was used to develop potential hazards and to provide background information that allowed the Planning Team to make educated decisions regarding mitigation actions designed to alleviate the effects of climate change.

## 2.0 PLANNING AREA PROFILE

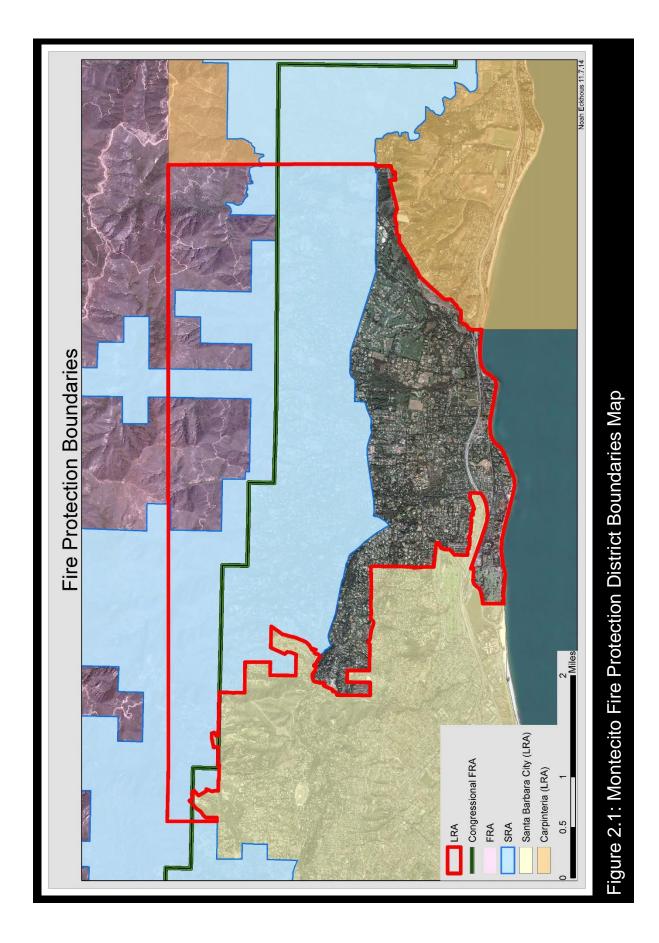
The District, located in the southern coastal portion of Santa Barbara County California, was formed on June 20, 1917, under the name Montecito Fire Protection District, to provide protection to the people, property, and the environment in the Montecito area. The District is approximately 21.7 square miles in size and serves the unincorporated community of Montecito with an estimated population of about 8,965. The District is funded by a portion of general property tax revenue collected within district boundaries, which covers the costs of all services.

The District provides Paramedic level Advanced Life Support services to its constituents and those in the surrounding area. District personnel are trained and equipped to respond to all fires, medical emergencies, vehicle accidents, alarms ringing, technical rescue, hazardous materials, public service assists, and unknown types emergencies upon on a case by case basis. The District also provides overhead personnel to the USDA Forest Service and other agencies when responses for large incidents need additional resources.

The Montecito Fire Protection District is governed by the Fire Board of Directors. The District is organized under section 13800 to 13970 inclusive, of the Health and Safety Code of the State of California, Fire Protection District Law of 1987.

The District's climate is a temperate Mediterranean style that generally consists of cool wet winters and mild dry summers with coastal fog in some of the summer months. As such, temperatures in the winter rarely fall below freezing. Spring conditions remain mild with light amounts of ran and fog. During the summer and fall, the climate is usually dry and warm, moderate conditions; however, the area often experiences the hot dry Santa Ana winds during the late summer and early fall periods.

The map on the following page provides an overview of the District' service area.



#### 2.1 Development Trends

**§201.6(c)(2)(ii)(C):** [The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

The areas within the District's service area boundary are generally built out, so sharp increases in population and the need for additional infrastructure development are unlikely. Currently, there are no plans to expand the with the District.

## 3.0 RISK ASSESSMENT

The Risk Assessment consists of three steps: Hazard Identification, Hazard Profiling, and Loss Estimates. This section includes the Hazard Identification and Hazard Profiling steps to evaluate the hazards of primary concern to local decision-makers to provide a basis for loss estimates which is also included within this chapter. Additionally, the Risk Assessment provides a foundation for the evaluation of mitigation measures that can help reduce the impacts of a potential hazard event. As an annex to the County's multi-jurisdictional hazard mitigation plan, the Planning Team used the information found in the County's Plan as a basis for elements of the Risk Assessment.

<u>Step 1: Identify Hazards:</u> This step identified the natural and man-made hazards that might affect the District and then narrowed the list to the hazards that are most likely to occur. These hazards included natural, technical, and human-caused events, with an emphasis on the effect disasters may have on critical facilities. The Planning Team participated in a Hazard Identification exercise to identify and rank the potential hazards within the District.

<u>Step 2: Profile Hazard Events:</u> The hazard event profiles are mostly products of the County's multi-jurisdictional Plan. The Planning team utilized the basic understanding of each hazard from the County Plan and then considered how that hazard would impact the District specifically.

<u>Step 3: Loss Estimates:</u> The loss estimate step relied on detailed information regarding the hazard probability and maps that were completed as part of the hazard profiles. This information was utilized to apply the hazard probabilities and recurrence intervals to the assets and inventory (buildings and infrastructure) of the District. This step was critical in determining which assets were subject to the greatest potential damages and which hazard event was likely to produce the greatest potential losses.

The conclusion of this step precipitated a comprehensive loss estimate (vulnerability assessment) for each identified hazard for each specific asset in terms of damages, economic loss, and the associated consequences for the District.

#### 3.1 Hazard Identification

§201.6(c)(2)(i): [The risk assessment shall include a] description of the type, location, and extent of all-natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.
§201.6(c)(2)(ii): [The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in `paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.
§201.6(c)(2)(ii): [The risk assessment] must also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged floods.
§201.6(c)(2)(iii): For multi-iurisdictional plans, the risk assessment must assess each

**§201.6(c)(2)(iii):** For multi-jurisdictional plans, the risk assessment **must** assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

The hazard identification and ranking were obtained primarily from a Hazard Identification Exercise completed during the Planning Team meeting. Each hazard profile includes a summary of the Hazard Identification Exercise identified risk factors and overall rank for each hazard, in addition to the detailed hazard description, historical occurrences, and projected future probability, magnitude, and frequency.

Each member of the Planning Team participated in the Hazard Identification Exercise to identify the potential hazards within the District's service area. The Hazard Identification Exercise was facilitated using an interactive spreadsheet program that asks specific questions on potential hazards and then rates them accordingly. These questions guided the Planning Team in the correct facilitation and application of the program. Table3.1 summarizes the Hazard Identification Workshop risk factors, lists the descriptions of each factor, provides the specific descriptor choices for each risk factor and description, and summarizes the risk ranking associated with each hazard:

Table 3.1: Hazard Identification Risk Factors

<b>Risk Factor</b>	Description	Descriptors	Value
		Infeasible event - not applicable due to geographic location characteristics	0
		Rare event - occurs less than once every 50 years	1
Probability/ Frequency	Prediction of how often a hazard will occur in the future	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	2
	5	Regular event - occurs between once a year and once every 7 years	3
		Frequent event - occurs more than once a year	4
		No damage	L
	Physical Damage -	Minor/slight damage to buildings and structures, no loss of lifelines	2
Consequence/	structures and lifelines Economic Impact – loss of	Moderate building damage, minor loss of lifelines (less than 12 hours)	3
Severity	function for power, water,	Moderate building damage, lifeline loss (less than 24 hours)	4
	sanitation, roads, etc.	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	5
	Impact Area - area impacted	No physical damage, no secondary impacts	-
	Secondary Impacts -	Localized damage area	2
	Capability of triggering additional hazards	Localized damage area, minor secondary impacts, delayed hazard onset	3
Vanieraomy	Onset - Period of time between initial recognition of	Moderate damage area, moderate secondary impacts, moderate warning time	4
	when the hazard begins to impact the community	Widespread damage area, significant secondary impacts, no warning time	5

Each hazard was assigned a risk rank (ranging from no/low hazard to severe/high hazard) based on the risk factors determined during the Hazard Identification Workshop. The risk score is calculated by Risk = Probability x Consequence x Vulnerability. Table 3.2 provides the risk ranking matrix used to calculate the risk score.

Table 3.2: Risk Ranking Matrix								
Probability/Frequency Description	Risk Ranking Matrix							
	Probability/Frequency			Consequence/ Severity				
	Value	1	1	2	3	4	5	
Rare Event: Occurs less than once every 50			1	2	3	4	5	
years	Vulnerability	2	2	4	6	8	10	
,		3	3	6	9	12	15	
		4	4	8	12	16	20	
		5	5	10	15	20	25	
	Probability/Frequency			Consequence/ Severity				
Infrequent Event:	Value	2	1	2	3	4	5	
Occurs between once every 8		1	2	4	6	8	10	
years and once every 50 years		2	4	8	12	16	20	
(inclusive)	Vulnerability	3	6	12	18	24	30	
		4	8	16	24	32	40	
		5	10	20	30	40	50	
	Probability/Frequency Consequence/ Severity							
	Value	3	1	2	3	4	5	
Regular Event:		1	3	6	9	12	15	
Occurs between once a year and once every 7 years		2	6	12	18	24	30	
	Vulnerability	3	9	18	27	36	45	
		4	12	24	36	48	60	
		5	15	30	45	60	75	
	Probability/Frequen	cy Consequence/ Severity						
	Value	4	1	2	3	4	5	
Frequent Event:		1	4	8	12	16	20	
Occurs more than once a year		2	8	16	24	32	40	
	Vulnerability	3	12	24	36	48	60	
		4	16	32	48	64	80	
		5	20	40	60	80	100	

Table 3.2: Risk Ranking Matrix

The final risk score yields a profile ranking of each hazard, as illustrated in Table 3.3.

Table 3.3: Risk Rank Categorization

Risk Rai	nk Categorization
High Hazard	50 to 100
Moderately High Hazard	25 to 49
Moderate Hazard	15 to 24
Moderately Low Hazard	5 to 14
Low Hazard	1 to 4

The following illustrates the final hazard ranking developed by the Planning Team to rank each of the identified hazards in order of the highest perceived vulnerability to lowest.

Hazard Ranking Summary	Score	
High		
Earthquake	50	
Moderately High		
Wildfire	48	
Landslide or Earth Movement	40	
Moderate		
Energy Shortage & Resiliency	18	
Flood	18	
Terrorism	16	
Moderately Low		
Low		

#### 3.2 Earthquake Hazard Profile

Earthquake Risk Assessment Summary		
Risk Rank: High		
Probability/ Frequency:	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	
Consequence/ Severity:	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	
Vulnerability:	Widespread damage area, significant secondary impacts, no warning time	
Hazard Risk Rank Score:	50	

Earthquake vulnerability for the region is described in the County's Multi-jurisdictional Hazard Mitigation Plan. According to maps developed by the County off Santa Barbara Office of Emergency Management, the Montecito area has minor fault lines running through the District's service area, with some areas being subject to moderate severity liquefaction. When considered by the Planning Team, it was decided that District assets would might sustain some damage, but the biggest impact would be need for the District's emergency services throughout the City. To date, an earthquake has overwhelmed District resources, but the District is cognizant of the possible damage during a large seismic event.

#### 3.3 Wildfire Hazard Profile

Wildfire Risk Assessment Summary		
Risk Rank: Moderately High		
Probability/ Frequency:	Regular event – occurs between once a year and once every 7 years	
Consequence/ Severity:	Moderate building damage, lifeline loss (less than 24 hours), severe injury or disability	
Vulnerability:	Moderate damage area, moderate secondary impacts, moderate warning time	
Hazard Risk Rank Score:	48	

Wildfire vulnerability for the region is described in the County's Multi-jurisdictional Hazard Mitigation Plan. The areas north and east of the District's service area were identified as very high fire hazard severity zones in maps prepared by the Santa Barbara County Fire Department in the County's Plan. In the aftermath of the Thomas Fire there was an amendment to the 2016 Community Wildfire Protection Plan (CWPP). The amendment identified, based on observed fire behavior during the recent fire, there was a greater need for increased operational space necessary for life safety and structure defense. This resulted in a recommendation to expand the District's defensible space requirement in the identified "very high fire severity zone" to 200 feet based on the current risk modeling and prescriptive guidelines in the CWPP.

The Planning Team discussed how, during the recent Thomas Fire in 2017/2018, the District only sustained minimal damage. However, the fire was followed by rain and extensive debris flows which caused severe damage to the areas throughout the service area. Earth Movement, including debris flow, is discussed in Section 3.4.

Additionally, the Planning team discussed how the impacts of climate change may result in a fire hazard. Increased usage of fossil fuels for transportation and electricity, along with increased deforestation has led to the overloading of the atmosphere with greenhouse gases such as carbon dioxide (CO2). These heat-trapping emissions act as a blanket and increase the overall atmospheric temperature, thus warming the planet. As summers get

hotter and longer, the conditions for wildfires increase exponentially. Wildfires in the U.S. have been on an increasing trend and the effects of climate change has shown to aggravate the frequency and duration of wildfires.

#### 3.4 Earth Movement Hazard Profile

Earth Movement Risk Assessment Summary		
Risk Rank: Moderately High		
Probability/ Frequency:	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)	
Consequence/ Severity:	Extensive building damage, widespread loss of lifelines (water, gas, electricity, sanitation, roads), loss of life	
Vulnerability:	Moderate damage area, moderate secondary impacts, moderate warning time	
Hazard Risk Rank Score:	40	

Landslide and Earth Movement vulnerability for the region is described in the County's Multijurisdictional Hazard Mitigation Plan. The Planning Team discussed its specific vulnerabilities and determined that debris flows, although not specifically outlined in the County's Plan, represented the most viable hazard to the District.

A debris flow is a geological phenomenon in which water-laden masses of soil and fragmented rock rush down mountain sides, funnel into stream channels, collect objects in their paths, and form thick, muddy deposits on valley floors. Some debris flows are very fast. In areas of steep slopes, geology.com states that some debris flows can reach speeds of over 100 miles an hour.

Debris flows can be triggered in several different ways including the following.

- Addition of MoistureA sudden flow of water from heavy rain, or rapid snowmelt,<br/>can be channeled over a steep valley filled with debris that is<br/>loose enough to be mobilized. The water soaks down into the<br/>debris, lubricates the material, adds weight, and triggers a<br/>flow
- **<u>Removal of Support:</u>** Streams often erode materials along their banks. This erosion can cut into thick deposits of saturated materials

stacked high up the valley walls. This erosion removes support from the base of the slope and can trigger a sudden flow of debris.

Failure of LandslideSome debris flows originate from older landslides. TheseDeposits:older landslides can be unstable masses perched up on a<br/>steep slope. A flow of water over the top of the old landslide<br/>can lubricate the slide material, or erosion at the base can<br/>remove support. Either of these can trigger a debris flow.

Wildfires or Timbering:Some debris flows occur after wildfires have burned the<br/>vegetation from a steep slope or after logging operations<br/>have removed vegetation. Before the fire or logging, the<br/>vegetation's roots anchored the soil on the slope and<br/>removed water from the soil. The loss of support and<br/>accumulation of moisture can result in a catastrophic failure.<br/>Rainfall that was previously absorbed by vegetation now runs<br/>off immediately. A moderate amount of rain on a burn scar<br/>can trigger a large debris flow

On January 9<sup>th</sup>, 2018, the areas of Montecito and Carpinteria experienced a debris flow event as a secondary impact of the 2017 Thomas Fire and subsequent rain fall. According to the event's After-Action Report, millions of tons of mud and rocks flowed out of the mountains toward the ocean creating destruction along the way. There were multiple significant incidents including: natural gas



pipeline explosions, structure fires in Montecito, flooded structures, and persons trapped in structures, attics, and roofs that required rescuing. Helicopters transported multiple burn victims, individuals stranded, and people with traumatic injuries. The debris flow ultimately led to 23 deaths, including two missing persons and numerous injuries.

Debris flows, landslides and other earth movement events are a geologic hazard common to every U.S. State, including California's central coast area. According to a US Geological Survey report, landslides cause more than \$1 billion in damages and 25 to 50 deaths in the U.S. each year. Earth movement in California is caused mainly due to increased precipitation and earthquakes. Large winter storms and earthquakes are usually accompanied by landslides that result in fatalities and property damage. The Planning Team reviewed its vulnerability and estimated two of its residential facilities are most likely to be impacted by a landslide due location topography.

3.	.5 Energy	Shortage 8	Resiliency	Hazard Profile
----	-----------	------------	------------	----------------

Energy Shortage	& Resiliency Risk Assessment Summary
Risk Rank: Modera	te
Probability/ Frequency:	Regular event - occurs between once a year and once every 7 years
Consequence/ Severity:	Minor/slight damage to buildings and structures, no loss of lifelines, first aid injury and no disability
Vulnerability:	Localized damage area, minor secondary impacts, delayed hazard onset
Hazard Risk Rank Score:	18

Energy Shortage & Resiliency vulnerability for the region is described in the County's Multijurisdictional Hazard Mitigation Plan. There is currently no system to anticipate the probably of energy shortage without evaluating the failure as a cascade effect from natural hazards (i.e., earthquakes). However, California has implemented numerous conservation measures to ensure an adequate power supply. The Planning Team noted that all parts of the District's service area are vulnerable to power shortages.

### 3.6 Flood Hazard Profile

Flood Risk Asses	sment Summary
Risk Rank: Modera	te
Probability/ Frequency:	Infrequent event - occurs between once every 8 years and once every 50 years (inclusive)
Consequence/ Severity:	Moderate building damage, minor loss of lifelines (less than 12 hours), lost time injury but no disability
Vulnerability:	Localized damage area, minor secondary impacts, delayed hazard onset
Hazard Risk Rank Score:	18

Flood vulnerability for the region is described in the County's Multi-jurisdictional Hazard Mitigation Plan. As demonstrated in the maps developed by the Santa Barbara County Office of Emergency Management in the County's Plan, the District's service area is not prone to flooding. The area is built on a natural slope which allows rain waters to flow toward the coast and into the ocean. Only local flooding in a few specific areas is expected for the area but will likely not severely affect the District. The Planning Team identified its two residential facilities as specific points of vulnerability.

### 3.7 Terrorism Hazard Profile

Terrorism Risk As	sessment Summary
Risk Rank: Moderate	3
Probability/ Frequency:	Rare event - occurs less than once every 50 years
Consequence/ Severity:	Moderate building damage, lifeline loss (less than 24 hours), severe injury or disability
Vulnerability:	Moderate damage area, moderate secondary impacts, moderate warning time
Hazard Risk Rank Score:	16

Terrorism vulnerability for the region is described in the County's Multi-jurisdictional Hazard Mitigation Plan. In 2004, the District completed a Security Vulnerability Assessment which determined the different avenues by which the District could be impacted by acts of Terrorism. For security purposes, a discussion of those vulnerabilities is not included in this annex. However, the Planning Team reviewed the safeguards that have been utilized to prevent a malevolent attack and discussed the areas of vulnerability that remain. For the purpose of this Annex, it should be noted that the Planning Team is conscious of the specific areas that are vulnerable to an act of terrorism.

### 3.11 Climate Change

With the release of the California Adaptation Planning Guide (APG) in March 2015, the District aimed to include the effects of climate change into the Annex. As identified in the "Understanding Regional Characteristics" portion of the APG, the District is located in the Central Coast Region of California. As a result, the Planning Team considered the following climate change impacts as recommended by the APG:

• Increased Temperatures

• Biodiversity Threat

• Reduced Precipitation

- Public Health Threats
- Reduced Agricultural Productivity
- Reduced Tourism

• Sea Level Rise

The Planning Team engaged in a discussion to determine which impacts posed a viable threat to the District. While some impacts clearly applied, others required additional research. Studies were conducted to look at recorded trends for sea level rise, wildfire, and regional temperature increases. The result of the study was the following list of perceived, feasible impacts that might affect the District over the next 5 to 10 years:

- Increased Temperatures
- Reduced Precipitation

After reviewing the results of each of these impacts, the Planning Team decided to include hazards in the Plan update that represented how the impacts would be felt by the District. For example, increased temperatures and reduced precipitation might result in a wildfire. Therefore, the Planning Team identified Wildfire as perceived hazard connected with climate change. Any information regarding the effects of these impacts on the District will be found under the hazard profiles listed above. Additionally, mitigation strategies that apply to these impacts will be classified under Wildfire in the mitigation actions identified in Section 4

### 3.12 Loss Estimates

The loss estimate began with a review of the District's asset inventory. The Asset Inventory Summary Tables are presented on the following tables.

Туре	Name	TOTAL
Station	Fire Station 1	\$6,842,824
Station	Fire Station 2	\$4,021,004
Rental	1255 Rental Property	\$491,996
Rental	1257 Rental Property	\$309,604
Rental	1259 Rental Property	\$298,450
	Tota	al \$11,963,878

Table 3.5: Asset Inventory Summary

The Planning Team reviewed each asset category and assigned a potential percentage of damage expected due to each identified hazard. In addition, if there were identified water service interruptions the loss of function values was also included. The tables of the following pages identify each asset category, name, total value, and the percent damage/damage value for each asset. The damages for each asset are totaled for each hazard to obtain the overall loss estimate for each hazard.

Monteci Vulnera	Montecito Fire Protection District Vulnerability Assessment Calculatio	trict culations	Earthquake	uake	Wildfire	fire	Landslide or Earth Movement	or Earth nent	Energy Shortage & Resiliency	iortage & ency	Flood	ро	Terrorism	rism
Type	Name	ΤΟΤΑΓ	Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate	% Damage	Loss Estimate
Station	Fire Station 1	\$6,842,824	%07	\$1,368,565	10%	\$684,282	5%	\$342,141	1%	\$68,42	%0	0\$	25%	\$1,710,706
Station	Fire Station 2	\$4,021,004	15%	\$603,151	10%	\$402,100	5%	\$201,050	1%	\$40,210	%0	\$0	25%	\$1,005,521
Rental	1255 Residential Property	\$491,996	50%	\$245,998	10%	\$49,200	35%	\$172,199	%0	0\$	%0	0\$	5%	\$24,600
Rental	1257 Residential Property	\$309,604	50%	\$154,802	10%	\$30,960	35%	\$108,361	%0	\$0	%0	\$0	5%	\$15,480
Rental	1259 Residential Property	\$298,450	50%	\$149,225	10%	\$29,845	35%	\$104,458	%0	\$0	%0	\$0	5%	\$14,923
	Fire Service	\$182,500	100%	\$182,500	100%	\$182,500	100%	\$182,500	100%	\$182,500	100%	\$182,500	100%	\$182,500
			Earthquake	\$2,704,240	Wildfire	\$1,378,888	Landslide or Earth Movement	\$1,110,709	Energy Shortage & Resiliency	\$291,138	Flood	\$182,500	Terrorism	\$2,953,460

Table 3.6: Vulnerability Assessment Calculations

<b>Montecito Fire Protection District</b>
Vulnerability Assessment Calculations

### Table 3.7 summarizes the loss estimates for each hazard

### Table 3.7: Loss Estimate Summary

Hazard	Total Losses
Terrorism	\$2,953,000
Earthquake	\$2,704,000
Wildfire	\$1,379,000
Landslide or Earth Movement	\$1,111,000
Energy Shortage & Resiliency	\$291,000
Flood	\$183,000

Note: Values are rounded to the nearest thousand.

### 4.0 MITIGATION STRATEGIES

### **§201.6(c)(3)(i):** [The hazard mitigation strategy **shall** include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

As an extension of the County's Multi-jurisdictional Hazard Mitigation Plan, the Planning Team felt it was important to continue with the goals and objectives laid out in the County's plan. The goals listed below guided the Planning Team in the development of mitigation activities that align with the objectives being upheld throughout the region.

Table 4.1: Hazard Mitigation Planning Goals

Goal 1	Promote disaster resiliency for future development to help them become less vulnerable to hazards
Goal 2	Promote disaster resiliency for existing assets (critical facilities/infrastructure and public facilities) and people to help them become less vulnerable to hazards
Goal 3	Enhance hazard mitigation coordination and communication

Note: Goals are taken from the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan

### 4.1 Identification of Mitigation Recommendations

**§201.6(c)(3)(ii):** [The mitigation strategy **shall** include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

**§201.6(c)(3)(iv):** For multi-jurisdictional plans, there **must** be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

Mitigation actions are administrative and/or engineering project recommendations to reduce the District's vulnerability to the identified hazards. During the Planning Team meeting, a team-based approach was used to brainstorm mitigation projects based on the identified hazards and associated loss. In addition, the Federal Emergency Management Agency's (FEMA) Local Mitigation Planning Handbook and the California Adaptation Planning Guide were used to identify actions to mitigate the effects of climate change.

Table 4.2 provides an overview of the mitigation actions, and other relevant information, in no specific order. Following the identification of the mitigation action, a Cost-Benefit Review was conducted in order to determine a prioritization of the items.

Mitigation Activity	Hazards Mitigated	Corresponding Plan Goal	Responsible Agencies/Departments	Resources	Estimated Project Cost	Timeframe	Protects New Buildings	Protects Existing Buildings
HMP.2018.01 - Enhance Public Outreach with regards to the impacts of a seismic event and wildfire	Earthquake Wildfire	Goal 3	Facilities Battalion Chief	Staff Time/ General Fun	\$10,000 in Material Costs	Short	٨	7
HMP.2018.02 - Implement structural integrity projects to protect power and communication systems	Earthquake Energy Shortage & Resiliency	Goal 2	Facilities Battalion Chief	CIP/GF	\$100,000 per project	Medium	z	z
HMP.2018.03 - Construct protective structures around critical facilities	Earth Movement Flood	Goal 2	Facilities Battalion Chief	CIP/GF	\$200,000 per project	Medium	z	z
HMP 2018.04 - Conduct an SVA to determine vulnerability	Terrorism	Goal 2	Facilities Battalion Chief	Staff Time	Free through California Highway Patrol	Short	z	~
HMP.2018.05 – Expand defensible space from 100 feet to 200 in vulnerable areas of the community	Wildfire	Goal 1, Goal 2	Facilities Battalion Chief	Staff Time	Staff Time	Short	≻	≻

### 4.2 Prioritization of Mitigation Recommendations

**§201.6(c)(3)(iii):** [The mitigation strategy section **shall** include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization **shall** include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

A simplified Benefit-Cost Review was applied in order to prioritize the mitigation recommendations for implementation. The priority for implementing mitigation recommendations depends upon the overall cost effectiveness of the recommendation, when considering monetary and non-monetary costs and benefits associated with each action. Additionally, the following questions were considered when developing the Benefit-Cost Review:

- How many people will benefit from the action?
- How large an area is impacted?
- How critical are the facilities that benefit from the action?
- Environmentally, does it make sense to do this project for the overall community?

Table 4.3 provides a detailed benefit-cost review for each mitigation recommendation, as well as a relative priority rank (High, Medium, and Low) based upon the judgment of the Planning Team. The general category guidelines are listed below:

- High Benefits are perceived to exceed costs without further study or evaluation
- Medium Benefits are perceived to exceed costs, but may require further study or evaluation prior to implementation
- Low Benefits and costs evaluation requires additional evaluation prior to implementation

It should be noted that values for costs are estimates only.

Priority	High	Medium	Medium	High
Costs (Cons)	<ul> <li>Difficulty reaching the public</li> <li>\$10,000 in material Costs</li> </ul>	\$100,000/ project in construction costs	\$200,000/project in construction costs	Staff Time
Benefits (Pros)	<ul><li>Avoiding EM Costs</li><li>Avoided Casualties</li></ul>	<ul> <li>Avoided Casualties</li> <li>Avoided Physical Damages</li> </ul>	<ul><li>Avoided Physical Damages</li><li>Reduce EM Cost</li></ul>	<ul> <li>Reduced EM Costs</li> <li>Improved Security</li> <li>Improved Vulnerability Awareness</li> </ul>
Table 4.3: Benefit Cost Review Summary Mitigation Activity	HMP.2018.01 - Enhance Public Outreach with regards to the impacts of a seismic event and wildfire	HMP.2018.02 - Implement structural integrity projects to protect power and communication systems	HMP.2018.03 - Construct protective structures around critical facilities	HMP 2018.04 - Conduct an SVA to determine vulnerability

ŝ 0 ū D t fit O à Tahla 1 3.

### 5.0 PLAN MAINTENANCE

The Mitigation Strategies section of this annex identifies mitigation actions that have been prioritized based on the loss estimates and the probability of each hazard, which will typically be implemented according to the priority rank. To thoroughly track hazard mitigation status, the District must continuously monitor and document the progress of the implementation of the mitigation actions. Though mitigation actions may be delegated to different departments within the District, Aaron Briner will have the responsibility of monitoring overall progress.

### 5.1 Planning Mechanisms

**§201.6(c)(4)(ii):** [The plan **shall** include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

The District maintains the following processes to incorporate mitigation strategies into planning mechanisms. The following resources were identified by the Planning Team as being most inherent to District operations and most likely to be avenues for the first steps in hazard mitigation implementation. Also, lists of identified resources are described in Tables 5.1 through 5.5 later in this section.

### **District Board of Directors**

The Board of Directors is responsible for approving projects and programs on a District-wide level. By providing mitigation planning concepts to the Board of Directors, mitigation actions and concepts will be incorporated into relevant planning efforts.

### Captains

The District is organized into groups of responding personnel under the direction of a captain. Captains have the ability to direct these groups in ways that encourage intentionality during response and training activities to implement mitigation measures throughout the community and encourage the public to do the same. When it comes to promoting a "mitigation mindset", Captains have the capacity to ensure mitigation concepts become precepts during normal daily operations.

### **Resource Tables**

This section serves as a high-level capability assessment of the District's resources through which hazard mitigation objectives may be achieved. The following subsections attempt to document the Regulatory, Administrative/Technical, Fiscal, Grant funding, and Outreach/Partnerships resources available to the District.

Table
Tools <sup>-</sup>
latory
Regulat
Table 5.1

Regulatory Tool	Comments
Fire Code	The Fire Code dictates established best practices for private and residential buildings within
	the District's service area. This code can be modified to require local homes and businesses
	to be modified to become less vulnerable to identified hazards.
Capital Improvement Plan	The plan outlines proposed efforts for capital projects and programs needed to carry out the goals and objectives of the District; including those regarding hazard mitigation.

# Table 5.2: Administrative/Technical Tools Table

Administrative/Technical Tool	Personnel/Resources
Board of Directors	The Board of Directors can review and approve mitigation proposal for implementations
Emergency Responders	The District staff is comprised mainly of trained emergency responders with varied specialties. District staff are able to provide one-on-one suggestions to victims of local emergencies about how to implement mitigation strategies of their own.

_
ab
Ĕ
S
ō
Ĕ
ल
sca
10
e,
S
<u>_</u>
-

Table 5.3: Fiscal Tools Table	
Fiscal Tool	Available
General Fund	Yes, with Board approval
Capital Improvement Plan	Yes, with Board approval
Land & Building Fund	Yes, with Board approval

## Table 5.4 Grant Funding Tools Table

Grant Funding Tool	Agency	Purpose	Contact
Pre-Disaster Mitigation	U.S. Department of	To provide funding for States, and	FEMA
Program	Homeland Security,	Security, communities for cost-effective	500 C. Street, SW
(PDM)	Federal Emergency	Emergency hazard mitigation activities which	
	Management Agency	complement a comprehensive	Washington, DC 20472
		hazard mitigation program and Phone: (202) 646-4621	Phone: (202) 646-4621
		reduce injuries, loss of life, and	www.fema.gov
		damage and deconstruction of	
		property.	
Hazard Mitigation Grant	U.S. Department of	of To prevent future losses of lives	FEMA
Program	Homeland Security,	Security, property due to disasters; to	500 C Street S.W.
	Federal Emergency	Emergency implement State of local hazard	
	Management Agency	mitigation plans; to enable mitigation	Washington, DC 20472

		measures to be implemented during immediate recovery from a disaster; and to provide funding for previously identified mitigation measures to benefit the disaster area.	Phone (202) 646-4621 <u>www.fema.gov</u>
Flood Mitigation Assistance (FMA)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To help States and communities plan and carry out activities designed to reduce the risk of flood damage to structures insurable under the NFIP.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov
Emergency Management Performance Grants (EMPG)	U. S. Department of Homeland Security; Federal Emergency Management Agency	To encourage the development of comprehensive emergency management at the State and local level and to improve emergency management planning, preparedness, mitigation, response, and recovery capabilities.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 <u>www.fema.gov</u>

			www.nrcs.usda.gov
Disaster Mitigation and Technical Assistance Grants	U.S. Department of Commerce, Economic Development Administration	To help States and localities to develop and /or implement a variety of disaster mitigation strategies.	EDA Herbert C. Hoover Building Washington, DC 20230 Phone: (800) 345-1222 <u>www.eda.gov</u>
Watershed Surveys and Planning	U.S. Department of Agriculture, Natural Resource Conservation Service	To provide planning assistance to Federal, State, and local agencies for the development of coordination water and related land resources programs in watersheds and river basins	NRCS PO Box 2890 Washington, DC 20013 Phone: (202) 720-3527 www.nrcs.usda.gov
National Earthquake Hazards Reduction Program (NEHRP)	U.S. Department of Homeland Security, Federal Emergency Management Agency	To mitigate earthquake losses that can occur in many parts of the nation providing earth science data and assessments essential for warning of imminent damaging earthquakes, land-use planning, engineering design, and emergency preparedness decisions.	FEMA 500 C Street S.W. Washington, DC 20472 Phone (202) 646-4621 www.fema.gov

Engineering for Natural Hazards	National Science Foundation	Supports fundamental research that advances knowledge for understanding and mitigating the impact of natural hazards on constructed civil infrastructure	National Science Foundation Phone: (703) 292-7024 https://www.nsf.gov
Pre-Disaster Mitigation Program (PDM)	U.S. Department of Homeland Security, Federal Emergency Management Agency	DepartmentofTo provide funding for States, andFEMAndSecurity,communitiesforcost-effectivendSecurity,communitiesforcost-effectiveEmergencyhazardmitigationactivitieswhichhazardmitigationactivitieswhichWashington, DC 20472ement AgencycomplementacomprehensivePhone: (202) 646-4621hazardmitigationprogramandPhone: (202) 646-4621reduceinjuries, loss of life, andwww.fema.govdamageand deconstructionofproperty.property.mate and deconstruction	FEMA 500 C. Street, SW Washington, DC 20472 Phone: (202) 646-4621 www.fema.gov

Social Media       The District has a presence on several social media platforms. These platforms allow the District to reach a wide audience quickly and can be utilized to provide information about hazard mitigation or direct readers to the City website for in-depth mitigation input         "Ready, Set, Go!" Defensible       The District provides guidance documents to the public on their website with tips on how to make their property more resistant to the impacts of a wildfire. This document can be expanded to include more mitigation ideas and include information on multiple hazard types.         Mutual Aid Agreements       As part of expanding its resilience to the impacts of hazard events, the District intends to review its current mutual aid agreements, identify gaps, and secure new agreements to expanded it	The	Public Outreach The District holds several educational opportunities throughout the year. Public outreach will be able to be expanded to include a broader spectrum of hazard-specific information to improve hazard awareness.	District Website The District website is an open forum for providing hazard information and for accepting ongoing comments from the public. The website will likely be the main avenue for maintaining an open dialogue with the public for hazard mitigation throughout the planning period.	able 5.5 Uutreach and Partnerships 1 ools 1 able Outreach/Partnership Tools Comments	Table 5.5 Outreach and Partnerships Tools Table
--	-----	---	---	---	---

### **5.2 Periodic assessment Requirements**

**§201.6(c)(4)(i):** [The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, **evaluating**, and updating the mitigation plan within a five-year cycle.

Planning is an ongoing process and, as such, this annex should be treated as a living document that must grow and adapt in order to keep pace with changes within the District. An annual assessment will be completed to document the changes in site hazards (e.g., updated FIRM maps, contemporary seismic studies, etc.) or the installation and purchase of new equipment (e.g., back-up generators, emergency response equipment, etc.), to ensure they do not have any major effects on the District's hazard vulnerabilities that would impact the conclusions or actions associated with the Plan. Prior to the fifth year of the revision cycle, these annual observations will be reviewed to determine what changes should be implemented in the required Plan update. The results of the annual evaluations will be folded back into each phase of the planning process and should yield decisions on how to update each section of the Plan.

Aaron Briner has the responsibility of implementing these annual and five-year requirements. During the annual review, if any updates are deemed minor, then Mr. Briner will perform the updates. However, if more major updates are required, then the Planning Team will be reconvened to discuss the effects on the Plan. For the fifth-year revision, the entire Planning Team will reconvene in order to use their expertise to update the Plan in its entirety. Each of the annual assessments will be utilized as an opportunity to evaluate the progress of hazard mitigation action implementation. The Mr. Briner will be responsible for reviewing the mitigation actions annually, determining which have the potential to be accomplished over the next year, and encouraging implementation with the proper departments. If the Plan is not meeting its goals, the Mr. Briner will document the shortcomings, suggest modifications, and implement changes to the plan as appropriate.

In addition to these periodic requirements, any significant modification to the District's facilities should be considered with respect to a possible impact on the Plan. All Planning Team members are responsible for providing updates for Mr. Briner as necessary. As noted in the following section, the completed Plan will be available on the District's website to allow the public to continue to be involved during these periodic reviews.

### 5.3 Update Requirements

**§201.6(c)(4)(i):** [The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, evaluating, and **updating** the mitigation plan within a five-year cycle.

**§201.6(c)(4)(iii):** [The plan maintenance process **shall** include a] discussion on how the community will continue public participation in the plan maintenance process.

The Emergency Management and Assistance regulations (44 CFR Part 201) state that it is the responsibility of local agencies (i.e., the District) to "at a minimum, review and, update the local mitigation plan every five years from date of plan approval to continue program eligibility". The evaluation procedures listed below will provide insight into the major changes that need to be included in the five-year update and resubmission to FEMA:

- Annual HMP review with respect to changes in hazard vulnerability (e.g., additional hazards identified, natural hazard events, etc.)
- Annual HMP review with respect to development of new facilities
- Five-year comprehensive update to address the findings of the annual reviews
- Re-submittal of the updated HMP to California Governor's Office of Emergency Services (Cal OES)/FEMA

Additionally, the risk assessment portion of the plan will be reviewed to determine if the information should be updated or modified. Each department responsible for the various implementation actions will report on:

- Status of their projects
- Implementation processes
- Any difficulties encountered
- How coordination efforts are proceeding
- Which strategies should be revised

Reg Pg. 311 U.S. Department of Homeland Security 1111 Broadway, Suite 1200 Oakland, CA. 94607-4052



May 8, 2019

Robert Lewin Director County of Santa Barbara Office of Emergency Management 4410 Cathedral Oaks Santa Barbara, CA 93110

Dear Mr. Lewin:

The Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan has been amended to include the Cachuma Operations and Maintenance Board, Carpinteria Valley Water District, Montecito Fire Protection District, and Montecito Water District as official planning participants. Each special district must submit an adoption resolution to FEMA in order to be considered fully approved.

FEMA's approval of the *Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan* remains for a period of five years from the original approval date of September 26, 2017 for all approved participants. An updated list of the status of current participating jurisdictions is enclosed with this letter.

Prior to September 26, 2022, Santa Barbara County and all participating jurisdictions are required to review and revise the plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval in order to continue to be eligible for mitigation project grant funding.

The continued approval of this plan ensures Santa Barbara County and all participating jurisdictions' continued eligibility for project grants under FEMA's Hazard Mitigation Assistance programs, including the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and Flood Mitigation Assistance Program. All requests for funding, however, will be evaluated individually according to the specific eligibility, and other requirements of the particular program under which applications are submitted.

If you have any questions regarding the planning or review processes, please contact the FEMA Region IX Hazard Mitigation Planning Team at <u>fema-r9-mitigation-planning@fema.dhs.gov</u>.

Sincerely,

Juliette Hayes Division Director Mitigation Division FEMA Region IX

cc: Jennifer Hogan, State Hazard Mitigation Officer, California Governor's Office of Emergency Services Adam Sutkus, Hazard Mitigation Planning Chief, California Governor's Office of Emergency Services

www.fema.gov

### Status of Participating Jurisdictions as of May 8, 2019

#	Jurisdiction	Date of Adoption
1	Santa Barbara County	8/22/2017
2	Buellton, City of	7/27/2017
3	Carpentaria, City of	9/11/2017
4	Goleta, City of	9/5/2017
5	Guadalupe, City of	9/8/2017
6	Lompoc, City of	9/5/2017
7	Santa Barbara, City of	8/16/2017
8	Santa Maria, City of	9/19/2017
9	Solvang, City of	7/24/2017

Jurisdictions – Adopted and Approved

Jurisdictions – Approvable	Pending Adoption
----------------------------	------------------

#	Jurisdiction
1	Cachuma Operations and Maintenance Board
2	Carpinteria Valley Water District
3	Montecito Fire Protection District
4	Montecito Water District

### Agenda Item #6

### LAFCO

### Santa Barbara Local Agency Formation Commission

105 East Anapamu Street Santa Barbara CA 93101 805/568-3391 FAX 805/568-2249 www.sblafco.org lafco@sblafco.org

June 3, 2019

### TO: Santa Barbara County Independent Special Districts

### Subject: Notice of Runoff Election for the Regular Special District Member to LAFCO – <u>Ballots are due no later than 5:00 pm, August 5, 2019</u>.

Attached please find a ballot for the Special District Selection Committee election for one of the two Regular Special District members on LAFCO. This is a runoff election between the two candidates receiving the highest number of votes in the mailed ballot election that ended on May 10, 2019.

For an election to be valid, at least a quorum of the special districts must submit valid ballots. A quorum is 20 or more of the 38 independent special districts.

There were 30 votes cast for the Regular Special District member in the last election. Jay Freemen received 13 votes (43.3%) and Judith Ishkanian received 11 votes (36.7%). Pursuant to Section 9(c) of the Special District Selection Committee Bylaws, a winning candidate must receive a majority of the votes cast. Where no candidate receives a majority, the election must go to a runoff between the two candidates receiving the highest number of votes.

<u>Voting Period</u> Attached you will find a ballot for the Regular Special District member, containing the names of two nominees receiving the highest number of votes. <u>The voting period will be 60-days and will end on August 5, 2019 at 5:00 pm.</u>

**Voting Process:** The Presiding Officer of each Independent Special District is authorized to vote. If the presiding officer is unable to participate in the election of the Special District Selection Committee, the legislative body of the district may appoint one of its members as an alternate to participate in the selection committee in the presiding officer's place.

Voting members should submit ballots directly to LAFCO, attention Jacquelyne Alexander. Ballots may be mailed, hand delivered, faxed or emailed to LAFCO at the contact information Local Agency Formation Commission June 3, 2019 Page two

shown below. Ballots must be <u>received by the deadline</u>; ballots postmarked on or before August 5 but received after the deadline are not sufficient.

Santa Barbara Local Agency Formation Commission Attn: Jacquelyne Alexander, Clerk 105 East Anapamu Street, Rm 407, Santa Barbara CA 93101 FAX 805/568-2249 Email Address: lafco@sblafco.org

Please contact the LAFCO office if you have any questions.

Sincerely,

Paul Hood

PAUL HOOD Executive Officer INDEPENDENT SPECIAL DISTRICTS SELECTION COMMITTEE Submit No Later than 5:00 pm, August 5, 2019

### **OFFICIAL BALLOT**

Runoff Election for Regular Special District Member on Santa Barbara LAFCO

Vote for <u>one</u> of the following **Regular Special District Member** candidates:

Jay Freeman – Isla Vista Community Services District
Judith Ishkanian – Montecito Fire Protection District

Name	of Inde	pendent	Special	District
------	---------	---------	---------	----------

Signature

**Print Name of Voting Delegate** 

Title (please check one)

Chair of the Special District Board

Board member, designated by Special District
 Board to vote in this election. (Gov. Code sec. 56332(a).)

Date: \_\_\_\_\_

### SANTA BARBARA LOCAL AGENCY FORMATION COMMISSION

NOMINATION FOR <u>REGULAR</u> SPECIAL DISTRICT MEMBER Return to: Executive Officer Santa Barbara LAFCO 105 East Anapamu Street, Room 407 Santa Barbara CA 93101 Or FAX to 568-2249	LAFCO STAFF USE Date Received:			
Please print in ink or type				
POSITION SOUGHT: Special District Member				
NAME OF NOMINEE: Jay Freeman	NAME OF DISTRICT: Isla Uista Community Services District			
MAILING ADDRESS: 6533 El Greco Road #A Isla Vista, CA 93117	TELEPHONE: Home: Bus: Cell: (805) 895-7209 Fax:			
ADDITIONAL INFORMATION: On this form <u>or</u> an accompanying letter, describe the nominee's personal interests, qualifications, experience, education, volunteer activities or community organization memberships that may bear on the nomination for Special District Member: This information will be distributed to all independent special districts.				
SIGNATURE OF NOMINATOR/NAME OF SPECIAL DISTRICT:	28 PN 1: 02 F SAN N. EXALAPA FK OF THE FK OF THE Y SUPERASONS			

Santa Barbara LAFCO Independent Special District Selection Committee,

Hello! My name is Jay Freeman and I am on the board of the Isla Vista Community Services District. I hereby express my intention to run for the position of Regular Special District Member.

I moved to Santa Barbara County in 1999, living in what later became Goleta until 2015 before moving to Isla Vista (where I live presently). I attended UCSB, graduating with a B.S. in Creative Studies with an emphasis in Computer Science. I continued with five years in UCSB's College of Engineering working on a Ph.D. in Computer Science before deciding to leave early to start my own company and develop Cydia, an alternative store for iOS that had tens of millions of users.

Continuing to live within walking distance of the University, I became involved in the efforts to establish a new government in Isla Vista, causing me to spend copious time researching the past efforts at incorporation, tracing through the archives of LAFCO, and eventually leading me to co-fund a financial feasibility study to explore governmental options for the area; this gave me eclectic background knowledge on the processes and procedures of this fascinating meta-entity.

In 2014, I began attending meetings of LAFCO, a habit I continued into 2016. During this time, I noticed a striking similarity amongst the experiences of the various unincorporated parts of Santa Barbara County; I'd always assumed Isla Vista's issues with the County were specific to Isla Vista, yet I saw similar patterns emerge in areas like Vandenberg Village and Santa Ynez.

Upon this realization, in 2016 I ran for 3rd District County Supervisor. My platform focussed on local control, stating an intention to fight to establish Municipal Advisory Councils in many of the key unincorporated areas of the County, as well as to work more closely with special districts as I had spoken with a number that felt that they were only tenuously connected with the County.

In the two years since, I have served on the board of the Isla Vista Community Services District, expanding my experience in practical local governmental affairs, and was recently appointed to the Goleta Valley Library Advisory Commission. I have occasionally attended local meetings of the SBCCSDA, regularly attend meetings of a handful of other special districts (including two in the Santa Ynez valley) while also randomly attending meetings of other varied special districts, and keep an eye focussed on what is being discussed at LAFCO and the Board of Supervisors.

In addition to this stated background, I have a specific interest in maps and aerial photography, and have built my own GIS systems to explore boundaries within the County of Santa Barbara.

I hope you believe, as do I, that I am a viable and useful candidate for this position, and thank you for taking the time to read this letter. I hope to also see many of you in person this month.

Sincerely, Jay Freeman (saurik) saurik@saurik.com

### SANTA BARBARA LOCAL AGENCY FORMATION COMMISSION

NOMINATION FOR <u>REGULAR</u> SPECIAL DISTRICT MEMBER Return to: Executive Officer Santa Barbara LAFCO 105 East Anapamu Street. Room 407 Santa Barbara CA 93101 Or FAX to 568-2249	LAFCO STAFF USE Date Received:				
Please print in ink or type					
POSITION SOUGHT: Special District Member					
NAME OF NOMINEE:	NAME OF DISTRICT:				
Judith Ishkanian	Montesito Fire Protection District				
MAILING ADDRESS:	TELEPHONE:				
1480 San Leandro Park Road	Home: <u>(805) 969-6020</u> Bus:				
1480 San Leandro Park Road Santa Barbara, CA 93108	Eus: Cell: ( <u>805) (680-54/2</u> Fax:				
ADDITIONAL INFORMATION: On this form or an accompanying letter, describe the nominee's personal interests, qualifications, experience, education, volunteer activities or community organization memberships that may bear on the nomination for Special District Member: This information will be distributed to all independent special districts. Please see attacked.					
SIGNATURE OF NOMINATOR/NAME OF SPECIAL DISTRICT: Silvia Easton Minteuito Fire Protection District					

### Judith Ishkanian, Ph.D

### Statement of Interest

### Voting Commissioner, Santa Barbara County LAFCO

On January 28, 2019, I received an appointment to the Montecito Fire District Board of Directors. Previously, I served on the Montecito Sanitary District Board of Directors from 2006 to 2018, having been President of the Board four times. I have served on the SBC CSDA Board of Directors for eight years, and was President in 2016, I was the Alternate Commissioner for LAFCO in 2017 and a voting Commissioner in 2018.

I am dedicated to service in this community, and I would be very honored to complete my term on LAFCO. The position will remain open until March, 2019, and I am a candidate to be re-elected to finish my term to 2022. SBC LAFCO is the culmination of all the experience I have acquired in service to local government boards. All of these associations working together protects them all, and SBC LAFCO oversees the process of healthy local governments.

### RESUME

Judith M. Ishkanian, Ph.D 1480 San Leandro Park road Santa Barbara CA 93108

Other: P.O. Box 5121 Santa Barbara CA 93150

Phone: 805-969-6020 cell: 805-680-5412

drish@aol.com

### **EDUCATION**

Ph.D, History, 1993 University of California, Santa Barbara

### WORK AND/OR VOLUNTEER EXPERIENCE

1988-1998 and 2003 Adjunct Professor of History University of California, Santa Barbara And Santa Barbara City College

2003-2015 President and Co-Founder 2005-2015 Neighborhood Defense League of Santa Barbara

2006-2018 Montecito Sanitary District

2011-2018 Board of Directors Santa Barbara Special Districts Association (SBC CSDA)

2017 Alternate Commissioner Santa Barbara County LAFCO 2018 Voting Commissioner Santa Barbara County LAFCO

2019 Director Montecito Fire Protection District

### REFERENCES

Diane Gabriel, General Manager Montecito Sanitary District 1041 Monte Cristo Lane Santa Barbara CA 93108 Phone: 805 969 4200 e mail: dgabriel@montsan.org

Warner Owens 244 Hot Springs Road Santa Barbara CA 93108 Phone: 805-969-2906 e mail: warnerbowens@gmail.com

Paul Hood, Executive Director Santa Barbara County LAFCO 105 E. Anapamu Street Santa Barbara CA 93101 Phone: 805-568-3391 e mail: hood.paul@sbcglobal.net

George Emerson, President Board of Directors Goleta Sanitary District 1 Moffet Place Goleta CA 93017 Phone: 805-967-7019 e mail: gweson@gmail.com

Next page

John McInnes, General Manager Goleta Water District 4699 Hollister Goleta CA 93017 Phone: 805-450-6603

Mr. Pedro Nava, Chair Little Hoover Commission 925 L Street, Suite 805 Sacramento CA 95814 Phone: 916-455-2125

Mr. Katcho Achadjian Recently Retired California State Assembly, three Terms San Luis Obispo County 222 E. Grand Avenue Arroyo Grande CA 93420 e mail: katchoman@yahoo.com

Mr. Ron Cortez Vice-Chancellor, Administration and Business Services University of California, Irvine Phone: 949-824-0220 e mail: recortez@uci.edu Local Santa Barbara Phone: 805-729-3731

## Agenda Item #7



## **STAFF REPORT**

Prepared for:	Montecito Fire Protection District Board of Directors
Prepared by:	Araceli Nahas, District Accountant
Date:	June 24, 2019
Topic:	Side Letter to Clarify the MOU Retirement Sections

## Summary

The Memorandum of Understanding (MOU) effective July 1, 2019, between the District Board, Montecito Firefighter's Association (MFA) and Staff, includes an increase to the employee's portion of the Employer's Retirement Contribution to 12% (from 10.5%) for all CalPERS classic members. In order for CalPERS to start the process on the formal contract amendment, they have requested a side letter for each of the MOUs to specify that the percentage change is a 1.5% increase.

The MFA and Staff representatives are each in support of the side letter language clarification.

## Conclusion

Staff recommends the Board approve the side letters to the MOUs as requested by CaIPERS.

## Side Letter Agreement To the Memorandum of Understanding between the Montecito Firefighter's Association and the Montecito Fire Protection District June 24, 2019

This side letter of agreement shall clarify Section 31, paragraph 2 of the Memorandum of Understanding between the Montecito Firefighter's Association and the Montecito Fire Protection District dated July 1, 2019.

### Retirement

Classic employees will pay 12% of the Employer's Retirement Contribution, a 1.5% increase from the prior contribution of 10.5%.

Montecito Firefighters Association

**Montecito Fire Protection District** 

Lucas Grant President Sylvia Easton President

William Wrenn Treasurer Chip Hickman Fire Chief

## **29. LONGEVITY INCENTIVE**

3-5 years	=	3.00%	15-17 years = 1	5.00%
6-8 years	=	6.00%	18-20 years = 1	8.00%
9-11 years	=	9.00%	21-23 years = 2	1.00%
12-14 years	=	12.00%	24+ years = 24	4.00%

Longevity increases are effective following the anniversary date (i.e. 3.00% following the 3rd anniversary).

## **30. DISPATCH CADRE**

Dispatch Cadre members can be filled by Miscellaneous Employees, Firefighters, Firefighter/Paramedics and/or Engineers. The District will pay Dispatch Cadre members an amount equal to 5% of the top step Firefighter monthly base pay.

## 31. RETIREMENT

The District pays the entire employee contribution to the California Public Employees' Retirement System ("CalPERS") for CalPERS classic members only. This sum is equal to 9% of employee earnings for safety employees and 8% of earnings for miscellaneous employees. The plans provided are: Safety Fire 3% at 55, PEPRA Safety Fire 2.7% at 57, Miscellaneous 3% at 60, and PEPRA Miscellaneous 2% at 62.

Classic employees will pay 12% of the Employer's Retirement Contribution effective July 1, 2019. The contributions will be pre-tax as allowed by a contract change with CalPERS and a 414(h)(2) resolution approved by the District Board and filed with CalPERS. Until such time that the contract with CalPERS is approved and implemented, the employees will reimburse the District the Employer's Retirement Contribution directly at the appropriate rate. This contribution is the corresponding percentage of an employee's reportable earnings for Safety and Miscellaneous classic employees. The intent of the employee's contribution towards the Employer's Retirement Contribution.

PEPRA employees will not make a cost-share contribution.

Eligibility for membership in CalPERS is dependent on rules established by CalPERS. If not a current member of CalPERS, a temporary full-time employee becomes eligible for membership when his/her appointment exceeds six months; membership is then effective on the first day of the seventh month of employment.

Employees who are "new members" as defined by California Public Employees' Pension Reform Act of 2013 (e.g., an employee hired on or after January 1, 2013 who has never been a CalPERS member or member of a reciprocal system or who has had a break in CalPERS service of at least six months or more) will constitute a new tier and be subject to all the PEPRA provisions, which

## Agenda Item #8

## Side Letter Agreement To the Memorandum of Understanding between the Members of Staff and the Montecito Fire Protection District June 24, 2019

This side letter of agreement shall clarify Section 32, paragraph 2 of the Memorandum of Understanding between the Montecito Firefighter's Association and the Montecito Fire Protection District dated July 1, 2019.

### Retirement

Classic employees will pay 12% of the Employer's Retirement Contribution, a 1.5% increase from the prior contribution of 10.5%.

**Montecito Fire Protection District** 

Chip Hickman Fire Chief Sylvia Easton President

Kevin Taylor Division Chief - Operations Aaron Briner Battalion Chief, Fire Marshal

Travis Ederer Battalion Chief

Scott Chapman

Battalion Chief

Alan Widling Battalion Chief

Araceli Nahas District Accountant

Joyce Reed Administrative Assistant

## Miscellaneous (Non-Safety) Employees:

<u>Position</u>	<u>Start</u>	<u>6 mo.</u>	<u>12 mo.</u>	<u>24 mo.</u>	<u>36 mo.</u>
Admin. Asst.	\$9,890	\$10,388	\$10,904	\$11,451	\$12,027
Accountant	\$10,480	\$11,009	\$11,561	\$12,142	\$12,749

The District will provide a 5.35% EMT/AED pay to all employees with a current EMT or AED certification. The EMT/AED pay will be calculated on the employee's base salary and longevity pay.

### 30. LONGEVITY INCENTIVE

3-5 years	=	3.00%	15-17 years = 15.00%
6-8 years	=	6.00%	18-20 years = 18.00%
9-11 years	=	9.00%	21-23 years = 21.00%
12-14 years	5 =	12.00%	24+ years = 24.00%

Longevity increases are effective following the anniversary date (i.e. 3.00% following the 3rd anniversary).

## 31. DISPATCH CADRE

Dispatch Cadre members can be filled by Miscellaneous Employees, Firefighters, Firefighter/Paramedics and/or Engineers. The District will pay Dispatch Cadre members an amount equal to 5% of the top step Firefighter monthly base pay.

## 32. RETIREMENT

The District pays the entire employee contribution to the California Public Employees' Retirement System ("CalPERS") for CalPERS classic members only. This sum is equal to 9% of employee earnings for safety employees and 8% of earnings for miscellaneous employees. The plans provided are: Safety Fire 3% at 55, PEPRA Safety Fire 2.7% at 57, Miscellaneous 3% at 60, and PEPRA Miscellaneous 2% at 62.

Classic employees will pay 12% of the Employer's Retirement Contribution effective July 1, 2019. The contributions will be pre-tax as allowed by a contract change with CalPERS and a 414(h)(2) resolution approved by the District Board and filed with CalPERS. Until such time that the contract with CalPERS is approved and implemented, the employees will reimburse the District the Employer's Retirement Contribution directly at the appropriate rate. This contribution is the corresponding percentage of an employee's reportable earnings for

## Agenda Item #9

## ATTACHMENT

#A

## Variance Report Finance Committee - June 17, 2019

Г	Report	Line Item	Variance Explanation
1	Balance Sheet	0115	Fair market value adjustments posted by the County on a quarterly basis.
2	Balance Sheet	0211	Property tax revenue impounded by the Auditor-Controller's Office due to large assessment appeals that have not been settled.
3	Balance Sheet	1015 & 1210	The EFT and accounts payable accounts reflect expenses entered by month-end, but disbursement payment wasn't completed until the next month.
4	Balance Sheet	2130	Fund Balance - Committed maintains the District's reserve balances as of 7/1/18: Catastrophic \$2,400,000 and Economic Uncertainties \$3,670,000.
5	Balance Sheet	Fund 3652 0550	The deposit is for a prepaid engine that is expected to be put into service in July. A journal entry to record the capital asset will be posted to reclassify the deposit to Equipment in July.
6	Financial Status	Revenues: Taxes	The District is expecting to collect about \$17.6 million in property tax revenue based on the County's estimates. An adjustment is proposed in the Budget Amendment.
7	Financial Status	3380	The interest income received is for the money held in the County Treasury Pool. Over the last year, the pool has yielded a return of approximately 1.6%, which is signicantly higher than the return in past years of less than 1%. An adjustment is proposed in the Budget Amendment.
8	Financial Status	3750 & 4476	Revenue received for assisting in state and federal fire assignments. An adjustment to reflect actual revenue is proposed in the Budget Amendment.
9	Financial Status	4160 & 4610	Funds received from FEMA/CalOES for the Public Assistance Disaster Relief Program from the Thomas Fire/Debris Flow damages are recorded in these two accounts. Approximately \$6 million in revenue is proposed in the budget
.0	Financial Status	5780	The funds received are from the insurance claim for the generator that stopped functioning during the Thomas Fire. The generator will be replaced next fiscal year.
.1	Financial Status	6301	The overtime reimbursable account exceeds the budgeted amount due to another busy fire season. An adjustment is proposed in the Budget Amendment.
.2	Financial Status	7030, 7050, 7200, 7363, 7400, 7540	Increases to these accounts are proposed in the Budget Amendment due mainly to planned projects/expenses approved by the Board in March.
.3	Financial Status	7650	This account included \$530,000 for the Thomas Fire/Debris Flow cost apportionment. This amount will be closer to \$4 million and is proposed in the budget amendment.
.4	Financial Status	Fund 3653 5780	The District received insurance proceeds for the rental properties that were damaged/destroyed during the Debris Flow. The District will received additional funds when repair/rebuild of the structures begins.
.5	Financial Trend	7650	Expenses this FY are trending higher due to the Prop 4 election (\$24k) and winte storm pre-position logistics expenses (\$48k), of which the majority will be reimbursed by CalOES.

## Variance Report Finance Committee - June 17, 2019

	Report	Line Item	Variance Explanation
16	Financial Trend	7901	The transfers shown in previous years were for the Pension Obligation Fund payments. The final payment was posted in May of 2018.
17	Expenditure Trend	6300, 6301, 6310	Overtime adjustment journal entries for March and April have not been posted due to backlog. Entries will be posted by year-end to properly reflect OT amounts.
18	Expenditure Trend	7400	10 AED's were purchased in May, totaling approximately \$23k.

**Balance Sheet** 

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund; Page Break At = Fund

# Fund 3650 -- Montecito Fire Protection Dist

	Beginning Balance 7/1/2018	Year-To-Date Debits	Year-To-Date Credits	Ending Balance 5/31/2019
Assets & Other Debits				
Assets				
0110 Cash in Treasury	8,457,112.66	25,107,455.74	15,856,116.24	17,708,452.16
0115 Treasury FMV Adjustment	-56,692.45	59,519.39	00.00	2,826.94 1
0120 Imprest Cash	500.00	0.00	00.00	500.00
0130 Cash with Fiscal Agents	20,471.79	2,054.31	00.0	22,526.10
0211 Prop Tax Impounds Receivable	261,060.00	00.0	00.00	261,060.00 2
0230 Accounts Receivable	670,916.69	0.00	670,916.69	0.00
0240 Interest Receivable	30,785.95	108,032.47	138,818.42	0.00
Total Assets	9,384,154.64	25,277,061.91	16,665,851.35	17,995,365.20
Total Assets & Other Debits	9,384,154.64	25,277,061.91	16,665,851.35	17,995,365.20
Liabilities, Equity & Other Credits				
Liabilities				
1010 Warrants Payable	00.0	1,122,753.36	1,122,753.36	0.00
1015 EFT Payable	163.06	6,247,625.21	6,249,345.64	1,883.49 3
1020 Salaries & Benefits Payable	22,398.00	22,398.00	00.00	0.00
1210 Accounts Payable	127,236.21	7,370,981.89	7,353,760.03	110,014.35 3
1240 Accrued Expenses	8,874.00	8,874.00	00.0	0.00
1400 Deposits	00.0	0.00	1,000.00	1,000.00
1730 Unidentified Deposits	0.00	7,459,433.60	7,459,433.60	0.00
Total Liabilities	158,671.27	22,232,066.06	22,186,292.63	112,897.84
<b>Equity</b> 2110 Fund Balance-Nonspendable	178.091.00	0.00	0.00	178,091,00
2120 Fund Balance-Restricted	0.00	0.00	2,826.94	2,826.94
2130 Fund Balance-Committed	6,070,500.00	0.00	0.00	6,070,500.00 4
2200 Fund Balance-Residual	2,976,892.37	35,900,923.04	44,555,080.09	11,631,049.42
Total Equity	9,225,483.37	35,900,923.04	44,557,907.03	17,882,467.36
டு இல்லாம் of Santa Barbara, FIN	Last Updated: 6/12/2019 5:47 AM	/2019 5:47 AM		Page

## **Balance Sheet**

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund; Page Break At = Fund

# Fund 3650 -- Montecito Fire Protection Dist

Ending Balance 5/31/2019	17,995,365.20
Year-To-Date Credits	66,744,199.66
Year-To-Date Debits	58,132,989.10
Beginning Balance 7/1/2018	9,384,154.64
	Total Liabilities, Equity & Other Credits ==

Page 2 of 4

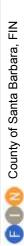
## **Balance Sheet**

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund; Page Break At = Fund

# Fund 3652 -- Montecito Fire Cap Outlay Res

	Beginning Balance 7/1/2018	Year-To-Date Debits	Year-To-Date Credits	Ending Balance 5/31/2019
Assets & Other Debits				
Assets				
0110 Cash in Treasury	2,657,406.90	841,088.02	1,599,955.86	1,898,539.06
0115 Treasury FMV Adjustment	-17,813.99	23,131.03	4,899.20	417.84
0240 Interest Receivable	8,223.30	33,234.72	41,458.02	0.00
0550 Deposits with Others	427,351.40	0.00	00.00	427,351.40 5
Total Assets	3,075,167.61	897,453.77	1,646,313.08	2,326,308.30
Total Assets & Other Debits	3,075,167.61	897,453.77	1,646,313.08	2,326,308.30
Liabilities, Equity & Other Credits Liabilities				
1010 Warrants Payable	0.00	795,030.00	795,030.00	0.00
1210 Accounts Payable	0.00	795,030.00	795,030.00	0.00
1730 Unidentified Deposits	00.00	4,600.00	4,600.00	0.00
Total Liabilities	0.00	1,594,660.00	1,594,660.00	0.00
Equity				
2110 Fund Balance-Nonspendable	427,351.40	0.00	0.00	427,351.40 5
2120 Fund Balance-Restricted	0.00	00.00	417.84	417.84
2140 Fund Balance-Assigned	2,647,816.21	0.00	00.00	2,647,816.21
2200 Fund Balance-Residual	00.00	2,827,690.90	2,078,413.75	-749,277.15
Total Equity	3,075,167.61	2,827,690.90	2,078,831.59	2,326,308.30
Total Liabilities, Equity & Other Credits	3,075,167.61	4,422,350.90	3,673,491.59	2,326,308.30

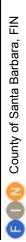


Layout Options: Summarized By = Fund; Page Break At = Fund

# Fund 3653 -- Montecito Fire Land & Building

	Beginning Balance 7/1/2018	Year-To-Date Debits	Year-To-Date Credits	Ending Balance 5/31/2019
Assets & Other Debits				
Assets				
0110 Cash in Treasury	5,650,048.41	684,936.31	3,862.50	6,331,122.22
0115 Treasury FMV Adjustment	-37,875.23	49,622.18	10,358.21	1,388.74
0240 Interest Receivable	20,416.84	76,247.39	96,664.23	0.00
Total Assets	5,632,590.02	810,805.88	110,884.94	6,332,510.96
Total Assets & Other Debits	5,632,590.02	810,805.88	110,884.94	6,332,510.96
Liabilities, Equity & Other Credits Liabilities				
1010 Warrants Payable	0.00	3,862.50	3,862.50	0.00
1210 Accounts Payable	0.00	3,862.50	3,862.50	0.00
1730 Unidentified Deposits	00.0	588,272.08	588,272.08	0.00
Total Liabilities	0.00	595,997.08	595,997.08	0.00
Equity				
2120 Fund Balance-Restricted	0.00	0.00	1,388.74	1,388.74
2140 Fund Balance-Assigned	5,632,590.02	0.00	0.00	5,632,590.02
2200 Fund Balance-Residual	00.0	216,998.45	915,530.65	698,532.20
Total Equity	5,632,590.02	216,998.45	916,919.39	6,332,510.96
Total Liabilities, Equity & Other Credits	5,632,590.02	812,995.53	1,512,916.47	6,332,510.96

Page 4 of 4



Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

Fund 3650 -- Montecito Fire Protection Dist

Line Item Account	6/30/2019 Fiscal Year Adjusted Budget	5/31/2019 Year-To-Date Actual	6/30/2019 Fiscal Year Variance	6/30/2019 Fiscal Year Pct of Budget	
Revenues					
Taxes 3010 Property Tax-Current Secured	14 723 000 00	15.727.006.52	1 004 006 52	106.82 %	
3011 Property Tax-Unitary	144,700.00	-252.10	-144,952.10	-0.17 %	
3015 PT PY Corr/Escapes Secured	73,238.00	551.53	-72,686.47	0.75 %	
3020 Property Tax-Current Unsecd	705,255.00	567,821.33	-137,433.67	80.51 %	
3023 PT PY Corr/Escapes Unsecured	0.00	2,834.18	2,834.18	I	
3040 Property Tax-Prior Secured	21,033.00	61.95	-20,971.05	0.29 %	
3050 Property Tax-Prior Unsecured	5,850.00	-6,491.45	-12,341.45	-110.96 %	
3054 Supplemental Pty Tax-Current	183,935.00	6,049.32	-177,885.68	3.29 %	
3056 Supplemental Pty Tax-Prior	00.0	2,070.03	2,070.03	1	
Taxes	15,857,011.00	16,299,651.31	442,640.31	102.79 %	9
Fines, Forfeitures, and Penalties 3057 PT-506 Int, 480 CIOS/CIC Pen	0.00	-4,266.11	-4,266.11	I	
Fines, Forfeitures, and Penalties	00.0	-4,266.11	-4,266.11	1	
Use of Money and Property 3380 Interest Income	20,000,00	108,032,47	88 032 47	540.16 %	2
3381 Unrealized Gain/Loss Invstmnts	2,827.00	59,519.39	56,692.39	2,105.39 %	
3409 Other Rental of Bldgs and Land	0.00	3,870.00	3,870.00	1	
Use of Money and Property	22,827.00	171,421.86	148,594.86	750.96 %	
Intergovernmental Revenue-State 3750 State-Emergency Assistance	345,000.00	924,572.43	579,572.43	267.99 %	∞
4160 State Aid for Disaster	00.0	1,858,865.01	1,858,865.01	1	6
4220 Homeowners Property Tax Relief	82,610.00	67,604.56	-15,005.44	81.84 %	
Intergovernmental Revenue-State	427,610.00	2,851,042.00	2,423,432.00	666.74 %	

Page 1 of 7

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

Fund 3650 -- Montecito Fire Protection Dist

Line Item Account	6/30/2019 Fiscal Year Adjusted Budget	5/31/2019 Year-To-Date Actual	6/30/2019 Fiscal Year Variance	6/30/2019 Fiscal Year Pct of Budget	
Intergovernmental Revenue-Federal 4476 Federal Emergency Assistance	140,000.00	283,623.74	143,623.74	202.59 %	ω
4610 Federal Aid for Disaster	00.0	4,669,969.00	4,669,969.00		6
Intergovernmental Revenue-Federal	140,000.00	4,953,592.74	4,813,592.74	3,538.28 %	
Charges for Services 5105 Reimb for District Services	198,595.00	147,083.17	-51,511.83	74.06 %	
Charges for Services	198,595.00	147,083.17	-51,511.83	74.06 %	
Miscellaneous Revenue 5780 Insurance Proceeds & Recovery	0.00	34,867.69	34,867.69	I	10
5895 Other-Donations	00.0	300.00	300.00	1	
5909 Other Miscellaneous Revenue	7,500.00	24,466.74	16,966.74	326.22 %	
Miscellaneous Revenue	7,500.00	59,634.43	52,134.43	795.13 %	
Revenues	16,653,543.00	24,478,159.40	7,824,616.40	146.98 %	
Expenditures					
Salaries and Employee Benefits 6100 Remilar Salaries	7 937 225 00	7 620 355 86	307 869 14	06 12 %	
6300 Overtime	130,000.00	89,292.68	40,707.32	68.69 %	
6301 Overtime - Reimbursable	485,000.00	847,170.32	-362,170.32	174.67 %	11
6310 Overtime - Constant Staffing	795,000.00	319,930.96	475,069.04	40.24 %	
6400 Retirement Contribution	2,539,640.00	2,237,253.74	302,386.26	88.09 %	
6550 FICA/Medicare	134,325.00	125,226.96	9,098.04	93.23 %	
6600 Health Insurance Contrib	1,962,500.00	1,718,761.22	243,738.78	87.58 %	
6700 Unemployment Ins Contribution	10,040.00	6,370.56	3,669.44	63.45 %	
6900 Workers Compensation	625,000.00	476,146.83	148,853.17	76.18 %	
Salaries and Employee Benefits	14 618 730 00	13 449 509 13	1 169 220 87	% UU 00	

Page 2 of 7

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

Fund 3650 -- Montecito Fire Protection Dist

Services and Supplies					
7030 Clothing and Personal	53,000.00	67,052.32	-14,052.32	126.51 % 12	
7050 Communications	99,500.00	107,686.63	-8,186.63	108.23 % 12	
7060 Food	2,500.00	8,738.97	-6,238.97	349.56 %	
7070 Household Supplies	30,250.00	26,890.99	3,359.01	88.90 %	
7090 Insurance	31,000.00	32,017.00	-1,017.00	103.28 %	
7120 Equipment Maintenance	35,000.00	63,426.68	-28,426.68	181.22 %	
7200 Structure & Ground Maintenance	26,550.00	35,460.84	-8,910.84	133.56 % 12	
7205 Fire Defense Zone	236,000.00	197,461.79	38,538.21	83.67 %	
7322 Consulting & Mgmt Fees	3,350.00	315.00	3,035.00	9.40 %	
7324 Audit and Accounting Fees	25,000.00	18,215.50	6,784.50	72.86 %	
7348 Instruments & Equip. < \$5000	11,000.00	18,920.61	-7,920.61	172.01 %	
7363 Equipment Maintenance	63,000.00	99,775.17	-36,775.17	158.37 % 12	
7400 Medical, Dental and Lab	30,000.00	52,443.99	-22,443.99	174.81 % 12	
7430 Memberships	12,500.00	13,465.45	-965.45	107.72 %	
7450 Office Expense	27,500.00	23,378.01	4,121.99	85.01 %	
7460 Professional & Special Service	302,500.00	276,560.53	25,939.47	91.42 %	
7507 ADP Payroll Fees	7,500.00	6,659.84	840.16	88.80 %	
7510 Contractual Services	52,000.00	51,868.90	131.10	99.75 %	
7530 Publications & Legal Notices	6,000.00	2,278.90	3,721.10	37.98 %	
7546 Administrative Expense	240,000.00	244,640.00	-4,640.00	101.93 %	
7580 Rents/Leases-Structure	4,500.00	7,599.42	-3,099.42	168.88 %	
7630 Small Tools & Instruments	13,000.00	1,731.06	11,268.94	13.32 %	
7650 Special Departmental Expense	553,500.00	93,940.08	459,559.92	16.97 % 13	
7671 Special Projects	23,000.00	3,285.32	19,714.68	14.28 %	
7730 Transportation and Travel	35,000.00	36,609.44	-1,609.44	104.60 %	
7731 Gasoline-Oil-Fuel	55,000.00	59,124.95	-4,124.95	107.50 %	
7732 Training	87,750.00	71,342.40	16,407.60	81.30 %	
County of Santa Barbara, FIN	Last Updated: 6/12/2019 5:47 AM	019 5:47 AM			Page 3 of 7

June 24, 2019

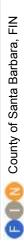
Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

Fund 3650 -- Montecito Fire Protection Dist

T760 - Utilities         43,522.84         43,522.84         -522.84         101.22 %           Revices and Supplies         2,108,900.00         1,664,412.63         44,487.37         78.92 %           Capital Assets         315,000.00         139,681.65         175,318.35         44.34 %           Soon - Equipment         Capital Assets         315,000.00         139,681.65         175,318.35         44.34 %           Soon - Equipment         Capital Assets         315,000.00         15,253,603.41         1,78,026.59         89.50 %           Cher Financing Sources & Uses         17,042,630.00         15,253,603.41         1,78,026.59         89.50 %           Other Financing Uses         0.00         15,253,603.41         1,75,318.35         44.34 %           Yoon - Coper Trif         0.01         422,000.00         0.00 %         0.00 %           Yoon - Oper Trif         0.01         422,000.00         0.00 %         0.00 %           Yoon - Oper Trif         0.01         422,000.00         0.00 %         0.00 %           Yoon - Oper Trif         0.01         422,000.00         0.00 %         0.00 %           Yoon - Oper Trif         0.01         0.00         422,000.00         0.00 %           Other Financing Uses         0.422,	Line Item Account	6/30/2019 Fiscal Year Adjusted Budget	5/31/2019 Year-To-Date Actual	6/30/2019 Fiscal Year Variance	6/30/2019 Fiscal Year Pct of Budget
vices and Supplies         2,108,900.00         1,664,412.63         444,487.37         7           vices and Supplies         315,000.00         139,681.65         175,318.35         4           Capital Assets         315,000.00         139,681.65         175,318.35         4           Capital Assets         315,000.00         139,681.65         175,318.35         4           Expenditures         17,042,630.00         15,253,603.41         1,789,026.59         8           ses         422,000.00         0.00         0.00         422,000.00         8           er Financing Uses         422,000.00         0.00         422,000.00         10         17789,026.59         8           g Sources & Uses         422,000.00         0.00         0.00         422,000.00         10           g Sources & Uses         2,827.00         0.00         0.00         422,000.00         10           g Sources & Uses         2,827.00         2,826.94         0.06         10         10           to Fund Balances         -2,827.00         2,826.94         0.06         10         10           to Fund Balances         -2,827.00         9,221,729.05         10,035,643.05         -1,13         10	7760 Utilities	43,000.00	43,522.84	-522.84	101.22 %
Capital Assets         315,000.00         139,681.65         175,318.35         4           Expenditures         315,000.00         139,681.65         175,318.35         4           Expenditures         315,000.00         139,681.65         175,318.35         4           Expenditures         17,042,630.00         15,253,603.41         1,789,026.59         8           ses         422,000.00         0.00         422,000.00         6         10           er Financing Uses         422,000.00         0.00         422,000.00         10           g Sources & Uses         422,000.00         0.00         422,000.00         10           er Financing Uses         2,827.00         0.00         422,000.00         10           g Sources & Uses         2,827.00         2,826.94         0.06         10           ease to Restricted         2,827.00         2,826.94         0.06         10           to Fund Balances         -2,827.00         -2,826.94         0.06         10           tire Protection Dist         -313,914.00         9,221,729.05         10,035,643.05         -1,13	Services and Supplies	2,108,900.00	1,664,412.63	444,487.37	78.92 %
Capital Assets         315,000.00         139,681.65         175,318.35         4           Expenditures         17,042,630.00         15,253,603.41         1,789,026.59         8           ses         422,000.00         15,253,603.41         1,789,026.59         8           ses         422,000.00         0.00         422,000.00         10           er Financing Uses         422,000.00         0.00         422,000.00         10           g Sources & Uses         422,000.00         0.00         422,000.00         10           g Sources & Uses         2,827.00         2,826.94         0.06         10           ease to Restricted         2,827.00         2,826.94         0.06         10           to Fund Balances         -3,827.00         -2,826.94         0.06         10           to Fund Balances         -3,827.00         -2,827.00         -3,826.94         0.06         10           tire Protection Dist         -813,914.00         9,221,729.05         10,035,643.05         -1,13	Capital Assets 8300 Equipment	315,000.00	139,681.65	175,318.35	44.34 %
Expenditures17,042,630.0015,253,603.411,789,026.598ses422,000.00422,000.008er Financing Uses422,000.000.00422,000.00er Financing Uses422,000.000.00422,000.00g Sources & Uses-422,000.000.00422,000.00g Sources & Uses-422,000.000.00422,000.00g Sources & Uses-422,000.000.0010g Sources & Uses2,827.002,826.940.06ease to Restricted2,827.00-2,826.940.06to Fund Balances-2,827.009,221,729.0510,035,643.05ire Protection Dist-813,914.009,221,729.0510,035,643.05ire Protection Dist-813,914.009,221,729.0510,035,643.05	Capital Assets	315,000.00	139,681.65	175,318.35	44.34 %
ses       422,000.00       0.00       422,000.00         er Financing Uses       422,000.00       0.00       422,000.00         g Sources & Uses       -422,000.00       0.00       10         g Sources & Uses       2,827.00       2,826.94       0.06         ease to Restricted       2,827.00       -2,826.94       0.06         to Fund Balances       -2,827.00       -2,826.94       0.06         ife Protection Dist       -813,914.00       9,221,729.05       10,035,643.05       -1,13	Expenditures	17,042,630.00	15,253,603.41	1,789,026.59	89.50 %
Iter Financing Uses         422,000.00         0.00         422,000.00           ing Sources & Uses         -422,000.00         0.00         422,000.00           ing Sources & Uses         -422,000.00         0.00         422,000.00           ing Sources & Uses         -422,000.00         0.00         10           ing Sources & Uses         2,827.00         2,826.94         0.06         10           crease to Restricted         2,827.00         2,826.94         0.06         10           is to Fund Balances         -2,827.00         -2,826.94         0.06         10           fire Protection Dist         -813,914.00         9,221,729.05         10,035,643.05         -1,13	Other Financing Sources & Uses Other Financing Uses 7901 Oper Trf (Out)	422,000.00	0.00	422,000.00	0.00 %
Ing Sources & Uses         -422,000.00         0.00         422,000.00           rease to Restricted         2,827.00         2,826.94         0.06           st o Fund Balances         -2,827.00         -2,826.94         0.06           Fire Protection Dist         -2,827.00         -2,826.94         0.06	Other Financing Uses	422,000.00	00.00	422,000.00	00.00
crease to Restricted     2,827.00     2,826.94     0.06       is to Fund Balances     2,827.00     2,826.94     0.06       is to Fund Balances     -2,827.00     -2,826.94     0.06       Fire Protection Dist     -813,914.00     9,221,729.05     10,035,643.05	Other Financing Sources & Uses	-422,000.00	0.00	422,000.00	% 00.0
2,827.00         2,826.94         0.06           -2,827.00         -2,826.94         0.06           -813,914.00         9,221,729.05         10,035,643.05	Changes to Fund Balances Increase to Restricted 9797 Unrealized Gains	2,827.00	2,826.94	0.06	100.00 %
-2,827.00 -2,826.94 0.06 -813,914.00 9,221,729.05 10,035,643.05 -1,	Increase to Restricted	2,827.00	2,826.94	0.06	100.00 %
-813,914.00 9,221,729.05 10,035,643.05	Changes to Fund Balances	-2,827.00	-2,826.94	0.06	100.00 %
	Montecito Fire Protection Dist	-813,914.00	9,221,729.05	10,035,643.05	-1,133.01 %

Page 4 of 7



Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

Fund 3652 -- Montecito Fire Cap Outlay Res

	6/30/2019 Fiscal Vear	5/31/2019 Vear-To-Date	6/30/2019 Fiscal Vear	6/30/2019 Fiscal Year
Line Item Account	Adjusted Budget	Actual	Variance	Pct of Budget
Revenues				
Use of Money and Property 3380 Interest Income	10,000.00	33,234.72	23,234.72	332.35 %
3381 Unrealized Gain/Loss Invstmnts	418.00	18,231.83	17,813.83	4,361.68 %
Use of Money and Property	10,418.00	51,466.55	41,048.55	494.02 %
Revenues	10,418.00	51,466.55	41,048.55	494.02 %
Expenditures Capital Assets				
8300 Equipment	1,222,000.00	804,925.86	417,074.14	65.87 %
Capital Assets	1,222,000.00	804,925.86	417,074.14	65.87 %
_ Expenditures	1,222,000.00	804,925.86	417,074.14	65.87 %
Other Financing Sources & Uses				
Other Financing Sources 5910 Oper Trf (In)-General Fund	422,000.00	0.0	-422,000.00	0.00 %
5919 Sale Capital Assets-Prsnl Prop	00.0	4,600.00	4,600.00	
Other Financing Sources	422,000.00	4,600.00	-417,400.00	1.09 %
Other Financing Sources & Uses	422,000.00	4,600.00	-417,400.00	1.09 %
Changes to Fund Balances Increase to Restricted 9797 Unrealized Gains	418 00	417 84	0 16	%90 00
Increase to Restricted	418.00	417.84	0.16	99.96 %
Changes to Fund Balances	-418.00	-417.84	0.16	99.96 %
- Montecito Fire Cap Outlay Res	-790,000.00	-749,277.15	40,722.85	94.85 %

Page 5 of 7

June 24, 2019

S
Π
Ţ
σ
t
<b>()</b>
_
b
5
U
σ
ž
ĹГ.

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

Fund 3653 -- Montecito Fire Land & Building

				14												
	6/30/2019 Fiscal Year Pct of Budget	508.32 %	2,826.78 % 704.81 %	- 1		4,294.24 %	I		% 00.0	0.00 %	1.93 %	% 86.66	99.98 %	99.98 %	-377.58 %	-512.66 %
	6/30/2019 Fiscal Year Variance	61,247.39	37,874.97 99,122.36	588,272.08	588,272.08	687,394.44	-3,862.50	-3,862.50	200,000.00	200,000.00	196,137.50	0.26	0.26	0.26	883,532.20	10,959,898.10
	5/31/2019 Year-To-Date Actual	76,247.39	39,263.97 115,511.36	588,272.08	588,272.08	703,783.44	3,862.50	3,862.50	0.0	00.0	3,862.50	1,388.74	1,388.74	-1,388.74	698,532.20	9,170,984.10
	6/30/2019 Fiscal Year Adjusted Budget	15,000.00	1,389.00 16,389.00	0.00	00.0	16,389.00	0.00	0.00	200,000.00	200,000.00	200,000.00	1,389.00	1,389.00	-1,389.00	-185,000.00	-1,788,914.00
3 Iviontecito Fire Land & Building	Line Item Account	Revenues Use of Money and Property 3380 Interest Income	3381 Unrealized Gain/Loss Invstmnts Use of Money and Property	Miscellaneous Revenue 5780 Insurance Proceeds & Recovery	Miscellaneous Revenue	Revenues	Expenditures Services and Supplies 7460 Professional & Special Service	Services and Supplies	Capital Assets 8100 Land	Capital Assets	Expenditures	Changes to Fund Balances Increase to Restricted 9797 Unrealized Gains	Increase to Restricted	Changes to Fund Balances		Net Financial Impact

Last Updated: 6/12/2019 5:47 AM

P County of Santa Barbara, FIN

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Document	Post On	Post On Dept Description	iption	Amount
Line Item Account 3054 Supplemental Pty Tax-Current	3054 Supple	mental Pty Ta	x-Current	
AUT - PT03410	5/6/2019	Add I	Add I SOB Collections 7-1-17 to 6-30-2018 (3054)	4,692.86
AUT - PT03411	5/6/2019	Add I	Add I SOB Collections 7-1-16 to 6-30-2017 (3054)	4,140.65
AUT - PT03412	5/6/2019	Add I	Add I SOB Collecitons 7-1-15 to 6-30-2016 (3054)	9,596.95
			Total Supplemental Pty Tax-Current	18,430.46
Line Item Account 3409 Other Rental of Bldgs and Land	3409 Other   5/31/2019	Rental of Bldgs Rents	Bldgs and Land Rental income_March-Anril	2 580 00
	0107100			2,000.00
			Total Other Rental of Bldgs and Land	2,580.00
Line Item Account 3750 State-Emergency Assistance	3750 State-E	Emergency As:	sistance	
JE - 0187474	5/31/2019	Recla	Reclass WC disability pmts, DJE 0116698	-10,011.04
			Total State-Emergency Assistance	-10,011.04
			Total Montecito Fire Protection Dist	10,999.42

## **Cost Transactions**

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Post On	Document	Vendor/Employee Name	Description	Hours	Amount
Line Item Accol	Line Item Account 6100 Regular Salaries	Salaries			
05/01/2019	CLM - 0533503	MASSMUTUAL	Employer/employee 457 plan contributions, 5/1/19	0.00	23,093.00
05/01/2019	CLM - 0533507	Franchise Tax Board	FTB Withholding Order for J. Jenkins: PR 5/1/19	0.00	1,599.00
05/01/2019	CLM - 0534223	AFLAC	Employee paid insurance, April 2019	0.00	1,641.92
05/01/2019	EFC - 0023603	STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll Dir Deposits, 5/1/19	00.0	224,047.90
05/01/2019	EFC - 0023603	STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll Taxes, 5/1/19	00.0	62,989.33
05/01/2019	JE - 0187451		Overtime adjustment, 1/16/19	0.00	-38,399.85
05/01/2019	JE - 0187465		Overtime adjustment, 2/1/19	0.00	-60,961.47
05/01/2019	MIC - 0122560	CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM	Employee retirement contribution, 5/1/19	00.0	34,262.41
05/07/2019	DJE - 0117424		Flexible spending account refund, April 2019	0.00	-46.53
05/14/2019	EFC - 0023738	WAGEWORKS INC	Montecito Fire FSA plan pmts, 4/20-5/9/19	0.00	1,491.97
05/16/2019	CLM - 0537917	MASSMUTUAL	Employer/employee 457 plan contributions, 5/16/19	0.00	23,093.00
05/16/2019	CLM - 0537919	MONTECITO FIREMENS ASSOC	Employee association dues, 5/16/19	0.00	6,300.00
05/16/2019	CLM - 0537919	MONTECITO FIREMENS ASSOC	Employee paid disability insurance, 5/16/19	0.00	1,102.50
05/16/2019	CLM - 0537921	Franchise Tax Board	FTB Withholding Order for J. Jenkins: PR 5/16/19	0.00	1,442.89
05/16/2019	EFC - 0023831	STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll Dir Deposits, 5/16/19	0.00	217,550.57
05/16/2019	EFC - 0023831	STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll Taxes, 5/16/19	0.00	60,973.77
05/16/2019	JE - 0186844		Payroll checks, 5/16/19	0.00	11,101.08
05/16/2019	MIC - 0122668	CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM	Employee retirement contribution, 5/16/19	0.00	34,738.47
05/31/2019	EFC - 0023894	STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll Dir Deposits, 5/31/19	0.00	248,366.89
05/31/2019	EFC - 0023894	STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll Taxes, 5/31/19	0.00	69,092.09
05/31/2019	EFC - 0023905	WAGEWORKS INC	Montecito Fire FSA plan pmts, 5/10-5/28/19	0.00	931.18
			Total Regular Salaries	00.0	924,410.12

Page 1 of 17

S
Ċ
0
Ť
Ä
Sa
Ĉ
പ്പ
' 
S.
0
()

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

### 13,538.36 18,877.00 4,903.15 4,903.15 9,461.38 53,949.36 5,338.64 33,058.58 53,540.93 4,588.83 112,079.12 4,820.78 5,250.20 75,581.17 4,992.62 33,061.21 Amount 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Hours **Fotal Overtime - Constant Staffing** Total Overtime Total Overtime - Reimbursable Total Retirement Contribution Overtime adjustment, 2/1/19 (Front #1 Pre-pos) Montecito Fire Payroll SS/Medicare, 5/16/19 Montecito Fire Payroll SS/Medicare, 5/31/19 Montecito Fire Payroll SS/Medicare, 5/1/19 District retirement contributions, 5/16/19 District retirement contributions, 5/1/19 2019 RBF Contribution, COLA Overtime adjustment, 1/16/19 Overtime adjustment, 1/16/19 Overtime adjustment, 2/1/19 Overtime adjustment, 2/1/19 Overtime adjustment, 2/1/19 Description STATE/FEDERAL TAXES & DIRECT DEPOSITS CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM STATE/FEDERAL TAXES & DIRECT STATE/FEDERAL TAXES & DIRECT Vendor/Employee Name Fund 3650 -- Montecito Fire Protection Dist -ine Item Account 6310 -- Overtime - Constant Staffing Line Item Account 6301 -- Overtime - Reimbursable Line Item Account 6400 -- Retirement Contribution DEPOSITS DEPOSITS Line Item Account 6550 -- FICA/Medicare Line Item Account 6300 -- Overtime EFC - 0023603 CLM - 0535893 MIC - 0122560 MIC - 0122668 EFC - 0023831 EFC - 0023894 JE - 0187465 JE - 0187465 JE - 0187465 JE - 0187465 JE - 0187451 JE - 0187451 Document 05/01/2019 05/01/2019 05/01/2019 05/01/2019 05/01/2019 05/09/2019 05/16/2019 05/01/2019 05/16/2019 05/31/2019 05/01/2019 05/01/2019 Post On

15,063.60

0.00

Total FICA/Medicare

Page 2 of 17

S
Ĉ
0
÷
Q
Ő
ŝ
Ä
<u>ש</u>
يہ
S
N.
$\mathbf{O}$

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## ; -٥ Ü -7 26E0 ЦЦ

Fund 3650 -	Montecito Fir	Fund 3650 Montecito Fire Protection Dist			
Post On	Document	Vendor/Employee Name	Description	Hours	Amount
Line Item Accou 05/01/2019	Line Item Account 6600 Health Insurance Contrib 05/01/2019 CLM - 0533694 CALIFORNIA F RETIREMENT	nsurance Contrib CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM	Health Benefits, May 2019	0.00	140,877.97
05/01/2019	CLM - 0533800	LINCOLN NATIONAL LIFE INS	Life Insurance, May 2019	0.00	707.41
05/01/2019	CLM - 0534220	DELTA DENTAL	Dental insurance - May 2019	0.00	12,822.13
05/01/2019	MIC - 0121372	Vision Service Plan-CA	Vision insurance - active, May 2019	0.00	1,398.79
05/01/2019	MIC - 0121372	Vision Service Plan-CA	Vision insurance - retirees, May 2019	0.00	1,659.03
05/15/2019	CLM - 0536158	WAGEWORKS INC	FSA administrative fee, April 2019	0.00	89.25
			Total Health Insurance Contrib	00.0	157,554.58
Line Item Accou 05/01/2019	unt 6700 Unemplo EFC - 0023603	Line Item Account 6700 Unemployment Ins Contribution 05/01/2019 EFC - 0023603 STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll SUI Taxes, 5/1/19	0.00	27.31
05/16/2019	EFC - 0023831	STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll SUI Taxes, 5/16/19	0.00	262.93
05/31/2019	EFC - 0023894	STATE/FEDERAL TAXES & DIRECT DEPOSITS	Montecito Fire Payroll SUI Taxes, 5/31/19	00.0	131.81
			Total Unemployment Ins Contribution	00.0	422.05
Line Item Accor	Line Item Account 6900 Workers Compensation	compensation			
05/31/2019	JE - 0187474		Reclass WC disability pmts, DJE 0116698	0.00	-10,011.04
			Total Workers Compensation	00.0	-10,011.04
Line Item Accor	Line Item Account 7030 Clothing and Personal				
05/07/2019	CLM - 0534296	TURNOUT MAINTENANCE CO LLC	Turnout repairs	0.00	85.42
05/07/2019	MIC - 0121390	L N CURTIS & SONS	Boots for new hire (1)	0.00	453.09
05/07/2019	MIC - 0121390	L N CURTIS & SONS	Boots for new hire (2)	0.00	906.18
05/14/2019	CLM - 0536152	LINEGEAR FIRE & RESCUE EQUIPMENT	PPE: Response Jacket (3)	00.0	755.02
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	PPE: Gear bags, masks, helmet shields (3 sets)	00.0	2,363.97
05/29/2019	CLM - 0538160	ON DUTY UNIFORMS	Cargo pants (2)	0.00	363.98
05/30/2019	CLM - 0538270	ALLSTAR FIRE EQUIPMENT INC	PPE: Leather structure gloves (19)	0.00	1,815.62

Page 3 of 17

Last Updated: 6/12/2019 5:47 AM

P County of Santa Barbara, FIN

## Cost Transactions

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/30/2019	CLM - 0538308	AROSHA INC	PPE: Lettering on yellow jackets (3)	0.00	60.00
05/30/2019	MIC - 0122573	ON DUTY UNIFORMS	Uniform pants (1)	0.00	387.90
05/30/2019	MIC - 0122573	ON DUTY UNIFORMS	Uniform pants (7)	0.00	1,273.50
05/31/2019	AUT - SUTAXJE		SUTAX JE - May 2019	0.00	120.85
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	PPE: Equipment for new hires	0.00	1,220.29
			Total Clothing and Personal	0.00	9,805.82
Line Item Accou	Line Item Account 7050 Communications	nications			
05/07/2019	CLM - 0534302	IMPULSE INTERNET SERVICES	Phone services, 5/25-6/24/19	0.00	1,884.15
05/08/2019	MIC - 0121618	TURN WIRELESS	Redundant internet Station 1: June 2019	0.00	88.25
05/08/2019	MIC - 0121618	TURN WIRELESS	Redundant internet Station 2: June 2019	0.00	88.25
05/09/2019	CLM - 0535431	SATCOM GLOBAL INC	Satellite phone charges	0.00	152.36
05/09/2019	CLM - 0535627	SPRINT	E92 Sim cards for MDC, 3/26-4/25/19	0.00	75.98
05/09/2019	MIC - 0121691	FRONTIER	209/097-2953.0	0.00	662.25
05/09/2019	MIC - 0121691	FRONTIER	209/111-1529.0	0.00	139.20
05/09/2019	MIC - 0121691	FRONTIER	805-565-9618	0.00	65.12
05/09/2019	MIC - 0121691	FRONTIER	805-969-0318	0.00	67.80
05/09/2019	MIC - 0121691	FRONTIER	Circuit ID: 05/RTNB/002320	0.00	45.83
05/09/2019	MIC - 0121691	FRONTIER	Circuit ID: 05/RTNB/655155	0.00	45.83
05/09/2019	MIC - 0121691	FRONTIER	Circuit ID: 05/RTNB/974343	0.00	45.83
05/09/2019	MIC - 0121691	FRONTIER	Circuit ID: 05/RTNB/974365	0.00	45.83
05/09/2019	MIC - 0121691	FRONTIER	Circuit ID: 11/RTNB/566142	0.00	114.65
05/09/2019	MIC - 0121691	FRONTIER	Circuit ID: 20/PLNB/200447	0.00	45.83
05/15/2019	CLM - 0536218	COX COMMUNICATIONS - BUSINESS	CAD connectivity & Internet	0.00	2,747.36
05/30/2019	CLM - 0538161	VERIZON WIRELESS	Wireless service, 4/14-5/13/19	0.00	2,455.68
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Phone accessories and UPS filters for Dispatch	0.00	91.63
			Total Communications	0.00	8,861.83

Page 4 of 17

June 24, 2019

S
0
÷
Ū
ā
ö
Ë
ສົ
<u> </u>
<del></del>
ň
м К
$\mathbf{U}$

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Post On	Document	Vendor/Employee Name	Description	Hours	Amount
Line Item Accou 05/28/2019	Line Item Account 7060 Food 05/28/2019 CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Meals for MFD, Front #3 Pre-position	0.00	708.34
			Total Food	0.00	708.34
Line Item Accor	Line Item Account 7070 Household Supplies	old Supplies			
05/09/2019	CLM - 0535630	VERITIV OPERATING COMPANY	Household supplies	00.0	719.78
05/09/2019	MIC - 0121666	MISSION LINEN SUPPLY	Shop towels, Sta. 1	0.00	272.78
05/09/2019	MIC - 0121666	MISSION LINEN SUPPLY	Shop towels, Sta. 2	0.00	476.37
05/14/2019	MIC - 0121902	MARBORG INDUSTRIES	Refuse disposal, Sta. 1	0.00	423.25
05/14/2019	MIC - 0121902	MARBORG INDUSTRIES	Refuse disposal, Sta. 2	0.00	159.82
05/14/2019	MIC - 0121907	READY REFRESH BY NESTLE	Bottled water, Sta. 1	0.00	279.56
05/14/2019	MIC - 0121907	READY REFRESH BY NESTLE	Bottled water, Sta. 2	0.00	91.85
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Household supplies: light bulbs, coffee decanter	0.00	113.21
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Replacement trash pump for Sta. 1	0.00	686.97
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Turnouts cleaned	0.00	269.60
05/31/2019	AUT - SUTAXJE		SUTAX JE - May 2019	0.00	7.68
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Curtain rods for Dispatch	0.00	15.80
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Household supplies: floor cleaner, wipes, cans	0.00	379.06
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Refrigerator replacement for Prevention office	0.00	193.94
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Turnouts cleaned	0.00	92.50
05/31/2019	JE - 0187473		Trash/recycling for rental prop, March-April	0.00	210.82
			Total Household Supplies	0.00	4,392.99
Line Item Accou 05/07/2019	Line Item Account 7120 Equipment Maintenance 05/07/2019 CLM - 0534300 ALLSTAR FIRI	ent Maintenance ALLSTAR FIRE EQUIPMENT INC	Rubber hose bands	0.00	54.36
05/09/2019	CLM - 0535497	CALIFORNIA HEALTH & SAFETY INC	Hydrostatic testing (4 bottles)	00.0	712.00
Cou	County of Santa Barbara, FIN		Last Updated: 6/12/2019 5:47 AM		Page 5 of 17

Reg Pg. 356

S
0
Ť
ğ
č
ิต
<u>ت</u>
З,
õ
ŏ
$\sim$

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

Fund 3650 -- Montecito Fire Protection Dist

Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/14/2019	CLM - 0536183	UNITED RENTALS NORTHWEST	Generator rental-4/18/19-5/16/19	0.00	2,270.64
05/15/2019	CLM - 0536219	FAIL SAFE TESTING	Annual ladder testing	0.00	1,039.95
05/17/2019	CLM - 0536280	SAFETY KLEEN CORP	Quarterly solvent tank maintenance	00.0	254.02
05/17/2019	CLM - 0536429	SAFETY KLEEN CORP	Waste oil pick up	00.0	85.00
05/20/2019	CLM - 0537008	ANCHOR AIR SYSTEMS	Station 1 maintenance - Air	0.00	201.53
05/24/2019	CLM - 0537810	JOY EQUIPMENT PROTECTION INC	Annual fire extinguisher testing	00.0	926.70
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Repair parts for exercise bikes	0.00	68.54
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Generator repair parts, Sta. 2	0.00	196.68
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Repair for probe eye finder on E391	0.00	238.50
			Total Equipment Maintenance	0.00	6,047.92
Line Item Accor	unt 7200 Structur	Line Item Account 7200 Structure & Ground Maintenance			
05/14/2019	CLM - 0536159	Peyton Scapes	Landscape maintenance	0.00	650.00
05/16/2019	MIC - 0121946	O'CONNOR PEST CONTROL-SB ACCTS	Quarterly pest control maint., Sta. 1	0.00	103.00
05/16/2019	MIC - 0121946	O'CONNOR PEST CONTROL-SB ACCTS	Quarterly pest control maint., Sta. 2	0.00	75.00
05/23/2019	CLM - 0537503	SCOTT MENZEL	Demonstration garden (budget amend)	0.00	280.00
05/24/2019	CLM - 0537913	ALFREDO GONZALEZ	Exterior painting, Sta. 2	0.00	4,000.00
05/31/2019	JE - 0187473		Heater and plumbing repairs for rental prop, March	0.00	917.85
			Total Structure & Ground Maintenance	0.00	6,025.85
Line Item Accou 05/13/2019	Line Item Account 7205 Fire Defense Zone 05/13/2019 MIC - 0121374 ECO TRE	ense Zone ECO TREE WORKS	Fuel treatment network: E. Mountain Dr.	00.0	3,700.00
05/13/2019	MIC - 0121374	ECO TREE WORKS	Neighborhood chipping: Chelham	0.00	5,000.00
05/13/2019	MIC - 0121374	ECO TREE WORKS	Neighborhood chipping: Upper Romero	00.0	8,000.00
05/15/2019	CLM - 0536238	MARBORG INDUSTRIES	Portable restroom, fuel treatment network	0.00	275.64
05/17/2019	MIC - 0121936	ECO TREE WORKS	Neighborhood chipping: Arcady- Knapp	0.00	6,050.00
05/17/2019	MIC - 0121936	ECO TREE WORKS	Special project: Barker Pass Rd	0.00	2,400.00

Reg Pg. 357

Page 6 of 17

Last Updated: 6/12/2019 5:47 AM

P County of Santa Barbara, FIN

S
ĉ
Ξ
. <u> </u>
オ
Ř
<sup>1</sup>
S
ā
<u>_</u>
Ļ
S
0
()
$\sim$

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

		רמוומ סמסת ואומוופמות רוופ בומופמוחון חופו			
Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/22/2019	CLM - 0537011	FIRESAFE SOLUTIONS	Roadside weed abatement misc roads within District	0.00	10,000.00
05/30/2019	CLM - 0538300	ECO TREE WORKS	Neighborhood chipping: East Mountain Dr.	00.00	8,700.00
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	A-frame sign for Prevention projects	0.0	80.80
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	NFPA guides for Prevention	00.0	230.50
			Total Fire Defense Zone	0.00	44,436.94
Line Item Accou 05/31/2019	Line Item Account 7322 Consulting & Mgmt Fees 05/31/2019 JE - 0187473	ing & Mgmt Fees	Rental property mgmt. fees, March-April	0.00	210.00
			Total Consulting & Mgmt Fees	0.00	210.00
Line Item Accou 05/15/2019	Line Item Account 7324 Audit and Accounting Fees 05/15/2019 CLM - 0536277 FECHTER & COI	Id Accounting Fees FECHTER & COMPANY	Financial Audit, FY 17-18-final balance	0.00	837.00
			Total Audit and Accounting Fees	0.00	837.00
Line Item Accou 05/30/2019	unt 7348 Instrumer CLM - 0538161	Line Item Account 7348 Instruments & Equip. < \$5000 05/30/2019 CLM - 0538161 VERIZON WIRELESS	iphone/plan upgrade	0.00	392.98
			Total Instruments & Equip. < \$5000	0.00	392.98
Line Item Accou	Line Item Account 7363 Equipment Maintenance	ent Maintenance	Doctors E201 rodio/lichts to Eurod 2652, CM 0522060		0 005 06
03/01/2019			F 201 D	0.00	-9,090.00
6107/10/CD				0.00	040.00
05/07/2019	CLM - 0534309	SOUTH COAST EMERGENCY VEHICLE SERVICE	Parts for E-91	0.00	116.99
05/07/2019	MIC - 0121384	VELOCITY TRUCK CENTER VENTURA COUNTY	Parts for E-91	00.0	22.66
05/07/2019	MIC - 0121384	VELOCITY TRUCK CENTER VENTURA COUNTY	Parts for E-91 and E-391	0.0	287.17
05/08/2019	CLM - 0535380	VELOCITY TRUCK CENTER VENTURA COUNTY	Parts for E-93	00.0	22.09
05/09/2019	CLM - 0535432	HUGO'S AUTO DETAILING	Car wash service, April 2019	00.0	300.00
05/09/2019	CLM - 0535517	SOUTH COAST EMERGENCY VEHICLE SERVICE	E-91: Brake parts, seat cushion, turbo hose/clamps	0.00	2,653.38

Page 7 of 17

Last Updated: 6/12/2019 5:47 AM

P County of Santa Barbara, FIN

## Cost Transactions

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Document Vendor/Employee Name CLM - 0535628 Larry's 8-day Auto Parts	Vendor/Employee Name Larry's 8-day Auto Parts		Description Parts for E-91	Hours 0.00	Amount 358.53
05/15/2019	CLM - 0536382	CALIFORNIA ELECTRIC SUPPLY	Shore power parts: M 91	00.0	109.24
05/15/2019	CLM - 0536385	CALIFORNIA ELECTRIC SUPPLY	Electrical tape	0.00	18.50
05/15/2019	CLM - 0536427	FREEDOM SIGNS	Truck lettering: USAR 91	0.00	319.00
05/17/2019	CLM - 0536342	McMaster-Carr Supply Co	Front drain parts: E-91	0.00	57.46
05/17/2019	MIC - 0121916	SOUTH COAST EMERGENCY VEHICLE SERVICE	A/C hoses and fittings: E-91	00.0	290.47
05/17/2019	MIC - 0121916	SOUTH COAST EMERGENCY VEHICLE SERVICE	Charger Display: E-92	00.0	382.78
05/17/2019	MIC - 0121916	SOUTH COAST EMERGENCY VEHICLE SERVICE	Valve handles: E-92	0.00	49.96
05/17/2019	MIC - 0121958	BUNNIN	Cabin filters: 912, 914	0.00	41.52
05/17/2019	MIC - 0121958	BUNNIN	Drain plug gaskets: 914	0.00	18.76
05/17/2019	MIC - 0121958	BUNNIN	Rear brake parts: 912	0.00	120.56
05/17/2019	MIC - 0121958	BUNNIN	Service Parts: 912	0.00	130.25
05/22/2019	CLM - 0537253	SOUTH COAST EMERGENCY VEHICLE SERVICE	E-92: Cap. seat belt	0.00	369.77
05/24/2019	MIC - 0122379	SM TIRE	3 tires: 914	0.00	394.54
05/24/2019	MIC - 0122379	SM TIRE	4 tires: 912	0.00	627.86
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	CAFS for E391, drive shafts for E391/E92	0.00	1,787.76
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Vehicle repair parts: battery charger, electrical	0.00	137.19
05/30/2019	CLM - 0538197	AMSOIL INC	Oil for vehicle maintenance	0.00	443.18
05/30/2019	MIC - 0122570	VELOCITY TRUCK CENTER VENTURA COUNTY	E-91, E-92: cab clearance lights	00.0	33.67
05/30/2019	MIC - 0122570	VELOCITY TRUCK CENTER VENTURA COUNTY	E-92: clearance light gaskets	0.00	5.94
05/30/2019	MIC - 0122570	VELOCITY TRUCK CENTER VENTURA COUNTY	E-92: Clutch fan rebuild kit	0.00	529.58
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Alternator parts, U94	0.00	209.09
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Cab lift valve, USAR 91	0.00	139.40

Page 8 of 17

Last Updated: 6/12/2019 5:47 AM

🕞 🕼 🚫 County of Santa Barbara, FIN

## Cost Transactions

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Hydraulic hoses, E92	0.00	132.67
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Paint touch up and mechanic shop supplies	00.0	125.91
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Seat belt, OES 317	00.0	123.14
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Under hood rodent repeller, E692	00.0	61.09
			Total Equipment Maintenance	0.00	873.08
Line Item Accou	Line Item Account 7400 Medical, Dental and Lab	l, Dental and Lab			
05/07/2019	CLM - 0534293	ARROW INTERNATIONAL	Patient medical supplies	0.00	1,201.95
05/07/2019	MIC - 0121393	Life Assist Inc	Patient medical supplies	0.00	1,388.47
05/14/2019	CLM - 0536188	Life Assist Inc	Patient medical supplies	0.00	1,440.83
05/17/2019	CLM - 0536301	AIRGAS WEST	Oxygen refills	0.00	200.79
05/23/2019	MIC - 0122286	Life Assist Inc	AEDs, 10 (budget amend)	0.00	19,854.77
05/23/2019	MIC - 0122286	Life Assist Inc	Gear bag upgrade, statpacks (budget amend)	0.00	702.48
05/23/2019	MIC - 0122286	Life Assist Inc	Gear bag upgrade, trauma cube (budget amend)	0.00	47.82
05/23/2019	MIC - 0122286	Life Assist Inc	Gear bag upgrade, trma cbe/statpcks (budget amend)	0.00	2,181.55
05/23/2019	MIC - 0122286	Life Assist Inc	Patient medical supplies	0.00	403.54
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Security tags for narcotics kits	00.00	17.99
			Total Medical, Dental and Lab	0.00	27,440.19
Line Item Accou 05/07/2019	Line Item Account 7450 Office Expense 05/07/2019 CLM - 0534306 STRE	Expense STREAMLINE OFFICE SOLUTIONS	Office copier usage fee, 3/30-4/29/19	0.00	464.66
05/09/2019	CLM - 0535504	TRI COUNTY OFFICE FURNITURE AND DESIGN	Deposit for desks: Captain, FM, FC	0.00	2,107.00
05/14/2019	CLM - 0536168	STAPLES BUSINESS CREDIT	Office supplies	00.0	422.78
05/22/2019	CLM - 0536445	The UPS Store	Shipping charges: April 2019	00.0	140.38
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Business cards, A. Broumand	00.0	66.32
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT	Office supplies for Captain exam	0.00	265.95
Col	County of Santa Barbara, FIN		Last Updated: 6/12/2019 5:47 AM		Page 9 of 17

Reg Pg. 360

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

		רמוומ סמסת ואומוופכונס בוופ בומפכיומוו הופו			
Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/28/2019	CLM - 0537998	SYSTEM US BANK CORPORATE PAYMENT SYSTEM	Postage expenses	00.0	174.51
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Stand-up desk for Prevention desk	0.00	258.00
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Adobe Illustrator annual subscription, 913	0.00	239.88
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Office supplies and postage expenses	0.00	49.40
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Stand-up desks for Prevention	0.00	833.99
			Total Office Expense	0.00	5,022.87
Line Item Accou	int 7460 Professic	Line Item Account 7460 Professional & Special Service			
05/07/2019	CLM - 0534308	SANSUM CLINIC OCCUPATIONAL MEDICINE	Medical Review (2)	0.00	110.00
05/08/2019	CLM - 0535425	LATITUDE 34 TECHNOLOGIES INC	IT support and Set up fee, May 2019	0.00	7,600.00
05/09/2019	CLM - 0535624	SANSUM CLINIC OCCUPATIONAL MEDICINE	Employee physicals (3)	0.00	3,982.00
05/14/2019	CLM - 0535834	LATITUDE 34 TECHNOLOGIES INC	Replacement battery for APC RBC116	0.00	215.50
05/20/2019	CLM - 0536914	UNDERWOOD MANAGEMENT RESOURCES INC	Roof/generator project management, April	0.00	3,737.50
05/20/2019	CLM - 0536967	LEXIPOL LLC	Policy manual update subscription	0.00	7,743.00
05/24/2019	CLM - 0537808	PRICE POSTEL & PARMA	Legal services, April 2019	0.00	5,176.50
05/29/2019	CLM - 0538155	VALLEY PRINTERS	2018 Annual Report: printing services	0.00	2,119.32
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	2018 Annual Report: postage expense	0.00	1,913.29
			Total Professional & Special Service	00.00	32,597.11
Line Item Accou 05/03/2019	Line Item Account 7507 ADP Payroll Fees 05/03/2019 EFC - 0023700 ADP IN	yroll Fees ADP INC	ADP fees, 4/30/19	0.00	273.15
			Total ADP Payroll Fees	00.00	273.15
Line Item Accou 05/07/2019	Line Item Account 7510 Contractual Services 05/07/2019 CLM - 0535085 ESO SOLU	tual Services ESO SOLUTIONS INC	Firehouse software: 4/1/19-3/31/20	0.00	1,815.00

Reg Pg. 361

Page 10 of 17

Last Updated: 6/12/2019 5:47 AM

E County of Santa Barbara, FIN

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/14/2019	CLM - 0536163	CREWSENSE LLC	Monthly support plan: May 2019	00.0	00.66
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Dropbox Business plan, 1 license	0.00	135.62
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Fax, server and phone apps, monthly fees	0.00	29.93
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Fulcrum app subscription, March	0.00	668.80
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Laptop cloud back-up annual fee, 903	0.00	50.00
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Evemote Premium annual plan, 903	0.00	69.99
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Fax, server and phone apps, monthly fees	0.00	34.92
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Fulcrum app subscription, April	0.00	668.80
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	VIPRE Endpoint IT Security, 2 year subscription	0.00	1,163.70
			Total Contractual Services	0.00	4,735.76
Line Item Accor	Line Item Account 7580 Rents/Leases-Structure	eases-Structure			
05/01/2019	CLM - 0536211	Community Radio Inc	Gibraltar space rental qtrly, Jan-March 2019	0.00	1,001.79
			Total Rents/Leases-Structure	0.00	1,001.79
Line Item Accou	Line Item Account 7630 Small Tools & Instruments	ools & Instruments CADET BLAKE	G. Blaka Daimh: Battary ractock		107 01
001/00/0010					
61UZ/8Z/GU	CLM - 023/998	US BANK CORPORATE PAYMENT SYSTEM	Fire axe nancie	00.0	48.29
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Radio programming cables	0.00	488.15
			Total Small Tools & Instruments	0.00	733.65
Line Item Accou 05/16/2019	unt 7650 Special I CLM - 0536316	Line Item Account 7650 Special Departmental Expense 05/16/2019 CLM - 0536316 ENTENMANN ROVIN CO	Badge: New hire	0.00	87.81
05/20/2019	CLM - 0537003	ENTENMANN ROVIN CO	Badges: 2 new hires, 1 promotion	0.00	346.62
05/22/2019	JE - 0186315		APCD permit to operate, Sta. 1 generator	0.00	465.00

Page 11 of 17

Last Updated: 6/12/2019 5:47 AM

🗐 🕼 🕜 County of Santa Barbara, FIN

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	EMS Update recognition for participants	0.00	250.00
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Logistics for XSB IMT3, Front #3 Pre-position	0.00	16,901.54
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Retirement helmets: Gregson, Holthe, Fuentes	00.0	1,333.65
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Dispatcher Week recognition	00.0	256.65
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Generator permit fee to SB County APCD	00.0	812.00
			Total Special Departmental Expense	0.00	20,453.27
Line Item Accol 05/09/2019	Line Item Account 7730 Transportation and Travel 05/09/2019 CLM - 0535073 JOYCE REED	ortation and Travel JOYCE REED	J. Reed Reimb: CalChiefs AFSS Educational Forum	0.00	238.16
05/09/2019	CLM - 0535519	EAN SERVICES LLC	Rental car: K. Taylor, FDAC Conference	00.0	146.11
05/10/2019	CLM - 0535490	SYLVIA EASTON	S. Easton Reimb: SBCSDA Meeting	0.00	40.00
05/13/2019	CLM - 0535835	JESS MORAN	J. Moran Reimb: California Fire Mechanic Academy	0.00	414.00
05/14/2019	CLM - 0535491	JUDITH ISHKANIAN	J. Ishkanian Reimb: SBCSDA Meeting	0.00	40.00
05/20/2019	CLM - 0536442	LOREN BASS	L. Bass Reimb: Food for Haz Mat Fro training	0.00	118.88
05/27/2019	JE - 0186835		Hickman/Taylor +3: SB County Fire Chief's Retreat	0.00	4,750.00
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Business meetings (8)	0.00	831.42
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	J. Moran: Inspect new E391/pick up P922	0.00	71.77
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	K. Taylor: AAIM Coach (Tahoe City)	0.00	176.13
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	K. Taylor: FDAC Conference registration	0.00	395.00
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Business meetings (6)	0.00	495.62
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Girls Inc Recognition Lunch (7 guests)	0.00	700.00
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Hickman/Taylor +3: SB County Fire Chief's Retreat	0.00	99.46
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT	K. Taylor +3: UCSB Wildland Fire Symposium	0.00	60.52
Co	County of Santa Barbara, FIN		Last Updated: 6/12/2019 5:47 AM		Page 12 of 17

Reg Pg. 363

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Fund 3650	Montecito Fir	Fund 3650 Montecito Fire Protection Dist			
Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/31/2019	CLM - 0539037	SYSTEM US BANK CORPORATE PAYMENT SYSTEM	K. Taylor: CFED Conference reg (Indian Wells)	0.00	400.00
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	K. Taylor: FDAC Conference (Napa)	0.00	1,151.95
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	K. Taylor: IAFC WUI Conference (Reno)	0.00	301.69
			Total Transportation and Travel	0.00	10,430.71
Line Item Accou	Line Item Account 7731 Gasoline-Oil-Fuel	e-Oil-Fuel McCormix Connoration	Diacal final 6/6/10		1 37/ 75
05/21/2019	MIC - 0122106		Fuel . April 2019	0.00	875.13
05/21/2019	MIC - 0122106	FUEL SMART	Fuel, 12/27/18	0.00	89.66
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Gasoline charges	00.0	2,077.82
05/30/2019	CLM - 0538336	McCormix Corporation	Diesel fuel, 5/23/19	00.0	1,380.31
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Gasoline charges	00.0	3,068.57
			Total Gasoline-Oil-Fuel	0.00	8,866.24
Line Item Accor	Line Item Account 7732 Training				
05/07/2019	CLM - 0534333	MAEVE JUAREZ	M. Juarez Reimb:IMT Command & Gen Staff Mtg	00.0	193.00
05/07/2019	CLM - 0534340	SHAWN WHILT	S. Whilt Reimb: Instructor 1	0.00	404.00
05/08/2019	CLM - 0535376	TSI Incorporated	Respiratory fit testing: on-site training	0.00	1,595.00
05/10/2019	CLM - 0535441	WILLIAM WRENN	W. Wrenn Reimb: Company Officer 2E	0.00	350.00
05/10/2019	CLM - 0535641	ANDREW RUPP	A. Rupp Reimb: VCFD Training	0.00	36.00
05/10/2019	CLM - 0535676	ANDREW RUPP	A. Rupp Reimb:Instructor 1	0.00	496.00
05/10/2019	CLM - 0535679	ANDREW RUPP	A. Rupp Reimb: ICS 300	0.00	297.12
05/10/2019	CLM - 0535689	ANDREW RUPP	A. Rupp Reimb: Company Officer 2B	0.00	476.00
05/13/2019	CLM - 0535493	NIC ELMQUIST	N. Elmquist Reimb: USFA O-305 All Hazards IMT	0.00	524.52
05/13/2019	CLM - 0535680	ANDREW RUPP	A. Rupp Reimb: Haz Mat IC	0.00	547.96
05/13/2019	CLM - 0535688	ANDREW RUPP	A. Rupp Reimb: S-219	0.00	76.60
05/13/2019	CLM - 0535838	MAEVE JUAREZ	M. Juarez Reimb: L-580 Leadership is Action	0.00	363.00
Col	County of Santa Barbara, FIN		Last Updated: 6/12/2019 5:47 AM		Page 13 of 17

From 5/1/2019 to 5/31/2019

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/17/2019	CLM - 0536314	KURT HICKMAN	K. Hickman Reimb: Paramedic CE	0.00	42.40
05/17/2019	CLM - 0536356	Montecito Village Hardware	Academy: new hire supplies	0.00	16.13
05/20/2019	CLM - 0536959	<b>BRANDON BENNEWATE</b>	B. Bennewate Reimb: So Cal IMT Annual Meeting	0.00	174.00
05/20/2019	CLM - 0536962	<b>BRANDON BENNEWATE</b>	B. Bennewate Reimb: 2019 IMT Workshop	0.00	1,096.58
05/20/2019	CLM - 0536981	GARET BLAKE	G. Blake Reimb: Paramedic recertification	0.00	200.00
05/20/2019	CLM - 0536984	STEPHEN COCHRAN	S. Cochran Reimb: Driver Operator 1b	0.00	606.57
05/22/2019	CLM - 0536507	DANIEL ARNOLD	D. Arnold Reimb: Company Officer 2E Wildland Fire	0.00	350.00
05/22/2019	CLM - 0536511	DANIEL ARNOLD	D. Arnold Reimb: Santa Barbara Training Tower	0.00	241.90
05/22/2019	CLM - 0536515	DANIEL ARNOLD	D. Arnold Reimb: VNC Crew Camp	0.00	76.60
05/24/2019	CLM - 0537811	EMERGENCY MEDICAL SERVICES AUTHORITY (EMSA)	EMT Certification: Cochran	00.0	75.00
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	A. Widling: ImageTrend Conference reg (July 2019)	0.00	760.00
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Chapman +2: FIERO PPE Symposium (NC)	0.00	212.35
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	Firefighter Academy textbooks	00.0	596.43
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	J. Jenkins: Central Square Conference	00.0	1,173.60
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	M. Juarez: Gettysburg Staff Ride instr (Baltimore)	0.00	975.00
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	M. Juarez: S-339 Instructor (Allan Hancock)	00.0	111.07
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	M. Juarez: S-420 Command & General Staff (Sac)	0.00	1,189.64
05/28/2019	CLM - 0537998	US BANK CORPORATE PAYMENT SYSTEM	M. Juarez: So Canyon Staff Ride instructor (CO)	0.00	456.01
05/30/2019	CLM - 0538456	SHAUN P DAVIS	S. Davis Reimb: Supplies for academy	0.00	171.02
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	A. Briner: L-952 PIO Training meals	0.00	49.82
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	A. Broumand: Paramedic renewal	0.00	200.00
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	A. Broumand: PIO Training meal	0.00	17.89

Page 14 of 17

Last Updated: 6/12/2019 5:47 AM

🕞 🕼 🚫 County of Santa Barbara, FIN

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

## Fund 3650 -- Montecito Fire Protection Dist

		רמוומ סמסת ואומוופמות בווב בומובמומוו מופו			
Post On	Document	Vendor/Employee Name	Description	Hours	Amount
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	A. Widling: Firehouse World (LA)	0.00	570.79
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Firefighter Academy textbooks (2 - CRP)	0.00	308.60
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	GoPro Camera and accessories for Academy use	0.00	419.50
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	J. Jenkins: Central Square Conference	00.0	988.24
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	J. Jenkins: ImageTrend Conference reg (July 2019)	00.0	760.00
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	J. Moran: CA Fire Mechanics Academy	00.0	592.60
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	M. Juarez: S-420 Command & General Staff (Sac)	00.0	284.86
05/31/2019	CLM - 0539037	US BANK CORPORATE PAYMENT SYSTEM	Training equipment for Academy	0.00	1,111.77
			Total Training	0.00	19,187.57
Line Item Accor	Line Item Account 7760 Utilities				
05/15/2019	CLM - 0536311	SOUTHERN CALIFORNIA EDISON	Electricity service, Sta. 1 & 2	00.0	1,600.32
05/15/2019	MIC - 0121915	THE GAS COMPANY	Gas service, Sta. 1 - 05/03/19)	00.0	52.42
05/15/2019	MIC - 0121915	THE GAS COMPANY	Gas service, Sta. 2 - 05/06/19	0.00	85.91
05/15/2019	MIC - 0121918	MONTECITO WATER DISTRICT	Water service, Sta. 1	0.00	331.82
05/15/2019	MIC - 0121918	MONTECITO WATER DISTRICT	Water service, Sta. 2	0.00	228.09
05/31/2019	JE - 0187473		Water/sewer for rental prop, March-April	0.00	210.63
			Total Utilities	0.00	2,509.19
Line Item Accor 05/09/2019	Line Item Account 8300 Equipment 05/09/2019 CLM - 0535508 D	ent DAY WIRELESS SYSTEMS	Motorola handhelds (budget amend)	0.00	728.26
05/10/2019	MIC - 0121718	MOTOROLA SOLUTIONS, INC	Motorola handhelds (budget amend)	0.00	19,022.75
05/15/2019	CLM - 0535692	STRYKER SALES CORPORATION	Ambulance gurney (budget amend)	0.00	44,074.10
05/23/2019	CLM - 0536991	ROCKRIDGE SERVICES GROUP LLC	Installation of new gurney, Med 91 (budget amend)	0.00	2,400.00

66,225.11

0.00

Total Equipment

Last Updated: 6/12/2019 5:47 AM

E County of Santa Barbara, FIN

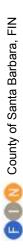
Page 15 of 17

Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

# Fund 3652 -- Montecito Fire Cap Outlay Res

9,895.86	0.00	Total Montecito Fire Cap Outlay Res		
9,895.86	00.0	Total Equipment		
9,895.86	0.00	E391: Pierce Type 3 radio/lighting upfit	JE - 0187478	05/01/2019 JE
			00 Equipment	Line Item Account 8300 Equipment
1,580,949.11	00.0	Total Montecito Fire Protection Dist		
Amount	Hours	Description	Document Vendor/Employee Name	Post On E
			Fund 3652 Montecito Fire Cap Outlay Res	Fund 3652 Mc



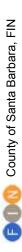
Selection Criteria: Fund = 3650, 3652, 3653

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund

# Fund 3653 -- Montecito Fire Land & Building

	Amount	3,862.50	3,862.50	3,862.50
	Hours	0.00	0.0	00.0
	Description	Rental properties project management, April	Total Professional & Special Service	Total Montecito Fire Land & Building
2	Vendor/Employee Name	Line Item Account 7460 Professional & Special Service 05/20/2019 CLM - 0536917 UNDERWOOD MANAGEMENT RESOURCES INC		
	Document	nt 7460 Professio CLM - 0536917		
	Post On	Line Item Accou 05/20/2019		

Page 17 of 17



$\mathbf{O}$
<u>a</u> )
E
Ē
•
Ξ
σ
5
¥
σ
Ċ
·=
ш

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund; Columns = 3yr

Fund 3650 -- Montecito Fire Protection Dist

Line Item Account     Year-IO-Date       Revenues     Taxes       Taxes     14,816,749.47       3010 - Property Tax-Unitary     -373.20       3011 - Property Tax-Unitary     -373.20       3015 - PT PY Corr/Escapes Secured     649,991.63       3020 - Property Tax-Unitary     -373.20       3020 - Property Tax-Unitary     -373.20       3020 - Property Tax-Unitary     -373.20       3020 - Property Tax-Unitary     0.00       3020 - Property Tax-Unitary     0.00       3051 - PT PY Corr/Escapes Secured     0.00       3050 - Property Tax-Prior Unsecured     0.00       3050 - Property Tax-Prior Unsecured     0.00       3050 - Property Tax-Prior Unsecured     0.00       3050 - Property Tax-Prior     0.00       3055 - Supplemental Pty Tax-Prior     0.00       3056 - Supplemental Pty Tax-Prior     0.00       3055 - PT-506 Int, 480 CIOS/CIC Pen     15,488,232.51       Fines, Forfeitures, and Penalties     0.00       3057 - PT-506 Int, 480 CIOS/CIC Pen     15,488,232.51       Fines, Forfeitures, and Penalties     0.00       3380 - Interest Income     330.195.00       3381 - Unrealized Gain/Loss Invstmnts     39,195.00       3381 - Unrealized Gain/Loss Invstmnts     39,195.00       3381 - Unrealized Gain/Loss Invstmnts     39,195.00	Year-Io-Date Actual 15,489,840.98 -332.64 38,211.37 760,810.99 10,700.15 -921.83 2,797.88	Year-To-Date Actual -252.10 551.53 567,821.33 2,834.18 61.95 61.95 6.040.32
ed 14,816,74 -37 ed 649,99 cd 649,99 cured 21,86 ed 21,88 ent 15,488,23 den 19,08 muts -20,51 and Property 337,75	15,489,840.98 -332.64 38,211.37 760,810.99 10,700.15 -921.83 2,797.88	15,727,006.52 -252.10 551.53 567,821.33 2,834.18 61.95 61.95 6.040.32
ed 14,816,74 -37 ed 649,99 bd 649,99 bd 21,86 ed 21,86 ent 21,86 ent 15,488,23 hd Penalties 15,488,23 and Penalties 39,19 and Property 37,75	15,489,840.98 -332.64 38,211.37 760,810.99 10,700.15 -921.83 2,797.88	15,727,006.52 -252.10 551.53 567,821.33 2,834.18 61.95 61.95 6.040.32
ed 14,816,74 -37 ed 649,99 cured 21,86 ed 21,86 ed 21,86 en 15,488,23 den 19,08 muts -20,51 and Property 37,75	15,489,840.98 -332.64 38,211.37 760,810.99 10,700.15 -921.83 2,797.88	15,727,006.52 -252.10 551.53 567,821.33 2,834.18 61.95 61.95 6.040.32
ed 649,99 bd 649,99 tured 21,86 ed 21,86 ed 15,488,23 ben 19,08 mod Penalties 15,488,23 and Property 337,75 and Property 37,75	-332.64 38,211.37 760,810.99 10,700.15 -921.83 2,797.88	-252.10 551.53 567,821.33 2,834.18 61.95 61.95 6.040.32
ed 649,99 cured 649,99 cured 21,86 ed 21,86 ent 15,488,23 nd Penalties 15,488,23 and Penalties 39,19 and Property 37,75	38,211.37 760,810.99 10,700.15 -921.83 2,797.88	551.53 567,821.33 2,834.18 61.95 -6,491.45 6.040.32
cd 649,99 cured 21,86 ed 21,86 ent 71,488,23 Pen 15,488,23 nd Penalties 15,488,23 and Property 337,75 and Property 37,75	760,810.99 10,700.15 -921.83 2,797.88	567,821.33 2,834.18 61.95 -6,491.45 6.040.32
ured 21,86 ed 21,86 ent 7axes 15,488,23 Pen 19,08 nd Penalties 19,08 mnts 20,51 and Property 37,75	10,700.15 -921.83 2,797.88	2,834.18 61.95 -6,491.45 6.040.32
ed ent Taxes 15,488,23 Pen nd Penalties 19,08 mnts -20,51 and Property 37,75	-921.83 2,797.88	61.95 -6,491.45 6.00.32
ed ent Taxes 15,488,23 Pen and Penalties 19,08 mnts -20,51 and Property 37,75	2,797.88	-6,491.45 6.040.32
ent Taxes 15,488,23 Pen 19,08 and Penalties 19,08 mnts -20,51 and Property 37,75		6 040 32
Taxes 15,488,23 Taxes 15,488,23 and Penalties 19,08 muts -20,51 and 29,19 and Property 37,75	48,148.63	0,040.01
Taxes 15,488,23 enalties 19,08 -20,51 roperty 37,75	134.94	2,070.03
enalties 19,08 -20,51 -20,51 39,19 roperty 37,75	16,349,390.47	16,299,651.31
enalties 19,08 -20,51 39,19 roperty 37,75	16,939.56	-4,266.11
roperty	16,939.56	-4,266.11
roperty	38,204.68	108,032.47 7
Property a	-14,609.68	59,519.39
d Property	11,347.00	3,870.00
	34,942.00	171,421.86
	818,577.81	924,572.43
4160 State Aid for Disaster 0.00	0.00	1,858,865.01 8
4220 Homeowners Property Tax Relief 82,613.00	83,632.74	67,604.56
Intergovernmental Revenue-State 936,356.89	902,210.55	2,851,042.00

Last Updated: 6/12/2019 5:47 AM

P County of Santa Barbara, FIN

Financial Trend

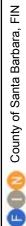
Selection Criteria: Fund = 3650

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund; Columns = 3yr

Fund 3650 -- Montecito Fire Protection Dist

Line Item Account ntergovernmental Revenue-Federal	5/31/2017 Year-To-Date Actual	5/31/2018 Year-To-Date Actual	5/31/2019 Year-To-Date Actual
	667,322.84 0.00	867,007.10 0.00	283,623.74 4,669,969.00
Intergovernmental Revenue-Federal	667,322.84	867,007.10	4,953,592.74
	139,496.47	143,537.98	147,083.17
Charges for Services	139,496.47	143,537.98	147,083.17
	0.00	0.00	34,867.69
	100,000.00	104,319.22	300.00
	6,562.53	12,745.81	24,466.74
Miscellaneous Revenue	106,562.53	117,065.03	59,634.43
Revenues	17,375,730.33	18,431,092.69	24,478,159.40
	6,160,268.80	6,641,326.31	7,629,355.86
	125,486.20	70,326.29	89,292.68
	812,886.31	1,374,348.46	847,170.32
	434,845.61	1,262,830.39	319,930.96
	1,958,971.70	2,033,401.39	2,237,253.74
	0.00	1,030,000.00	0.00
	104,435.39	133,192.58	125,226.96
	1,638,444.98	1,609,949.34	1,718,761.22
	6,150.57	7,018.95	6,370.56
	464,819.93	633,815.04	476,146.83
Salaries and Employee Benefits	11,706,309.49	14,796,208.75	13,449,509.13

Last Updated: 6/12/2019 5:47 AM



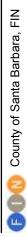
σ	
መ	
Ð	
Ē	
σ	
5	
ž	
σ	
:	
LL	

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund; Columns = 3yr

Fund 3650 -- Montecito Fire Protection Dist

Line Item Account	5/31/2017 Year-To-Date Actual	5/31/2018 Year-To-Date Actual	o/31/2019 Year-To-Date Actual
Services and Supplies			
7030 Clothing and Personal	97,207.39	97,825.73	67,052.32
7050 Communications	70,778.59	115,398.10	107,686.63
7060 Food	1,957.43	18,993.60	8,738.97
7070 Household Supplies	32,595.63	29,347.57	26,890.99
7090 Insurance	25,661.93	26,537.00	32,017.00
Equipment Maintenance	26,993.48	74,999.62	63,426.68
Structure & Ground Maintenance	39,822.03	14,432.84	35,460.84
7205 Fire Defense Zone	216,755.60	109,566.36	197,461.79
7322 Consulting & Mgmt Fees	2,396.70	696.32	315.00
7324 Audit and Accounting Fees	22,073.00	24,631.00	18,215.50
7348 Instruments & Equip. < \$5000	43,004.18	32,491.67	18,920.61
7363 Equipment Maintenance	67,455.03	63,064.41	99,775.17
7400 Medical, Dental and Lab	43,482.43	26,563.60	52,443.99
7430 Memberships	12,081.00	8,632.00	13,465.45
7450 Office Expense	20,183.18	21,955.75	23,378.01
7460 Professional & Special Service	213,022.33	313,202.09	276,560.53
7507 ADP Payroll Fees	6,056.72	6,324.07	6,659.84
7510 Contractual Services	34,888.96	33,634.48	51,868.90
7530 Publications & Legal Notices	5,174.46	2,783.84	2,278.90
7546 Administrative Expense	238,346.00	221,362.00	244,640.00
7580 Rents/Leases-Structure	3,716.88	2,842.32	7,599.42
7630 Small Tools & Instruments	16,272.70	18,372.30	1,731.06
Special Departmental Expense	17,211.17	38,510.62	93,940.08 15
7671 Special Projects	5,978.54	1,763.11	3,285.32
7730 Transportation and Travel	25,353.13	31,460.05	36,609.44
7731 Gasolina-Oil-Eual	30 100 10		

Page 3 of 5



Financial Trend

Selection Criteria: Fund = 3650

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund; Columns = 3yr

Fund 3650 -- Montecito Fire Protection Dist

		5/31/2017 5/31/2018 5/31/2019 Year-To-Date Year-To-Date Year-To-Date Actual Actual Actual	7732 Training 61,333.07 51,307.40 71,342.40	7760 Utilities 40,746.33 41,441.80 43,522.84	Services and Supplies 1,420,980.35 1,499,758.63 1,664,412.63	Capital Assets 8300 Equipment 183,074.56 83,615.00 139,681.65	Capital Assets 183,074.56 83,615.00 139,681.65	Expenditures 13,310,364.40 16,379,582.38 15,253,603.41	Other Financing Sources & Uses Other Financing Uses 7901 Oper Trf (Out) 155,000.00 0.00 16	Other Financing Uses 455,362.00 155,000.00 0.00	Other Financing Sources & Uses -455,362.00 -155,000.00 0.00	Changes to Fund Balances Decrease to Nonspendables 9602 Receivables 0.00 22,032.00 0.00	Decrease to Nonspendables 0.00 22,032.00 0.00	Decrease to Restricted 9797 Unrealized Gains 0.00 0.00	Decrease to Restricted 17,772.21 0.00 0.00	Increase to Nonspendables 9602 Receivables 0.00 72,613.00 0.00	Increase to Nonspendables 0.00 72,613.00 0.00	Increase to Restricted 0707 I Increalized Gains
--	--	---	---	--	--	--	--	--	--	---	---	---	---	---	--	---	---	--

Last Updated: 6/12/2019 5:47 AM

County of Santa Barbara, FIN

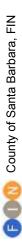
### Financial Trend

Selection Criteria: Fund = 3650

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund; Columns = 3yr

Fund 3650 -- Montecito Fire Protection Dist

18 5/31/2019 Date Year-To-Date Actual	0.00 2,826.94	-50,581.00 -2,826.94	1,845,929.31 9,221,729.05	1,845,929.31 9,221,729.05
5/31/2018 Year-To-Date Actual		-50	1,845	1,845
5/31/2017 Year-To-Date Actual	0.00	17,772.21	3,627,776.14	3,627,776.14
Line Item Account	Increase to Restricted	Changes to Fund Balances	Montecito Fire Protection Dist	Net Financial Impact



nd
Ð
ĒΞ
tur
jp
ber
ШX

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund; Columns = 6mo, MTDActual

Fund 3650 -- Montecito Fire Protection Dist

רמוום 2020 ואוטוונפכונס רוופ רוטופכווטוו בוצו							
Line Item Account	12/31/2018 Month-To-Date Actual	1/31/2019 Month-To-Date Actual	2/28/2019 Month-To-Date Actual	3/31/2019 Month-To-Date Actual	4/30/2019 Month-To-Date Actual	5/31/2019 Month-To-Date Actual	
Expenditures							
Salaries and Employee Benefits 6100 Regular Salaries	708.081.00	616.728.53	449.463.03	718.257.34	701.292.61	924.410.12	
6300 Overtime	9,349.75	0.00	56,365.01	0.00	0.00	18,877.00 17	2
6301 Overtime - Reimbursable	0.00	00.0	140,032.20	00.0	00.0	4,903.15 17	
6310 Overtime - Constant Staffing	13,142.25	00.0	129,723.83	00.0	00.0	75,581.17 17	2
6400 Retirement Contribution	113,421.95	135,828.89	104,559.02	106,680.39	104,920.92	112,079.12	
6550 FICA/Medicare	10,494.61	6,651.34	11,074.48	10,039.78	10,142.72	15,063.60	
6600 Health Insurance Contrib	154,919.35	173,757.46	144,733.17	160,527.07	158,357.72	157,554.58	
6700 Unemployment Ins Contribution	125.00	5,536.34	-5.41	40.15	33.18	422.05	
6900 Workers Compensation	-7,291.62	-4,861.08	-11,111.04	0.00	0.00	-10,011.04	
Total Salaries and Employee Benefits	1,002,242.29	933,641.48	1,024,834.29	995,544.73	974,747.15	1,298,879.75	
Services and Supplies							
7030 Clothing and Personal	363.98	34.26	2,526.05	497.51	11,402.05	9,805.82	
7050 Communications	8,631.48	8,776.15	8,813.43	8,880.29	9,976.68	8,861.83	
7060 Food	238.87	00.0	33.52	6,153.28	1,432.34	708.34	
7070 Household Supplies	1,081.12	2,988.27	1,485.02	3,179.92	1,749.93	4,392.99	
7090 Insurance	00.0	00.0	0.00	00.0	00.0	00.0	
7120 Equipment Maintenance	7,061.93	6,157.01	11,557.47	4,904.46	3,597.71	6,047.92	
7200 Structure & Ground Maintenance	1,203.79	5,589.40	4,261.20	3,208.02	1,075.00	6,025.85	
7205 Fire Defense Zone	9,414.60	15,686.87	29,531.62	27,511.70	53,995.56	44,436.94	
7322 Consulting & Mgmt Fees	00.00	00.0	00.00	105.00	00.0	210.00	
7324 Audit and Accounting Fees	3,113.50	00.0	0.00	3,113.50	00.0	837.00	
7348 Instruments & Equip. < \$5000	1,323.48	681.36	1,018.69	4,790.57	00.0	392.98	R
7363 Equipment Maintenance	3,740.18	6,368.31	7,548.07	13,139.90	26,112.84	873.08	eg F
7400 Medical, Dental and Lab	1,129.71	00.0	5,282.68	3,096.07	00.00	27,440.19 18	₩ 92
7430 Memberships	00.00	00.0	0.00	1,860.00	0.00	00.0	74
7450 Office Expense	1,575.26	2,253.60	1,346.37	3,985.84	2,310.39	5,022.87	
🔒 🕼 🔞 County of Santa Barbara, FIN		Last Updated: 6/12/2019 5:47 AM	2019 5:47 AM			Page 1 of 3	

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund; Columns = 6mo, MTDActual

Fund 3650 -- Montecito Fire Protection Dist

רמומ אמאט ואומווופמונס רוופ רומופמוומוו הואו	וו חוא					
Line Item Account	12/31/2018 Month-To-Date Actual	1/31/2019 Month-To-Date Actual	2/28/2019 Month-To-Date Actual	3/31/2019 Month-To-Date Actual	4/30/2019 Month-To-Date Actual	5/31/2019 Month-To-Date Actual
7460 Professional & Special Service	17,602.00	20,267.00	26,956.00	31,447.32	31,469.00	32,597.11
7507 ADP Payroll Fees	548.79	562.96	854.38	1,506.24	511.27	273.15
7510 Contractual Services	4,421.26	10,765.02	2,233.56	1,557.17	1,697.73	4,735.76
7530 Publications & Legal Notices	812.76	419.38	0.00	906.36	00.0	00.0
7546 Administrative Expense	0.00	00.0	0.00	0.00	244,640.00	0.00
7580 Rents/Leases-Structure	00.0	1,001.79	0.00	00.0	2,700.00	1,001.79
7630 Small Tools & Instruments	00.0	191.55	462.82	22.71	320.33	733.65
7650 Special Departmental Expense	331.07	1,390.77	1,131.95	957.00	26,059.20	20,453.27
7671 Special Projects	0.00	00.0	0.00	1,499.33	83.98	00.0
7730 Transportation and Travel	2,719.48	2,016.06	3,645.12	2,092.21	2,568.19	10,430.71
7731 Gasoline-Oil-Fuel	4,771.60	4,166.38	4,470.18	4,667.49	4,765.22	8,866.24
7732 Training	5,484.96	2,780.51	2,665.01	8,880.25	12,687.79	19,187.57
7760 Utilities	8,639.96	2,518.06	8,729.69	3,028.36	2,189.65	2,509.19
Total Services and Supplies	84,209.78	94,614.71	124,552.83	140,990.50	441,344.86	215,844.25
Capital Assets						1 - 1 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -
8300 Equipment	15,310.00	00.00	000	00.00	12,004.46	11.022,00
Total Capital Assets	15,310.00	0.00	0.00	0.00	12,004.46	66,225.11
Total Expenditures	1,101,762.07	1,028,256.19	1,149,387.12	1,136,535.23	1,428,096.47	1,580,949.11
Other Financing Sources & Uses Other Financing Uses						
7901 Oper Trf (Out) -	0.00	00:0	0.00	0.00	0.00	0.00
Total Other Financing Uses	0.00	0.00	0.00	0.00	0.00	0.00
Total Other Financing Sources & Uses	0.00	0.0	0.00	0.00	0.00	00.0

Page 2 of 3

Last Updated: 6/12/2019 5:47 AM

Layout Options: Summarized By = Fund, LineltemAccount; Page Break At = Fund; Columns = 6mo, MTDActual

Fund 3650 -- Montecito Fire Protection Dist

Fund 3650 Montecito Fire Protection Dist	in Dist					
Line Item Account	12/31/2018 Month-To-Date Actual	1/31/2019 Month-To-Date Actual	2/28/2019 Month-To-Date Actual	3/31/2019 Month-To-Date Actual	4/30/2019 Month-To-Date Actual	5/31/2019 Month-To-Date Actual
Changes to Fund Balances						
Changes to Restricted						
9797 Unrealized Gains	0.00	0.00	0.00	2,826.94	0.00	0.00
Total Changes to Restricted	0.00	0.00	0.00	2,826.94	0.00	00.00
Total Changes to Fund Balances	0.00	0.00	0.00	2,826.94	0.00	0.00
- Total Montecito Fire Protection Dist	1,101,762.07	1,028,256.19	1,149,387.12	1,139,362.17	1,428,096.47	1,580,949.11
Total Report	1,101,762.07	1,028,256.19	1,149,387.12	1,139,362.17	1,428,096.47	1,580,949.11

Camp Fire US&R Assist, CA-OES-054807	11/17-11/25/18	0-20185330	01/24/19	CalOES	18,816.30		
Carr, CA-SHU-007808	07/26-08/19/18	U-20185327	02/12/19	CalOES	666,922.59	04/15/19	666,922.59
County, CA-LNU-009502	07/01-07/09/18	U-20180640	08/22/18	CalOES	21,764.62	01/02/19	21,764.62
Cranston, CA-BDF-0011390	07/25-07/29/18	F-20185061	09/25/18	USFS	55,383.17	02/13/19	55,383.17
Cranston, CA-BDF-0011390 (Reimb)	07/25-07/29/18	F-20186065	12/24/18	USFS	347.14	04/05/19	347.14
Cruces, CA-SBC-009203	07/18-07/19/18	U-20185352	10/19/18	CalOES	13,662.42	04/09/19	13,662.42
Delta, CA-SHF-001444	09/07-09/24/18	F-20185882	11/20/18	USFS	121,428.04	03/25/19	121,428.04
Donnell, CA-STF-001702	08/04-08/23/18	F-20185220	11/14/18	USFS	45,378.27		
Ferguson, CA-SNF-000745	07/09-08/05/18	F-20185439	10/17/18	USFS	63,558.92	02/13/19	63,554.48
Florence - NC (FEMA)	09/18-09/20/18	O-20185053	09/26/18	CalOES	15,548.80		
Florence - VA (FEMA)	09/12-09/18/18	O-20185042	09/26/18	CalOES	31,929.63		
Front, CA-LPF-002334	08/20-08/21/18	2019-02	05/22/19	USFS	8,073.48	06/12/19	8,073.48
Gorge, CA-SHU-008796	08/19-08/21/18	U-20185677	11/13/18	CalOES	42,934.98	03/01/19	42,934.97
Hill, CA-VNC-009093	11/08-11/09/18	U-20185843	01/08/19	CalOES	15,911.89	05/06/19	15,911.89
Holiday, CA-SBC-008657	07/06-07/11/18	U-20180932	09/17/18	CalOES	75,087.98	01/25/19	75,087.98
Holiday, CA-SBC-008657	07/06-07/09/18	U-20180933	09/17/18	CalOES	6,005.33	01/25/19	6,005.33
Klamathon, CA-SKU-004641	07/05-07/10/18	U-20180818	09/05/18	CalOES	56,408.49	03/04/19	56,408.49
OES Pre-Position (7/6/18)	7/6/2018	0-20180207	09/17/18	CalOES	1,985.50	02/05/19	1,985.50
OES Pre-Position (7/24/18)	07/24-07/26/18	O-20185004	09/18/18	CalOES	23,198.85	02/01/19	23,198.85
OES Pre-Position (8/6/18)	08/06-08/07/18	O-20185008	09/21/18	CalOES	5,284.92	02/01/19	5,284.92
OES Pre-position (1/15/19), CA-OES-190005	1/15/2019	O-20190041	04/16/19	CalOES	7,709.00		
OES Pre-position (1/15/19), CA-OES-190005	1/15/2019	0-20190101	06/06/19	CalOES	1,941.23		
OES Pre-position (1/15/19), CA-OES-190005	1/15/2019	O-20190116	06/06/19	CalOES	1,718.95		
OES Pre-position (2/1/19), CA-OES-190010	02/01-02/03/19	0-20190032	04/16/19	CalOES	20,339.04		
OES Pre-position (2/1/19), CA-OES-190010	02/01-02/03/19	0-20190031	04/16/19	CalOES	2,793.28		
OES Pre-position (2/1/19), CA-OES-190010	02/01-02/03/19	0-20190100	06/06/19	CalOES	24,048.60		
OES Pre-position (3/5/19)	03/05-03/06/19	O-20190098	05/30/19	CalOES	17,373.05		
Ogilvy, CA-LPF-002476	09/01-09/06/18	F-20156040	12/11/18	USFS	42,910.91	04/15/19	42,910.91
Ogilvy, CA-LPF-002476	Reimbursement	2019-03	05/22/19	USFS	406.64		
Pawnee, CA-LNU-007002	07/01-07/05/18	U-20180350	08/06/18	CalOES	48,436.11	01/02/19	48,436.11
Woolsey, CA-VNC-091023	11/09-11/18/2018	U-20185983	01/16/19	CalOES	188,238.72	05/06/19	188,238.72
Reimbursements Due to MFD for XSB IMT3 Storm Pre-positions	torm Pre-positions			\$	1,645,546.85	Ŷ	1,457,539.61
OES Pre-position (1/15/19), CA-OES-190005	1/15/2019	0-20190041	04/16/19	CalOES	7,654.00		
OES Pre-position (2/1/19), CA-OES-190010	02/01-02/03/19	O-20190071	04/30/19	CalOES	21,447.21		
OES Pre-position (3/5/19), CA-OES-190020	03/05-03/06/19	O-20190098	05/30/19	CalOES	15,097.47		
			Unallocated	Ş	44,198.68	\$	
Account Reconciliation	<b>Budgeted Revenue</b>	Total Due	Revenue				
Acct 3750 - Cal-OES Revenue Acct 3750 - State Aid for Disaster (Pre-pos)	345,000 -	1,308,060 44,199	963,060 44,199				
Acct 4476 - USFS Revenue	140,000	337,487	197,487				
Total Revenue	485,000	1,689,746	1,204,746				

### ATTACHMENT

#B

### MONTECITO FIRE PROTECTION DISTRICT PARS Post-Employment Benefits Trust

<b>OPEB</b> Account						
	Beginning					
Month	Balance	Contributions	Earnings	Expenses	Ending Balance	1-M %
May 2018	11,000,998.46	-	114,259.72	4,682.55	11,110,575.63	1.04%
June 2018	11,110,575.63	-	17,815.68	4,727.43	11,123,663.88	0.16%
July 2018	11,123,663.88	-	200,839.35	4,728.00	11,319,775.23	1.81%
August 2018	11,319,775.23	-	160,157.83	4,793.21	11,475,139.85	1.41%
September 2018	11,475,139.85	-	(16,803.09)	4,844.64	11,453,492.12	-0.15%
October 2018	11,453,492.12	-	(566,517.98)	4,835.13	10,882,139.01	-4.95%
November 2018	10,882,139.01	-	151,422.06	4,640.03	11,028,921.04	1.39%
December 2018	11,028,921.04	-	(548,020.57)	4,676.48	10,476,223.99	-4.97%
January 2019	10,476,223.99	-	592,182.10	4,414.11	11,063,991.98	5.65%
February 2019	11,063,991.98	-	214,753.79	4,681.85	11,274,063.92	1.94%
March 2019	11,274,063.92	-	122,019.57	4,780.38	11,391,303.11	1.08%
April 2019	11,391,303.11	-	273,206.79	4,809.59	11,659,700.31	2.40%
Total		-	715,315.25	56,613.40		
Total Contribu	tions to the Plan =		8,376,000			
Total OPEB Lia	bility as of 6/30/2	017 =	11,973,770			
PARS OPEB bal	lance as of 6/30/2	017 =	10,372,284			
Net OPEB Liab	ility at of 6/30/202	17 =	1,601,486			

### **Pension Account**

	Beginning					
Month	Balance	Contributions	Earnings	Expenses	Ending Balance	1-M %
May 2018	1,810,779.48	-	12,901.02	767.29	1,822,913.21	0.71%
June 2018	1,822,913.21	-	1,736.68	772.38	1,823,877.51	0.10%
July 2018	1,823,877.51	-	18,313.44	771.93	1,841,419.02	1.00%
August 2018	1,841,419.02	-	17,160.08	776.07	1,857,803.03	0.93%
September 2018	1,857,803.03	-	(5,205.89)	780.28	1,851,816.86	-0.28%
October 2018	1,851,816.86	-	(50,254.38)	777.54	1,800,784.94	-2.71%
November 2018	1,800,784.94	-	15,910.68	763.51	1,815,932.11	0.88%
December 2018	1,815,932.11	-	(35,062.95)	769.27	1,780,099.89	-1.93%
January 2019	1,780,099.89	-	66,388.47	769.15	1,845,719.21	3.73%
February 2019	1,845,719.21	-	22,117.18	783.49	1,867,052.90	1.20%
March 2019	1,867,052.90	-	23,456.01	789.43	1,889,719.48	1.26%
April 2019	1,889,719.48	-	25,153.92	794.94	1,914,078.46	1.33%
Total		-	87,460.34	8,520.34		

Total Contributions to the Plan =

1,800,000



### MONTECITO FIRE PROTECTION DISTRICT PARS Post-Employment Benefits Trust

Stephen Hickman Fire Chief Montecito Fire Protection District 595 San Ysidro Rd. Santa Barbara, CA 93108

		Accoun	t Summary				
Source	Beginning Balance as of 4/1/2019	Contributions	Earnings	Expenses	Distributions	Transfers	Ending Balance as of 4/30/2019
OPEB	\$11,391,303.11	\$0.00	\$273,206.79	\$4,809.59	\$0.00	\$0.00	\$11,659,700.31
PENSION	\$1,889,719.48	\$0.00	\$25,153.92	\$794.94	\$0.00	\$0.00	\$1,914,078.46
Totals	\$13,281,022.59	\$0.00	\$298,360.71	\$5,604.53	\$0.00	\$0.00	\$13,573,778.77

### **Investment Selection**

OPEB	Montecito Fire Protection District - OPEB
PENSION	Montecito Fire Protection District - PENSION
	Investment Objective
Source	
	Individual account based on Balanced HighMark PLUS. The dual goals of the Balanced Strategy are growth of principal and income. While
OPEB	dividend and interest income are an important component of the objective's total return, it is expected that capital appreciation will comprise a larger portion of the total return. The portfolio will be allocated between equity and fixed income investments.
	Individual account based on Moderately Conservative HighMark PLUS. The dual goals of the Moderately Conservative Strategy are current
PENSION	income and moderate capital appreciation. The major portion of the assets is committed to income-producing securities. Market fluctuations should be expected.

### **Investment Return**

				A	nnualized Retu		
Source	1-Month	3-Months	1-Year	3-Years	5-Years	10-Years	Plan's Inception Date
OPEB	2.40%	5.51%	6.51%	8.90%	6.27%	-	1/19/2010
PENSION	1.33%	3.84%	6.24%	-	-	2	6/29/2017

Information as provided by US Bank, Trustee for PARS; Not FDIC Insured; No Bank Guarantee; May Lose Value

Past performance does not guarantee future results. Performance returns may not reflect the deduction of applicable fees, which could reduce returns. Information is deemed reliable but may be subject to change. Investment Return: Annualized rate of return is the return on an investment over a period other than one year multiplied or divided to give a comparable one-year return. Account balances are inclusive of Trust Administration, Trustee and Investment Management fees

Headquarters - 4350 Von Karman Ave., Suite 100, Newport Beach, CA 92660 800.540.6369 Fax 949.250.1250 www.pars.org

### ATTACHMENT

#C



### STAFF REPORT

Prepared for:	Montecito Fire Protection District Finance Committee
Prepared by:	Chief Hickman and Araceli Nahas, District Accountant
Date:	June 24, 2019
Topic:	Draft Budget Amendment for Fiscal Year 2018-19

### Summary

Staff is requesting approval to amend the budgets for Funds 3650 and 3653 for fiscal year 2018-19, per Resolution 2019-04. The proposed amendment would establish appropriations of \$9,560,700 and increase expenditures by \$5,711,000 to the General Fund.

### Discussion

### Fund 3650 – General Fund

**Revenue** - The proposed amendment would establish appropriations of \$9,560,700 from the following revenue sources:

Property taxes - \$1,720,700 (Since the Final Budget was approved in September of 2018, the Auditor-Controller's Office reported that property tax losses from the Thomas Fire and 1-9 Debris Flow were not as severe as originally anticipated, and property tax revenue for the District is expected to be closer to \$17.6 million for FY 2018-19.)

3380 Interest Income - \$100,000 (Interest income received for funds held in the County Treasury Pool. The expected return is significantly higher than in past years.)

3750 State Fire Assignments - \$960,000 (Revenue received from assisting with state fire/pre-position assignments.)

4160 State Aid for Disaster - \$1,910,000 (Reimbursements received from CalOES from the Thomas Fire and 1-9 Debris Flow through the disaster recovery program.)

4476 Federal Fire Assignments - \$200,000 (Revenue received from assisting with federal fire assignments.)

4610 Federal Aid for Disaster - \$4,670,000 (Reimbursements received from FEMA from the Thomas Fire and 1-9 Debris Flow through the disaster recovery program.)

**Expenses -** The proposed amendment would result in an overall increase in expenditures of \$5,711,000 as follows:

6301 Overtime Reimbursable - \$515,000 (Cover overtime incurred by staff for assisting in fire assignments.)

6450 Supplemental Retirement Contributions – \$1,630,000 (Resume supplemental retirement contributions that were put on hold last fiscal year following the 1-9 Debris Flow.)

Services & Supplies – \$158,000 various line items (Increases to accommodate for Board-approved projects scheduled for completion this fiscal year.)

7650 Special District Expense - \$3,543,000: The increase is due to the District's costapportionment share for three incidents:

Thomas Fire = \$3,875,000 (less previously budgeted amount of \$530,000) 1-9 Debris Flow = \$150,000 (estimate) XSB Incident Management Team storm pre-positions = \$48,000

8300 Equipment - (\$135,000) (Capital projects were deferred to next fiscal year.)

The amended budget for Fund 3650 will result in a net financial impact of \$3,035,786. These funds will carry over to next fiscal year in the Fund Balance – Unrestricted Residual line item.

### Fund 3653 – Land & Building Fund

**Revenue** - The proposed amendment would establish appropriations of \$588,000 from the following revenue source:

5780 Insurance Proceeds & Recovery - \$588,000 (Partial settlement from insurance company for property damage and loss for the rental units. Funds will be used to repair and replace the two vacant properties.)

**Expenses** - The proposed amendment would result in an increase in expenditures of \$15,000 as follows:

8200 Structures & Structure Improvements - \$15,000 (Funds used for project manager overseeing the repairs and rebuilding of the rental property units.)

The amended budget for Fund 3653 will result in a net financial impact of \$388,000. These funds will carry over to next fiscal year.

Please see the attached draft resolution and proposed amended budgets for more details.

### Conclusion

The Board has the option to:

- a) Accept the Budget Amendment and Resolution 2019-04.
- b) Amend or modify the above option.

FUND 3650	- GENERAL FUND			
		Adopted		Final Amended
Account	Line Item Description	Final Budget	Adjustment	Budget
REVENUES				
Taxes				
3010	Property Tax - Secured	14,723,000	1,457,000	16,180,000
3011	Property Tax - Unitary	144,700	-	144,700
3015	Property Tax - Escapes Secured	73,238	-	73,238
3020	Property Tax - Unsecured	705,255	(105,255)	600,000
3040	Property Tax - Prior Secured	21,033	-	21,033
3050	Property Tax - Prior Unsecured	5,850	179,950	185,800
3054	Supplemental Property Tax - Current	183,935	189,005	372,940
	Total Taxes Revenue	15,857,011	1,720,700	17,577,711
Use of Mon	ey and Property			
3380	Interest Income	20,000	100,000	120,000
	Total Use of Money and Property	20,000	100,000	120,000
Intergovern	mental Revenue - State			
3750	State-Emergency Assistance (Fire Asgmt)	345,000	960,000	1,305,000
4160	State Aid for Disaster	-	1,910,000	1,910,000
4220	Homeowners Property Tax Relief	82,610	-	82,610
	Total Intergovernmental Revenue - State	427,610	2,870,000	3,297,610
Intergovern	mental Revenue - Federal			
4476	Federal Emergency Assistance (Fire Asgmt)	140,000	200,000	340,000
4610	Federal Aid for Disaster	-	4,670,000	4,670,000
	Total Intergovernmental Revenue - Federal	140,000	4,870,000	5,010,000
Charges for	Services			
•	Reimbursement for District Services	198,595	-	198,595
	Total Charges for Services	198,595	-	198,595
Miscellaneo	bus Revenue			
5909	Other Miscellaneous Revenue	7,500		7,500
5.0.	Total Miscellaneous Revenue	7,500		7,500
	TOTAL GENERAL FUND REVENUES	16,650,716	9,560,700	26,211,416
		10,000,710	7,300,100	20,211,410

FUND 3650 - GENERAL FUND						
Account	Line Item Description	Adopted Final Budget	Adjustment	Final Amended Budget		
EXPENDITU	· · · · · · · · · · · · · · · · · · ·					
	Employee Benefits					
6100	Regular Salaries	7,937,225	-	7,937,225		
6300	Overtime	130,000	-	130,000		
6301	Overtime - Fire Reimbursable	485,000	515,000	1,000,000		
6310	Overtime - Constant Staffing	795,000	-	795,000		
6400	Retirement Contributions	2,539,640	-	2,539,640		
6450	Supp Retirement Contribution		1,630,000	1,630,000		
6550	FICA/Medicare	134,325	-	134,325		
6600	Insurance Contributions	1,962,500	-	1,962,500		
6700	Unemployment Insurance	10,040	-	10,040		
6900	Workers Compensation Insurance	625,000	-	625,000		
0,00	Total Salaries & Employee Benefits	14,618,730	2,145,000	16,763,730		
Services & S	Supplies					
7030	Clothing and PPE	53,000	15,000	68,000		
7050	Communications	99,500	15,000	114,500		
7060	Food	2,500	-	2,500		
7070	Household Supplies	30,250	-	30,250		
7090	Insurance: Liability/Auto/Prop.	31,000	-	31,000		
7120	Equipment Maintenance	35,000	-	35,000		
7200	Structure and Ground Maintenance	26,550	20,000	46,550		
7205	Fire Defense Zone (Hazard Mitigation)	236,000	-	236,000		
7322	Consulting and Management Fees	3,350	-	3,350		
7324	Audit and Accounting Fees	25,000	-	25,000		
7348	Instruments & Equip. < \$5,000	11,000	-	11,000		
7363	Equipment Maintenance (Vehicles)	63,000	50,000	113,000		
7400	Medical & First Aid Supplies	30,000	26,000	56,000		
7430	Memberships	12,500		12,500		
7450	Office Expense	27,500	-	27,500		
7460	Professional and Special Services	302,500	-	302,500		
7507	ADP Payroll Fees	7,500	-	7,500		
7510	Contractual Services	52,000	-	52,000		
7530	Publications & Legal Notices	6,000	-	6,000		
7540	Rents & Leases - Equipment (Generator)	-	32,000	32,000		
7546	Administrative Tax Expense	240,000		240,000		
7580	Rents & Leases (Gibraltar)	4,500	-	4,500		
7630	Small Tools & Instruments	13,000	-	13,000		
7650	Special District Expense	553,500	3,543,000	4,096,500		
7630	Special Projects	23,000	-	23,000		
7730	Transportation and Travel	35,000	-	35,000		
7731	Gasoline/Oil/Fuel	55,000	-	55,000		

		Adopted		Final Amended
Account	Line Item Description	Final Budget	Adjustment	Budget
7732	Training	87,750	-	87,750
7760	Utilities	43,000	-	43,000
	Total Services & Supplies	2,108,900	3,701,000	5,809,900
Capital Ass	ets			
8300	Equipment	315,000	(135,000)	180,000
	Total Capital Assets	315,000	(135,000)	180,000
	TOTAL EXPENDITURES	17,042,630	5,711,000	22,753,630
	ANCING USES Incing Uses			
7901	Tfr To Capital Reserves Fund (3652)	422,000	-	422,000
	Total Other Financing Uses	422,000	-	422,000
	TOTAL EXPENDITURES AND TRANSFERS	17,464,630	5,711,000	23,175,630
	Net Financial Impact	(813,914)	3,849,700	3,035,786
	Fund 3650 Fund Balance Detail			
	*Reserves: Catastrophic (a/o 7/1/18)	2,400,000		
	*Reserves: Economic Uncertainties (a/o 7/1/18)	3,670,000		
	Fund Balance - Restricted (by County)	178,091		
	Fund Balance - Unrestricted Residual (a/o 7/1/18)	2,976,892		
	Net Financial Impact (Unrestricted Residual)	3,035,786		

\*Reserves Policy adopted as part of Capitol PFG Financial Analysis recommendations.

FUND 3652 -	CAPITAL RESERVES FUND			
Account	Line Item Description	Adopted Final Budget	Adjustment	Final Amended Budget
REVENUES				
Use of Mone	ey and Property			
3380	Interest Income	10,000		10,000
	Total Use of Money and Property	10,000	-	10,000
Financing So	ources			
5910	Transfer from General Fund (3650)	422,000	-	422,000
	Total Financing Sources	422,000	-	422,000
	TOTAL FUND REVENUES	432,000		432,000
EXPENDITU				
Capital Asse 8300	Equipment	1,222,000		1,222,000
	Total Capital Assets	1,222,000	-	1,222,000
	TOTAL EXPENDITURES	1,222,000		1,222,000
	Net Financial Impact	(790,000)		(790,000)

#### MONTECITO FIRE PROTECTION DISTRICT Final Amended Budget - Fiscal Year 2018-19 June 24, 2019 Draft

FUND 3653 -	LAND AND BUILDING FUND			
		Adopted		Final Amended
Account	Line Item Description	Final Budget	Adjustment	Budget
REVENUES				
Use of Mone	y and Property			
3380	Interest Income	15,000		15,000
	Total Use of Money and Property	15,000	-	15,000
Miscellaneo	us Revenue			
5780	Insurance Proceeds & Recovery (Rental Prop)		588,000	588,000
	Total Financing Sources	<u> </u>	588,000	588,000
	TOTAL FUND REVENUES	15,000	588,000	603,000
EXPENDITU Capital Asse				
8100	Land	200,000	-	200,000
8200	Structures & Structure Improvements		15,000	15,000
	Total Capital Assets	200,000	15,000	215,000
	TOTAL EXPENDITURES	200,000	15,000	215,000
	Net Financial Impact	(185,000)	573,000	388,000

#### **RESOLUTION NO. 2019-04**

#### RESOLUTION OF THE GOVERNING BOARD OF THE MONTECITO FIRE PROTECTION DISTRICT AMENDING THE FINAL BUDGET FOR FISCAL YEAR 2018-19

WHEREAS, a final budget for the District for Fiscal Year 2018-19 was adopted by the Board on September 24, 2018; and

WHEREAS, the District has now received unanticipated, non-budgeted revenues from reimbursements for fire assignments, disaster recovery funds, tax revenues, and insurance claim proceeds, which are considered additional revenues rather than a reduction of expenditures; and

WHEREAS, the following account needs to be adjusted by the following amount to accommodate overtime and adjustments to expenditures:

Fund 3650 – General Fund	
Overtime - Reimbursable	\$ 515,000
Supplemental Retirement Contribution	1,630,000
Clothing and PPE	15,000
Communications	15,000
Structure and Ground Maintenance	20,000
Equipment Maintenance (Vehicles)	50,000
Medical & First Aid Supplies	26,000
Rents & Leases – Equipment	32,000
Special District Expense	3,543,000
Equipment	 -135,000
	\$ 5,711,000
Fund 3653 – Land & Building Fund	
Professional and Special Service	\$ 15,000

NOW, THEREFORE, the Board of Directors of the Montecito Fire Protection District hereby resolves as follows:

That the following revised budget be adopted for the Fiscal Year 2018-19:

Fund 3650 – General	
Salaries & Employee Benefits	\$ 16,763,730
Services & Supplies	5,809,900
Capital Assets	180,000
Transfer to Capital Reserves Fund	422,000
	\$ 23,175,630
<u>Fund 3652 – Capital Outlay</u>	
Capital Assets	\$ 1,222,000
<u>Fund 3653 – Land &amp; Building</u>	
Capital Assets	\$ 215,000

PASSED AND ADOPTED by the governing board of the Montecito Fire Protection District this 24<sup>th</sup> day of June, 2019, by the following vote:

AYES: NAYS: ABSTAIN: ABSENT:

ATTEST:

President of the Board of Directors Montecito Fire Protection District

Secretary of the Board of Directors Montecito Fire Protection District

## ATTACHMENT

## #D

		Strategic Plan	Prelimin	ary Budget	Final	Budget	Increase/
Account	Line Item Description	Goal Ref.		019-20		)18-19	(Decrease)
REVENUES							<u>,</u>
Taxes							
3010	Property Tax - Secured			16,827,000		14,723,000	2,104,000
3011	Property Tax - Unitary			147,000		144,700	2,300
3015	Property Tax - Escapes Secured			76,000		73,238	2,762
3020	Property Tax - Unsecured			675,000		705,255	(30,255
3040	Property Tax - Prior Secured			22,000		21,033	967
3050	Property Tax - Prior Unsecured			186,000		5,850	180,150
3054	Supplemental Property Tax - Current			373,000		183,935	189,065
	Total Taxes Revenue			18,306,000		15,857,011	2,448,989
Use of Mor	ney and Property						
3380	Interest Income			100,000		20,000	80,000
3381	Unrealized Gain/Loss Invstmnts (County)			-		-	-
3409	Rental Property Income			20,000			20,000
	Total Use of Money and Property			120,000		20,000	100,000
Intergover	nmental Revenue - State						
3750	State-Emergency Assistance (Fire Asgmt)			1,000,000		345,000	655,000
4160	State Aid for Disaster			660,000		-	660,000
4220	Homeowners Property Tax Relief			78,000		82,610	(4,610
	Total Intergovernmental Revenue - State			1,738,000		427,610	1,310,390
Intergover	nmental Revenue - Federal						
4476	Federal Emergency Assistance (Fire Asgmt)			500,000		140,000	360,000
4610	Federal Aid for Disaster			233,500			233,500
	Total Intergovernmental Revenue - Federal			733,500		140,000	593,500
Charges for	r Services						
5105	Reimbursement for District Services			202,500		198,595	3,905
	AMR First Response Payment		108,000	-	106,615	-	-
	CSFD Dispatch Services		94,500		91,980	-	-
	Total Charges for Services			202,500		198,595	3,905
Miscellane	ous Revenue						
5769	State Reimbursements (911 phone system)			135,000		-	135,000
5909	Other Miscellaneous Revenue			7,500		7,500	-
	Westmont Payment		4,500	-	4,500	-	-
	Other		3,000		3,000		-
	Total Miscellaneous Revenue			142,500		7,500	135,000
	TOTAL GENERAL FUND REVENUES			21,242,500		16,650,716	4,591,784

FUND 3650	- GENERAL FUND						
		Strategic Plan		ary Budget		Budget	Increase/
Account	Line Item Description	Goal Ref.	FY 2	019-20	FY 20	)18-19	(Decrease)
EXPENDITU	IRES						
Salaries & E	Employee Benefits	7					
6100	Regular Salaries			8,961,100		7,937,225	1,023,875
	Salaries		8,603,600		7,740,600		
	Engineer/Inspector position		220,000		-		
	Auxiliaries/Director's Fees		37,500		46,625		
	Vacation Redemption Programs		100,000		150,000		
6300	Overtime			130,000		130,000	-
6301	Overtime - Fire Reimbursable			1,000,000		485,000	515,000
6310	Overtime - Constant Staffing			750,000		795,000	(45,000)
6400	Retirement Contributions			2,838,500		2,539,640	298,860
6450	Supp Retirement Contribution			1,000,000		-	1,000,000
6550	FICA/Medicare			165,700		134,325	31,375
6600	Insurance Contributions			2,199,100		1,962,500	236,600
	Health Insurance		1,917,400		1,714,440		
	Dental Insurance		230,000		198,390		
	Vision Insurance		38,400		36,555		
	Life Insurance		9,300		9,115		
	Employee Assistance Program		1,500		1,500		
	Flexible Spending Account Admin.		2,500		2,500		
6700	Unemployment Insurance			7,000		10,040	(3,040)
6900	Workers Compensation Insurance			500,000		625,000	(125,000)
	Total Salaries & Employee Benefit	ts		17,551,400		14,618,730	2,932,670
Services &	Supplies						
7030	Clothing and PPE	8		76,000		53,000	23,000
	Operational		45,000		12,000		
	Turnout sets		13,500		41,000		
	SCBA masks		10,000		-		
	Particulate hoods		7,500		-		
7050	Communications	4		125,000		99,500	25,500
	Operational		115,000		99,500		
	iPads (10) for Field Operations/MDCs		10,000		-		
7060	Food	7		2,500		2,500	-
7070	Household Supplies	6		59,000		30,250	28,750
	Operational		33,000		30,250		
	Mattresses for dorms (13)		26,000		-		
7090	Insurance: Liability/Auto/Prop.	2,6		33,000		31,000	2,000
7120	Equipment Maintenance	6		38,500		35,000	3,500
7200	Structure and Ground Maintenance	6		34,550		26,550	8,000
	Operational		31,550		26,550		
	Rental property		3,000		-		
7205	Fire Defense Zone (Hazard Mitigation)	1		250,000		236,000	14,000
7322	Consulting and Management Fees	1,6		2,000		3,350	(1,350)
7324	Audit and Accounting Fees	9		27,000		25,000	2,000

FUND 3650	- GENERAL FUND	Strategic Plan	Drolimino	n Pudgot	Einal P	udgot	Increase /
Account	Line Item Description	Goal Ref.	Preliminar FY 202		Final B FY 201		Increase/ (Decrease)
		Goal Kel.	FT 20.				
7348	Instruments & Equip. < \$5,000	4	6,000	89,000	6,000	11,000	78,000
	Hose equipment and maintenance Rope rescue equipment maintenance	4	5,000		5,000		
		4			3,000		
	Equipment for new Type 1 engine SCBA bottles	8	65,000 13,000		-		
7363		0	13,000	121,500	-	62.000	E8 E00
7303	Equipment Maintenance (Vehicles) Operational	4	80,000	121,500	62 000	63,000	58,500
	•	6			63,000		
	Mechanic shop equipment	8	31,000		-		
	Emergency lighting for U91 & U92		8,200		-		
7400	Keystones for E91 & E92	4	2,300	C7 000	-	20.000	27.000
7400	Medical & First Aid Supplies	4	22.000	67,900	20.000	30,000	37,900
	Operational		33,000		30,000		
	AEDs (10)		30,000		-		
	Stair chair for Squad 91		3,400		-		
7420	Portable suction kit	-	1,500	14.000	-	12 500	4 500
7430	Memberships	7		14,000		12,500	1,500
7450	Office Expense	All		27,500		27,500	-
7460	Professional and Special Services			430,500		302,500	128,000
	Operational	2,4,5	246,500		232,500		
	Public Information and Education	1	45,000		45,000		
	EMS system study	5	25,000		25,000		
	Facilities Project Manager	6	50,000		-		
	Debris Flow Risk Map update	1	64,000		-		
7507	ADP Payroll Fees	9		7,500		7,500	-
7510	Contractual Services	4,5		126,500		52,000	74,500
	Operational		64,000		52,000		
	Table Command MDC software		45,000		-		
	Avtech Radio System maintenance		14,400		-		
	Data tracking software		3,100		-		
7530	Publications & Legal Notices	9		6,000		6,000	-
7540	Rents & Leases - Equipment (Generator)	6		14,000		-	14,000
7546	Administrative Tax Expense	9		245,000		240,000	5,000
7580	Rents & Leases - Structure (Gibraltar)	4		9,500		4,500	5,000
7630	Small Tools & Instruments	4		14,000		13,000	1,000
	Operational		11,000		10,000		
	HazMat team equipment		3,000		3,000		
	Patrol 91/92 equipment		-		7,100		
7650	Special District Expense	9		25,500		553,500	(528,000)
	Operational (permits, fees, other)		10,500		10,500		
	LAFCO		15,000		13,000		
	Thomas Fire/Debris Flow Cost	3	-		530,000		
7671	Special Projects	1,2		38,000		23,000	15,000
	Public Education materials		7,500		7,500		
	Hazard abatement brochure		6,000		6,000		
	Evacuation drill expenses		5,000		5,000		
	Neighborhood chipping flyer		4,500		4,500		
	Prevention Education pamphlet		15,000		-		
7730	Transportation and Travel	5,7		35,000		35,000	-
7731	Gasoline/Oil/Fuel	3,4,6		60,000		55,000	5,000

FUND 3650	- GENERAL FUND						
	S	Strategic Plan	Prelimina	ary Budget	Final	Budget	Increase/
Account	Line Item Description	Goal Ref.	FY 20	019-20	FY 20	)18-19	(Decrease)
7732	Training			98,050		87,750	10,300
	Operational	7	87,750		87,750		
	Blue Card Training Program with iPads	5,7	10,300		-		
7760	Utilities	6		45,500		43,000	2,500
	Operational		43,000	-	43,000	-	-
	Rental housing utilities		2,500		-		
	Total Services & Supplies			2,122,500		2,108,900	13,600
Capital Asse	ets						
8200	Structures & Improvements			590,000		250,000	340,000
	Facility repairs: roof, generator,						
	vehicle exhaust system	6,8	590,000		250,000		
8300	Equipment			177,500		65,000	112,500
	911 Emergency phone system	4	135,000		-		
	IT server/equipment	2,6	25,000		-		
	SCBA testing machine	8	17,500		-		
	CAD Microwave Point to Point System	4	-		65,000		-
	Total Capital Assets			767,500		315,000	452,500
	TOTAL EXPENDITURES			20,441,400		17,042,630	3,398,770
OTHER FINA	ANCING USES						
Other Finan	cing Uses						
7901	Tfr To Capital Reserves Fund (3652)	4,6		440,000		422,000	18,000
	Total Other Financing Uses			440,000		422,000	18,000
	TOTAL EXPENDITURES AND TRANSFERS			20,881,400		<u>17,464,630</u>	
	Net Financial Impact			361,100		(813,914)	
	Fund 3650 Fund Balance Detail			l			
	*Reserves: Catastrophic (a/o 7/1/18)			2,400,000			
	*Reserves: Economic Uncertainties (a/o 7/1	L/18)		3,670,000			
	Fund Balance - Restricted (by County)			178,100			
	Fund Balance - Unrestricted Residual Estima	ate (a/o 7/1/19	)	2,163,000			
	Net Financial Impact (Unrestricted Residual	)		361,100			
	Projected Ending Fund Balance at 6/30/202	0		8,772,200			

\*Reserves Policy adopted as part of Capitol PFG Financial Analysis recommendations.

		Prelim. Budget	Final Budget
Account	Line Item Description	FY 2019-20	FY 2018-19
REVENUES			
Use of Mor	ney and Property		
3380	Interest Income	25,000	10,000
	Total Use of Money and Property	25,000	10,000
Financing S	ources		
5910	Transfer from General Fund (3650)	440,000	405,000
	Total Financing Sources	440,000	405,000
	TOTAL FUND REVENUES	465,000	415,000
EXPENDITU	IRES		
Capital Ass	ets		
8300	Apparatus (Engine 91 - Type 1) - Paid in FY 19	795,000	795,000
	Apparatus (Engine 91 - Type 1) - Add'l funding	35,000	-
	Vehicle (Fire Chief)	65,000	-
	Vehicle (Wildland Fire Specialist 921)	37,000	-
	Vehicle (Battalion Chief 916)	85,000	-
	Vehicle (Repair 91)	84,000	-
	Apparatus (Engine 391 - Type 3)	440,000	432,000
	Total Capital Assets	1,541,000	1,227,000
	TOTAL EXPENDITURES	1,541,000	1,227,000
	Net Financial Impact	(1,076,000)	(812,000)

FUND 3653	- LAND AND BUILDING FUND		
		Prelim. Budget	Final Budget
Account	Line Item Description	FY 2019-20	FY 2018-19
REVENUES			
Use of Mor	ney and Property		
3380	Interest Income	40,000	15,000
	Total Use of Money and Property	40,000	15,000
	TOTAL FUND REVENUES	40,000	15,000
EXPENDITU	JRES		
Capital Ass	ets		
8100	Land	200,000	200,000
8200	Structures and Improvements (rental prop)	1,000,000	
	Total Capital Assets	1,200,000	200,000
	TOTAL EXPENDITURES	1,200,000	200,000
	Net Financial Impact	(1,160,000)	(185,000)

#### **RESOLUTION NO. 2019-05**

#### RESOLUTION OF THE BOARD OF DIRECTORS OF THE MONTECITO FIRE PROTECTION DISTRICT IN THE MATTER OF THE ADOPTION OF THE PRELIMINARY BUDGET FOR THE FISCAL YEAR 2019-20

WHEREAS, Section 13890 of the Health and Safety Code requires that the District Board adopt a preliminary budget conforming to the Accounting Procedures for Special Districts and Budgeting Procedures for Special Districts, as described, on or before June 30 of each year; and

WHEREAS, Section 13893 of the Health and Safety Code requires that the District Board publish a notice on or before June 30 of each year stating: (1) that it has adopted a preliminary budget which is available for inspection at a time and place within the District specified in the notice; and (2) the date, time and place when the Board will meet to adopt the final budget and that any person may appear and be heard regarding any item in the budget or regarding the addition of other items; and

WHEREAS, Section 13893 of the Health & Safety Code further provides that said notice shall be published in at least one newspaper of general circulation in the District, the first publication to be at least two weeks before the date of the meeting; and

WHEREAS, the Board of Directors met at a meeting on June 24, 2019, to consider the District's preliminary budget for fiscal year 2019-20 as described by and recommended for approval by the Fire Chief;

NOW, THEREFORE, BE IT AND IT IS HEREBY ORDERED AND RESOLVED AS FOLLOWS:

1. That the Board of Directors adopts the 2019-20 preliminary budget for the Montecito Fire Protection District in the form recommended by the Fire Chief at the Board's meeting on June 24, 2019.

In summary, the preliminary budget provides as follows:

Fund 3650 – General Fund	
Salaries & Employee Benefits	\$ 17,551,400
Services & Supplies	2,122,500
Capital Assets	767,500
Transfer to Capital Reserves	440,000
	\$ 20,881,400
Fund 3652 – Capital Outlay	
Capital Assets	\$ 1,541,000
<u>Fund 3653 – Land &amp; Building</u>	
Capital Assets	\$ 1,200,000

Copies of the approved budget are on file with District records.

2. The adopted preliminary budget shall be available for inspection Monday through Friday, between 8:00 a.m. and 5:00 p.m. at the Montecito Fire Protection District, 595 San Ysidro Road, Santa Barbara, California.

3. The Board of Directors will meet on September 23, 2019 at 2:00 p.m. at the Montecito Fire Protection District, 595 San Ysidro Road, Santa Barbara, California, to consider and adopt the final budget as required by law and any person may appear at that time and be heard regarding any item in the budget or regarding the addition of other items.

4. The Secretary is directed to cause to be published the notice attached to this resolution as Exhibit A in the *Santa Barbara News Press* in accordance with Health and Safety Code Section 13893 on or before June 30, 2019.

PASSED AND ADOPTED by the Governing Board of the Montecito Fire Protection District this 24<sup>th</sup> day of June, 2019, by the following vote, to wit:

AYES: NAYS: ABSTAIN: ABSENT:

> President of the Board of Directors MONTECITO FIRE PROTECTION DISTRICT

ATTEST:

Secretary of the Board of Directors MONTECITO FIRE PROTECTION DISTRICT

#### EXHIBIT A

#### **PUBLIC NOTICE**

Montecito Fire Protection District in the Matter of the Preliminary Budget for Fiscal Year 2019-20 Health and Safety Code Section 13893

NOTICE IS HEREBY GIVEN that the preliminary budget of the Montecito Fire Protection District for fiscal year 2019-20 was adopted by the Board of Directors of said District on June 24, 2019, and is available for inspection Monday through Friday, between 8:00 a.m. and 5:00 p.m. at the Montecito Fire Protection District, 595 San Ysidro Road, Santa Barbara, California.

NOTICE IS ALSO GIVEN that on September 23, 2019 at 2:00 p.m., the Board of Directors will meet at the Montecito Fire Protection District, 595 San Ysidro Road, Santa Barbara, California, for the purpose of adopting the District's final budget at which time and place any person may appear and be heard regarding any item in the budget or regarding the addition of other items.

This Notice shall be published in accordance with California Health & Safety Code Section 13893.

By order of the Board of Directors of the Montecito Fire Protection District, State of California, this 24th day of June, 2019.

Michael Lee, Secretary

# Agenda Item #10

#### Circular Letter No. 200-056-11 Enclosure

#### PUBLICLY AVAILABLE PAY SCHEDULE AND WRITTEN LABOR POLICY OR AGREEMENT REGULATIONS

California Code of Regulations, title 2, §§ 570.5 and 571

Title 2. Administration Division 1. Administrative Personnel Chapter 2. Board of Administration of Public Employees' Retirement System Subchapter 1. Employees' Retirement System Regulations Article 4. Contracts

#### ADD 2 CCR § 570.5

§ 570.5. Requirement for a Publicly Available Pay Schedule.

(a) For purposes of determining the amount of "compensation earnable" pursuant to Government Code Sections 20630, 20636, and 20636.1, payrate shall be limited to the amount listed on a pay schedule that meets all of the following requirements:

(1) Has been duly approved and adopted by the employer's governing body in accordance with requirements of applicable public meetings laws;

(2) Identifies the position title for every employee position;

(3) Shows the payrate for each identified position, which may be stated as a single amount or as multiple amounts within a range;

(4) Indicates the time base, including, but not limited to, whether the time base is hourly, daily, bi-weekly, monthly, bi-monthly, or annually;

(5) Is posted at the office of the employer or immediately accessible and available for public review from the employer during normal business hours or posted on the employer's internet website;

(6) Indicates an effective date and date of any revisions;

(7) Is retained by the employer and available for public inspection for not less than five years; and

(8) Does not reference another document in lieu of disclosing the payrate.

(b) Whenever an employer fails to meet the requirements of subdivision (a) above, the Board, in its sole discretion, may determine an amount that will be considered to be payrate, taking into consideration all information it deems relevant including, but not limited to, the following:

 Documents approved by the employer's governing body in accordance with requirements of public meetings laws and maintained by the employer;
 Last payrate listed on a pay schedule that conforms to the requirements of subdivision (a) with the same employer for the position at issue;

(3) Last payrate for the member that is listed on a pay schedule that conforms with the requirements of subdivision (a) with the same employer for a different position;

(4) Last payrate for the member in a position that was held by the member and that is listed on a pay schedule that conforms with the requirements of subdivision (a) of a former CalPERS employer.

NOTE: Authority cited: Sections 20120 and 20121, Government Code. Reference: Sections 20630, 20636 and 20636.1, Government Code.

#### AMEND §571(b)

§ 571. Definition of Special Compensation.

(a) – (No changes).

(b) The Board has determined that all items of special compensation listed in subsection (a) are:

(1) Contained in a written labor policy or agreement as defined at Government Code section 20049, provided that the document:

(A) Has been duly approved and adopted by the employer's governing body in accordance with requirements of applicable public meetings laws;

(B) Indicates the conditions for payment of the item of special compensation, including, but not limited to, eligibility for, and amount of, the special compensation;

(C) Is posted at the office of the employer or immediately accessible and available for public review from the employer during normal business hours or posted on the employer's internet website;

(D) Indicates an effective date and date of any revisions;

(E) Is retained by the employer and available for public inspection for not less than five years; and

(F) Does not reference another document in lieu of disclosing the item of special compensation;

(2) Available to all members in the group or class;

(3) Part of normally required duties;

(4) Performed during normal hours of employment;

(5) Paid periodically as earned;

(6) Historically consistent with prior payments for the job classification;

(7) Not paid exclusively in the final compensation period;

(8) Not final settlement pay; and

(9) Not creating an unfunded liability over and above PERS' actuarial assumptions.

(c) – (No changes).

(d) – (No changes).

NOTE: Authority cited: Sections 20636(c)(6), 20636.1(c)(6), 20120 and 20121, Government Code; Calif. Const. Art. XVI, Section 17. Reference: Sections 20630, 20636, 20636.1 and 20691, Government Code.

Research Note: - (No changes).

#### MONTHLY SALARY BASE RATES:

Rank/Title	Start	6 mo.	12 mo.	24 mo.	36 mo.
Fire Chief	22,712				
Division Chief of Operations	18,041	20,346			
Battalion Chief/Fire Marshal	16,451	18,247			
Battalion Chief	14,956	16,587			
Captain/Asst. Fire Marshal	13,632	14,281			
Captain	12,125	12,981			
Wildland Specialist	11,844	12,402			
Engineer/Inspector	11,844	12,402			
Engineer	10,541	11,278			
Firefighter/Paramedic	8,551	9,396	10,244	11,178	
Firefighter	7,699	8,454	9,224	10,062	
Dispatcher	8,018	8,343	8,575		
Communications Coordinator	11,416	11,988	12,585		
Accountant	10,480	11,009	11,561	12,142	12,749
Administrative Assistant	9,890	10,388	10,904	11,451	12,027
Mechanic	8,486	9,233	9,984		

#### SPECIAL COMPENSATION:

Longevity Incentives: Special compensation pay is calculated using the employee's base rate.

Years of Service	Rate
3 to 5	3.0 %
6 to 8	6.0 %
9 to 11	9.0 %
12 to 14	12.0 %
15 to 17	15.0 %
18 to 20	18.0 %
21 to 23	21.0 %
24+	24.0 %

**Dispatch Cadre Members:** Special compensation pay 5% of top step of the Firefighter classification base salary.

Current incentive rate: \$ 503.10 per month

**EMT/AED Certification Incentive**: 5.35% Special compensation pay is calculated using the employee's base rate and longevity incentive.

**FLSA Earnings:** Safety employees working a 24-hour shift schedule receive FLSA compensation equal to 5 hours of straight time pay every 24-day period.

Dispatchers working a 24-hour shift schedule receive FLSA compensation calculated weekly for hours worked in excess of a 40-hour workweek.

# Agenda Item #11

#### MONTECITO FIRE PROTECTION DISTRICT

#### Minutes for the Special Meeting of the Board of Directors

Held at Montecito Fire Protection District, 595 San Ysidro Road, Santa Barbara, CA 93108 on May 13, 2019 at 9:00 a.m.

Director Easton called the meeting to order at 9:00 a.m.

**Present:** Director Easton, Director van Duinwyk, Director Powell, Director Lee, Director Ishkanian. Chief Hickman and District Counsel Mark Manion were also present.

1. Public comment: Any person may address the Board at this time on any non-agenda matter that is within the subject matter jurisdiction of the Montecito Fire Protection District. (30 minutes total time allotted for this discussion.)

There were no public comments at this meeting.

#### 2. Fire Chief's report.

There were no items to report at this meeting.

#### 3. Board of Director's report.

There were no items to report at this meeting.

#### 4. CLOSED SESSION:

- a. PUBLIC EMPLOYEE APPOINTMENT (Government Code section 54957) Title: Fire Chief
- b. Conference with Labor Negotiators (Government Code section 54957.6) Agency designated representatives: Director Powell and Director Lee Unrepresented employee: Fire Chief

The Board reported out of closed session at 11:37 a.m. with no reportable action.

Meeting Adjourned at 11:39 a.m.

President Sylvia Easton

Secretary Michael Lee

# Agenda Item #12

#### MONTECITO FIRE PROTECTION DISTRICT

#### Minutes for the Special Meeting of the Board of Directors

Held at Montecito Fire Protection District, 595 San Ysidro Road, Santa Barbara, CA 93108 on May 23, 2019 at 2:00 p.m.

Director Easton called the meeting to order at 2:00 p.m.

**Present:** Director Easton, Director van Duinwyk, Director Powell, Director Lee, Director Ishkanian. Chief Hickman and District Counsel Mark Manion were also present.

1. Public comment: Any person may address the Board at this time on any non-agenda matter that is within the subject matter jurisdiction of the Montecito Fire Protection District. (30 minutes total time allotted for this discussion.)

There were no public comments at this meeting.

2. Presentation of Military Order of World Wars Award, Dennis Merenbach, Award Chair and Marine Brigadier General Fred Lopez, Presenter: Recipient, Battalion Chief Travis Ederer.

Colonel Phillip Conran presented the First Responder Outstanding Service Award to Battalion Chief Travis Ederer for his outstanding actions during the 1/9 Debris flow event.

Construction project update by project manager, Dan Underwood. (Strategic Plan Goal
 6)

Project manager, Dan Underwood provided an update and timeline regarding various projects including: roof work, generator and rental properties.

### 4. Consider declaring E392 as surplus and authorize the Fire Chief to sell, donate, or dispose of the vehicle as specified in the Surplus Property policy. (Strategic Plan Goal 6)

a. Staff report presented by Fire Chief Chip Hickman.

Chief Hickman provided a staff report regarding E392. Motion to authorize the Fire Chief to sell, donate or dispose of the vehicle as specified in the Surplus Property policy made by Director Powell, seconded by Director Ishkanian and unanimously passed.

5. Receive briefing from Fire Prevention Staff on Cal Fire, Fire Prevention Grants.

Wildland Specialist Nic Elmquist provided a report regarding Cal Fire, Fire Prevention Grants.

### 6. Election of the Fire Agencies Insurance Risk Authority Governing Board of Directors Positions.

Chief Hickman provided information regarding the Fire Agencies Insurance Risk Authority Governing Board of Directors positions. He stated that there are seven vacancies, and seven candidates on the ballot. Motion to approve the slate made by Director van Duinwyk, seconded by Director Lee and unanimously passed.

#### 7. Report from the Finance Committee. (Strategic Plan Goal 9.1)

### a. Consider recommendation to approve March and April 2019 financial statements.

Director van Duinwyk provided a report regarding the March and April 2019 financial statements. Motion made by Director Lee, seconded by Director van Duinwyk and unanimously passed to approve the March and April 2019 financial statements.

#### b. Review PARS OPEB Trust Program statement for February and March 2019.

Director van Duinwyk provided a report regarding the PARS OPEB Trust Program statement for February and March 2019.

#### c. Review Draft Preliminary Budget for FY 2019-20.

Director van Duinwyk provided a report regarding the Preliminary Budget for FY 2019-20.

#### 8. Approval of Minutes of the April 22, 2019 Regular Meeting.

Motion to approve the minutes of the April 22, 2019 Regular meeting made by Director Lee, seconded by Director Ishkanian and unanimously passed.

#### 9. Fire Chief's report.

Chief Hickman highlighted significant calls for the month of April. The Chief stated that he is planning to have a Retirement Barbeque at Lower Manning Park on September 1. Chief Hickman mentioned that today, the Department attended a flag dedication at 1187 Coast Village Rd.

#### **10.** Board of Director's report.

There were no items to report at this meeting.

### 11. Suggestions from Directors for items other than regular agenda items to be included for the June 24, 2019 Regular Board meeting.

Director Powell suggested a discussion item to consider a workers compensation side fund. Director Lee suggested an update regarding the Microgrid project.

#### 12. CLOSED SESSION:

#### a. Conference with Labor Negotiators (Government Code section 54957.6) Agency designated representatives: Director Powell and Director Lee Unrepresented employee: Fire Chief

The Board reported out of closed session at 4:10 p.m.

The Montecito Fire Protection District Board of Directors and Division Chief Kevin Taylor came to terms on a Fire Chief Employment Agreement to be presented for final consideration at the next Board meeting.

Meeting Adjourned at 4:13 p.m.

President Sylvia Easton

Secretary Michael Lee

# Agenda Item #13



• • •

May 21, 2019 Deer Pobert Salbraith & Crew Thank you for taking care of my puppy Can after I was picked up by emplerance on Sunday May 12th, He enjoyed his Station Dag" status and still backs about it. Jappeniate all you did for me that afternoon and detring the fire and much debries flow, Repairlos, Karry Meirogean,

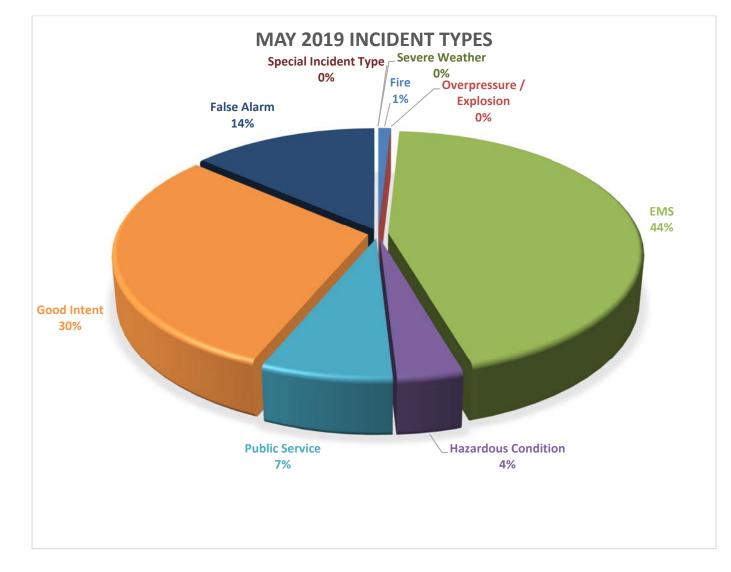
## YOUROCK

62 Olive Mill Road Montecito, CA



#### MAY 2019 CALLS BY INCIDENT TYPE TOTAL INCIDENTS: 110

FIRE: 1 EXPLOSION, OVERHEAT: 0 HAZARDOUS CONDITION: 4 FALSE ALARM: 15 SPECIAL INCIDENT TYPES: 0 EMS: 49 PUBLIC SERVICE\*\* 8 GOOD INTENT\*: 33 SEVERE WEATHER: 0



\*Good Intent: Firefighters respond to a reported emergency, but find a different type of incident or nothing at all upon arrival to the area. Example: A caller reports smoke on the hillside. Firefighters arrive to discover a grading operation at a construction site is creating dust mistaken for smoke. Dispatched and Cancelled Enroute falls in this category. \*\* Public Service: Non-emergency requests for assistance. Examples: lock out, animal rescue, ring removal, water problem; lift assists, seized gate, stalled elevator, providing the Sheriff's Department with a ladder to enter a building.

