

NAPA COUNTY OPERATIONAL  
AREA HAZARD MITIGATION PLAN  
2013 UPDATE

Prepared by:

NOAHMP PLANNING COMMITTEE

Administered by:

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*COUNTY EXECUTIVE  
OFFICE,  
EMERGENCY  
SERVICES DIVISION*



# Table of Contents

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TABLE OF CONTENTS.....	I
LIST OF TABLES.....	V
LIST OF FIGURES.....	VI
<b>SECTION 1. LEGAL REQUIREMENTS .....</b>	<b>1</b>
1.1. ACKNOWLEDGEMENTS .....	1
1.2. LETTER OF PROMULGATION .....	2
1.3. EXECUTIVE SUMMARY.....	11
<b>SECTION 2. THE PLANNING PROCESS .....</b>	<b>15</b>
2.1. PLANNING PROCESS .....	15
2.2. ORGANIZE RESOURCES.....	16
2.2.1. <i>Build Planning Team</i> .....	16
2.2.2. <i>Public Outreach</i> .....	21
2.2.3. <i>Incorporation of Earlier Plans and Studies</i> .....	21
2.2.4. <i>Access Risks</i> .....	22
2.2.5. <i>Develop Mitigation Plan</i> .....	23
2.3. COMMUNITY DESCRIPTIONS.....	24
2.3.1. <i>Napa County Operational Area Overview</i> .....	24
2.3.2. <i>Jurisdictional Overviews</i> .....	30
2.4. THE PLANNING PROCESS BY THREAT .....	49
2.4.1. <i>Major Threat: Flooding</i> .....	49
2.4.2. <i>Major Threat: Earthquake</i> .....	52
2.4.3. <i>Major Threat: Wildland Interface Fires</i> .....	54
<b>SECTION 3. RISK ASSESSMENT.....</b>	<b>57</b>
3.1. HAZARD IDENTIFICATION .....	57
3.2. ASSIGNING RISK FACTORS.....	57
3.2.1. <i>Hazard Risk Factor</i> .....	59
3.3. FLOOD HAZARD.....	60
3.3.1. <i>Flood History</i> .....	62
3.3.2. <i>Napa River Flood Control Project</i> .....	64
3.3.3. <i>Napa County Small Stream Flood Threat</i> .....	66
3.3.4. <i>Probability of Future Flooding</i> .....	66
3.3.5. <i>Vulnerability Assessment of Structures, Infrastructure, &amp; Critical Facilities</i> .....	67
3.3.6. <i>Repetitive Flood Loss</i> .....	67
3.4. EARTHQUAKE HAZARD .....	70
3.4.1. <i>Earthquake Loss Estimation Modeling</i> .....	70
3.4.2. <i>GIS Maps and HAZUS</i> .....	75
3.4.3. <i>Summary of Expected Damage</i> .....	75
3.4.4. <i>Vulnerability Assessment of Structures, Infrastructure, &amp; Critical Facilities</i> .....	76
3.4.5. <i>Probability of Future Earthquakes</i> .....	77
3.5. FIRE HAZARD - WILDLAND URBAN INTERFACE .....	78
3.5.1. <i>Fire Hazard Severity</i> .....	79
3.5.2. <i>Wildland Interface Fire History</i> .....	79
A.1 FUEL CLASSIFICATIONS .....	79
3.5.3. <i>Vulnerability Assessment of Structures, Infrastructure, &amp; Critical Facilities</i> .....	80
3.5.4. <i>Probability of Wildland Fire</i> .....	80

<b>SECTION 4. MITIGATION STRATEGY .....</b>	<b>82</b>
4.1. HAZARD MITIGATION GOALS AND OBJECTIVES .....	82
4.2. CAPABILITIES ASSESSMENT .....	83
4.2.1. <i>Planning and Regulatory Mitigation Capabilities</i> .....	83
4.2.2. <i>Administrative/Technical Capabilities</i> .....	85
4.2.3. <i>Fiscal Capabilities</i> .....	88
4.2.4. <i>Community Political Capability</i> .....	89
4.2.5. <i>Self-Assessment of Capability</i> .....	89
4.3. MITIGATION ACTION ITEMS .....	90
4.3.1. <i>Mitigation Action Categories</i> .....	90
4.3.2. <i>Identification of Mitigation Actions</i> .....	90
4.3.3. <i>Project Implementation</i> .....	94
4.3.4. <i>Legal Framework</i> .....	94
<b>SECTION 5. PLAN MAINTENANCE PROCEDURES.....</b>	<b>95</b>
5.1. PLAN ADOPTION.....	95
5.2. PLAN MAINTENANCE.....	95
5.3. FUTURE PARTICIPATION.....	95
5.4. MONITORING, EVALUATING AND UPDATING THE PLAN.....	95
5.5. IMPLEMENTATION THROUGH EXISTING PROGRAMS.....	96
5.6. CONTINUED PUBLIC INVOLVEMENT .....	96
<b>APPENDIX A. NAPA COUNTY OPERATIONAL AREA .....</b>	<b>97</b>
A.1 MITIGATION GOALS, OBJECTIVES, AND ACTIONS TRACKING .....	99
A.1.1 <i>GOAL 1: Promote a Flood Safer Community</i> .....	99
A.1.2 <i>Goal 2: Promote an Earthquake Safer Community</i> .....	101
A.1.3 <i>Goal 3: Promote a Fire Safer Community</i> .....	102
A.2 MITIGATION ACTION TRACKING SHEETS .....	105
A.2.1 <i>Action 1.1.1:</i> .....	105
A.2.2 <i>Action 1.2.1:</i> .....	111
A.2.3 <i>Action 1.3.1:</i> .....	117
A.2.4 <i>Action 1.4.1</i> .....	123
A.2.5 <i>Action 1.5.1</i> .....	129
A.2.6 <i>Action 1.5.2</i> .....	135
A.2.7 <i>Action 2.1.1</i> .....	141
A.2.8 <i>Action 2.1.2</i> .....	147
A.2.9 <i>Action 2.2.1</i> .....	153
A.2.10 <i>Action 2.2.2</i> .....	159
A.2.11 <i>Action 3.1.1:</i> .....	165
A.2.12 <i>Action 3.1.2:</i> .....	171
A.2.13 <i>Action 3.2.1:</i> .....	177
A.2.14 <i>Action 3.2.2:</i> .....	183
A.2.15 <i>Action 3.3.1</i> .....	189
A.2.16 <i>Action 3.4.1</i> .....	195
A.2.17 <i>Action 3.5.1</i> .....	201
A.3 NAPA COUNTY HAZARD MAPS.....	207
A.4 NAPA COUNTY DISASTER HISTORY AND ASSETS AT RISK .....	223
A.5 NAPA COUNTY CRITICAL FACILITIES.....	229
A.6 NAPA COUNTY MEDICAL FACILITIES .....	231
A.7 NAPA COUNTY PUBLIC SAFETY FACILITIES.....	233
A.8 NAPA COUNTY SCHOOLS .....	237
<b>APPENDIX B. CITY OF AMERICAN CANYON .....</b>	<b>241</b>

B.1	RISK ASSESSMENT .....	242
B.2	FUTURE DEVELOPMENT .....	243
B.4	AMERICAN CANYON HAZARD MAPS .....	250
<b>APPENDIX C. CITY OF CALISTOGA .....</b>		<b>257</b>
C.1	RISK ASSESSMENT .....	258
C.2	FUTURE DEVELOPMENT .....	259
C.3	CAPABILITIES ASSESSMENT .....	260
C.3.1	<i>Planning and Regulatory Capabilities</i> .....	260
C.3.2	<i>Administrative and Technical Capability</i> .....	261
C.3.3	<i>Financial Capability</i> .....	263
C.3.4	<i>Political Capability</i> .....	264
C.3.5	<i>Self-Assessment of Capability</i> .....	264
C.4	CITY OF CALISTOGA HAZARD MAPS .....	265
<b>APPENDIX D. CITY OF NAPA .....</b>		<b>272</b>
D.1	HAZARD MAPS .....	273
<b>APPENDIX E. CITY OF ST. HELENA .....</b>		<b>280</b>
E.1	RISK ASSESSMENT .....	281
E.2	FUTURE DEVELOPMENT .....	282
E.3	CAPABILITIES ASSESSMENT .....	283
E.3.1	<i>Planning and Regulatory Mitigation Capabilities</i> .....	283
E.3.2	<i>Administrative and Technical Capabilities</i> .....	284
E.3.3	<i>Fiscal Capability</i> .....	285
E.3.4	<i>Political Capability</i> .....	286
E.3.5	<i>Self-Assessment of Capability</i> .....	287
E.4	ST. HELENA HAZARD MAPS .....	288
<b>APPENDIX F. TOWN OF YOUNTVILLE .....</b>		<b>294</b>
F.1	RISK ASSESSMENT .....	295
F.2	FUTURE DEVELOPMENT .....	296
F.3	CAPABILITIES ASSESSMENT .....	297
F.3.1	<i>Planning and Regulatory Capability</i> .....	297
F.3.2	<i>Administrative and Technical Capabilities</i> .....	299
F.3.3	<i>Fiscal Capability</i> .....	300
F.3.4	<i>Political Capability</i> .....	301
F.3.5	<i>Self-Assessment of Capability</i> .....	302
F.4	YOUNTVILLE HAZARD MAPS .....	303
<b>APPENDIX G. NAPA VALLEY COLLEGE .....</b>		<b>309</b>
G.1	RISK ASSESSMENT .....	310
G.2	FUTURE DEVELOPMENT .....	311
G.3	CAPABILITIES ASSESSMENT .....	313
G.3.1	<i>Planning and Regulatory Capability</i> .....	313
G.3.2	<i>Administrative and Technical Capability</i> .....	314
G.3.3	<i>Fiscal Capability</i> .....	317
G.3.4	<i>Political Capability</i> .....	317
G.3.5	<i>Self-Assessment of Capability</i> .....	318
<b>APPENDIX H. NAPA COUNTY OFFICE OF EDUCATION .....</b>		<b>319</b>
H.1	RISK ASSESSMENT .....	319
H.2	FUTURE DEVELOPMENT .....	320

<b>H.3</b>	<b>CAPABILITIES ASSESSMENT</b> .....	<b>321</b>
<i>H.3.1</i>	<i>Planning and Regulatory Capability</i> .....	<i>321</i>
<i>H.3.2</i>	<i>Administrative and Technical Capability</i> .....	<i>322</i>
<i>H.3.3</i>	<i>Fiscal Capability</i> .....	<i>323</i>
<i>H.3.4</i>	<i>Political Capability</i> .....	<i>324</i>
<i>H.3.5</i>	<i>Self-Assessment of Capability</i> .....	<i>324</i>
<b>APPENDIX I.</b>	<b>PRESENTATION MATERIAL</b> .....	<b>326</b>

# List of Tables

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Table 2-1: DMA 2000 CFR Breakdown .....	15
Table 2-2: 2013 HMP Planning Committee .....	17
Table 2-3: HMP Consultant Team .....	19
Table 2-4: Planning Committee Meeting Summary .....	21
Table 2-5: Jurisdictional Population and Land Area Estimates for Napa County.....	28
Table 3-1: Risk Factor Criteria .....	58
Table 3-2: Napa County Risk Factor Results Table .....	59
Table 4-1: Napa County’s Regulatory Mitigation Capabilities .....	83
Table 4-2: Napa County Administrative and Technical Mitigation Capabilities.....	85
Table 4-3: Napa County Fiscal Capabilities.....	88
Table 4-4: Capabilities Assessment Self-Survey Conclusion.....	89
Table 5-1: American Canyon Risk Factor Results Table.....	242
Table 5-2: American Canyon Planning and Regulatory Capabilities.....	244
Table 5-3: American Canyon Fiscal Capabilities .....	247
Table 5-4: American Canyon Self-Assessment of Capability .....	249
Table 5-5: Calistoga Risk Factor Results Table .....	258
Table 5-6: Calistoga Planning and Regulatory Capabilities.....	260
Table 5-7: Calistoga Administrative and Technical Capability.....	261
Table 5-8: Calistoga Self-Assessment of Capability .....	264
Table 5-9: St. Helena Risk Factor Results Table.....	281
Table 5-10: St. Helena Political Capability.....	287
Table 5-11: Yountville Risk Factor Results Table .....	295
Table 5-12: Yountville Planning and Regulatory Capability .....	297
Table 5-13: Yountville Self-Assessment .....	302
Table 5-14: Napa Valley College Risk Factor Results Table .....	310
Table 5-15: Napa Valley College Planning and Regulatory Capability .....	313
Table 5-16: Napa Valley College Administrative and Technical Capability.....	314
Table 5-17: Napa Valley College Fiscal Capability .....	317
Table 5-18: Napa Valley College Self-Assessment of Capability.....	318
Table 5-19: NCOE Risk Factor Results Table.....	319
Table 5-20: NCOE Planning Regulatory Capability .....	321
Table 5-21: NCOE Administrative and Technical Capability .....	322
Table 5-22: NCOE Fiscal Capability.....	323
Table 5-23: NCOE Self-Assessment of Capability .....	325

# List of Figures

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Figure 2-1: Napa County HMP Planning Process.....	16
Figure 2-2: Planning Committee Meeting #1 .....	20
Figure 2-3: Jurisdictional Focus Groups at Planning Committee Meeting #1 .....	20
Figure 2-4: Average Daily Temperatures and Extremes for City of Calistoga, CA.....	26
Figure 2-5: Average Daily Temperatures and Extremes for Napa City, CA.....	26
Figure 2-6: Average Monthly Precipitation for Calistoga, CA .....	27
Figure 2-7: Average Monthly Precipitation for Napa City, CA .....	27
Figure 2-8: Napa County (2008-2013) General Plan Land Use Map .....	29
Figure 2-9: City of American Canyon (2010) General Plan Map .....	31
Figure 2-10: City of Napa (2020) General Plan Map.....	33
Figure 2-11: Yountville (2003) General Plan Land Use Map .....	35
Figure 2-12: City of St. Helena (2030) General Plan Map .....	39
Figure 2-13: City of Calistoga (2012) General Plan Map.....	43
Figure 2-14: Napa Valley College Locations .....	46
Figure 2-15: Napa County Flood Zone Map .....	51
Figure 2-16: Napa County Fault Map .....	53
Figure 3-1: Napa County Flood Zone Map .....	63
Figure 3-2: HAZUS Modeling Rodgers Creek Fault .....	71
Figure 3-3: HAZUS Modeling Concord/Green Valley Fault.....	72
Figure 3-4 HAZUS Modeling West Napa Fault.....	73
Figure 3-5: Napa County Fire Severity Zones .....	81
Figure 5-1: Napa County Floodzones .....	207
Figure 5-2: Napa County Fault Lines .....	208
Figure 5-3: Napa County Alluvial Soils.....	209
Figure 5-4: Napa County Soil Slope Relief .....	210
Figure 5-5: Napa County Fault Lines and Government Buildings .....	211
Figure 5-6: Napa County Fault Lines and Police and Fire Facilities.....	212
Figure 5-7: Napa County Fault Lines and Medical Facilities .....	213
Figure 5-8: Napa Alluvial Soils and Childcare Facilities.....	214
Figure 5-9: Napa County Vegetation Fuels.....	215
Figure 5-10: Napa County Wildfire Severity Zones .....	216
Figure 5-11: Napa County Lands in 500 ft Proximity to Roads .....	217
Figure 5-12: Napa County Slopes Greater Than 30% .....	218
Figure 5-13: Napa County Difficulty of Control .....	219
Figure 5-14: Napa County Housing Density.....	220
Figure 5-15: Napa County High Risk Wildfire Areas .....	221
Figure 5-16: American Canyon Floodzones.....	250
Figure 5-17: American Canyon Fault Lines and Soil Relief.....	251
Figure 5-18: American Canyon Fault Lines and Police and Fire Facilities .....	252



Figure 5-19: American Canyon Fault Lines and Medical Facilities .....	253
Figure 5-20: Fault Lines and School Facilities .....	254
Figure 5-21: American Canyon Alluvial Soils and Childcare Facilities .....	255
Figure 5-22: Calistoga Floodzones .....	265
Figure 5-23: Calistoga Fault Lines and Soil Relief .....	266
Figure 5-24: Calistoga Fault Lines and Childcare Facilities .....	267
Figure 5-25: Calistoga Fault Lines and School Facilities.....	268
Figure 5-26: Calistoga Fault Lines and Police and Fire Facilities .....	269
Figure 5-27: Calistoga Fault Lines and Medical Facilities .....	270
Figure 5-28: Calistoga Alluvial Soils and Childcare Facilities.....	271
Figure 5-29: City of Napa Floodzones .....	273
Figure 5-30: City of Napa Fault Lines and Soil Relief .....	274
Figure 5-31: City of Napa Fault Lines and Government Buildings .....	275
Figure 5-32: City of Napa Fault Lines and Police and Fire Stations.....	276
Figure 5-33: City of Napa Fault Lines and Medical Facilities .....	277
Figure 5-34: City of Napa Alluvial Soils and Childcare Facilities .....	278
Figure 5-35: City of Napa Fault Lines and School Facilities .....	279
Figure 5-36: St. Helena Floodzones.....	288
Figure 5-37: St. Helena Fault Lines and Soil Relief .....	289
Figure 5-38: St. Helena Fault Lines and Police and Fire Facilities .....	290
Figure 5-39: St. Helena Fault Lines and School Facilities.....	291
Figure 5-40: St. Helena Fault Lines and Medical Facilities.....	292
Figure 5-41: St. Helena Alluvial Soils and Childcare Facilities.....	293
Figure 5-42: Yountville Floodzones .....	303
Figure 5-43: Yountville’s Faults and Soil Relief.....	304
Figure 5-44: Yountville Fault Lines and Police and Fire Facilities .....	305
Figure 5-45: Yountville Fault Lines and Medical Facilities .....	306
Figure 5-46: Yountville Fault Lines and School Facilities .....	307
Figure 5-47: Yountville Alluvial Soils and Childcare Facilities .....	308



## Section 1. LEGAL REQUIREMENTS

### 1.1. ACKNOWLEDGEMENTS



A Tradition of Excellence  
A Commitment to Service

County Executive Office

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Kerry John Whitney  
Risk Manager

#### *Acknowledgements*

I would like to take this opportunity to publicly acknowledge the people who assisted in the preparation of this plan. From North to South County, in Calistoga, City Clerk Su Sneddon and Chief Steve Campbell, Calistoga FD, moved the Draft through departmental review, hosted the Calistoga Public Meeting, prepared the agenda item and staff report for council, and provided me with the changes received during this process.

In St. Helena, Chief Kevin Twohey, St. Helena FD, performed the same functions for St. Helena and, as part of the Operational Area Council, reviewed many of the components of the plan. Subsequent to Kevin's retirement, Napa County hired him as our part time Emergency Services Coordinator. Kevin has taken the lead in making revisions to the original plan, which was submitted to FEMA in 2009, and the following Hazard Mitigation Plan is the result of those efforts.

Darin Drake, Napa City Fire Marshal, designed a five-year Firewise program and was instrumental in reviewing and improving the Wildland Urban Interface portions of the plan.

In Yountville, Town Administrator Stevon Rogers, and Sgt. Keith Behlmer, Town Sheriff and Emergency Services Coordinator, also coordinated the Draft through departmental review and provided information on their jurisdiction. They organized and hosted a special presentation to the council on our approach and later prepared the agenda item and staff report for council, and provided me with the changes received during this process.

Chief Dan Hall of the City of Napa was a valuable ally in the production of this plan; we shared information, approaches and ideas that made the process easier to prepare both plans.

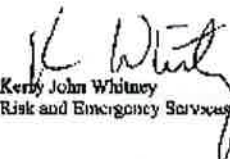
Chief Glen Weeks, Fire Chief and Emergency Services Coordinator of American Canyon, moved the Draft through departmental review, provided detailed information on the jurisdiction, hosted the American Canyon Public Meeting, prepared the agenda item and staff report for council, and provided me with the changes received during this process. As a group, theyajoiled me to finish and helped me keep my sense of humor throughout the process.

The Napa County GIS Section under Pat Kowts and Katy Wallis were invaluable in preparing the maps that so clearly demonstrate the hazards and vulnerability we face in our community. Mike Wilson of County Fire/ CDF provided the fire history maps.

Chief Tim Stueblow from County Fire/ CalFire, Undersheriff John Robertson of the County Sheriff's Department, City Fire Chief Tim Borman (recently retired) and Capt. Tracy Smart of the County Sheriff's Department all provided excellent help in wading through the terrorism sections. Agricultural Commissioner Dave Whitmer, and his staff were extremely helpful on the agricultural components of the plan and programs.

Our assistant, Parti DeWeese, provided editing and organizational skills, without which this document would not have been possible. Neal O'Haire and Frank Lucier, consultants, were involved in the initial preparation, technical review of and editing the early drafts of this plan revision.

Thank you all for your assistance, cooperation and support!

  
Kerry John Whitney  
Risk and Emergency Services Manager

## 1.2. LETTER OF PROMULGATION



A Tradition of Stewardship  
A Commitment to Service

Board of Supervisors

114th Third St.  
Suite 310  
Napa, CA 94550  
www.co.napa.ca.us

Main: (707) 253 4421  
Fax: (707) 253 4170

Mark Luce  
Chair

### Letter of Promulgation

Approval Date: DECEMBER 15, 2009

To: Officials, Employees, and Citizens of Napa County

The preservation of life, property and the environment is an inherent responsibility of local, state, and federal government. Napa County, in cooperation with the cities of Napa, American Canyon, St Helena, Calistoga and the Town of Yountville, Napa County Flood Control and Water Conservation District, Napa County Office of Education, Napa Valley Community College District and other special districts, have prepared this updated Hazard Mitigation Plan to ensure the most effective and economical allocation of resources for protection of people and property prior to the onset of a natural or technological disaster.

While no plan can completely prevent death and destruction, good plans, carried out by knowledgeable and well-trained personnel, can and will minimize losses. This updated Plan establishes the priorities for future mitigation actions and begins the process of making Napa County a disaster resistant community.

The objective of this Plan is to incorporate and coordinate the best possible approaches to mitigation from our four major threats, flooding, wildfire, earthquakes and technological hazards so these approaches can be rapidly and effectively applied as resources become available to conduct these mitigation programs and measures. Implementing over time the process and programs outlined in this Plan will greatly enhance the survivability of critical facilities and increase the ability of response personnel of the County and Operational Area member jurisdictions to respond effectively to any emergency.

This updated Mitigation Plan is an extension of the *State Hazard Mitigation Plan*. It will be reviewed and exercised periodically and revised as necessary to meet changing conditions.

The Napa County Board of Supervisors gives its full support to this Plan and urges all officials, employees and the citizens, individually and collectively, to do their share in the total disaster mitigation effort of Napa County.

This letter promulgates the updated *Napa Operational Area Hazard Mitigation Plan*, constitutes the adoption of the Plan as a standing annex to the Napa County Emergency Operations Plan, and the adoption of the philosophy that is reflected in State and Federal guidance that repetitive and avoidable disasters must be prevented to make all communities, disaster resistant communities. This Mitigation Plan becomes effective on approval by the Napa County Board of Supervisors.

Chairman  
  
Napa County Board of Supervisors

Brad Wagenknecht  
District 1

Mark Luce  
District 2

Diane Dillon  
District 3

Bill Dodd  
District 4

Keith Caldwell  
District 5

RESOLUTION NO. 2009-134

**APPROVING THE DISASTER MITIGATION ACT 2009 OPERATIONAL  
AREA AND COUNTY PRE-DISASTER HAZARD MITIGATION PLAN**

**WHEREAS**, the Operational Area Council has drafted a revised a Hazard Mitigation Plan to advance better mitigation planning and projects for the entire County of Napa; and

**WHEREAS**, each city, special district member and public has contributed to this planning approach under the direction of the Federal Disaster Mitigation Act (DMA) 2009; and

**WHEREAS**, the City has read and agrees to abide by the DMA 2009 guidance and grant guidelines and this plan represents the compliance with same;

**NOW, THEREFORE, BE IT RESOLVED** that the plan entitled "the Napa County Operational Hazard Mitigation Plan" is formally adopted as our plan and road map to a more disaster resistant community.

**PASSED, APPROVED AND ADOPTED** at a regular meeting of the City Council of the City of American Canyon on the 1st day of December, 2009, by the following vote:

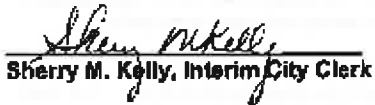
**AYES:** Councilmembers Bennett, Coffey, West, Vice Mayor Callison and Mayor Garcia  
**NOES:** None  
**ABSTAIN:** None  
**ABSENT:** None



Leon Garcia, Mayor

**ATTEST:**

**APPROVED AS TO FORM:**



Sherry M. Kelly, Interim City Clerk



William D. Ross, City Attorney

**Town of Yountville**  
**Resolution Number 2837-09**

**Authorizing the Approval of the Updated 2009 Operational Area and County of Napa  
Hazard Mitigation Plan**

---

**Recitals**

- A. The Town of Yountville is a member agency of the County-wide emergency response planning and disaster mitigation plan. Each city, town, special district member, and public has contributed to this planning approach under the direction of the federal Disaster Mitigation Act of 2000.
- B. The Town of Yountville contracts with the County of Napa for its law enforcement and fire and emergency medical services and as such they are not only our disaster planning staff but more significantly, also our first responders in the event of an actual disaster.
- C. The Operational Area Council initially drafted a Hazard Mitigation Plan for Napa County to advance better mitigation planning and projects for the entire county. The Town Council initially adopted this plan in 2000 and has subsequently reviewed and adopted an updated plan in 2004.
- D. The Town of Yountville has been involved with potential disaster mitigation planning in Napa County as a part of an ongoing focus since the adoption of the Disaster Mitigation Act of 2000. Under the Town's contracts for law enforcement and fire and emergency medical services, the County of Napa provides this planning and implementation support to the Town of Yountville. The current Napa County Operational Plan was last updated by the County in 2004. The Act reinforces the importance of pre-disaster mitigation planning to reduce disaster losses nationwide.
- E. The Yountville Town Council has read and agrees to continue to abide by the DMA 2000 guidance and grant guidelines and the provisions of the 2009 updated plan represents compliance with the same.

**Now therefore, the Town Council of the Town of Yountville does resolve as follows:**

- 1. The updated 2009 plan entitled "Napa Operational Hazard Mitigation Plan" is formally adopted by the Town Council as our plan and road map to a more disaster resistant community.
- 2. The Town Manager is authorized to finalize and execute the final draft of the updated plan recognizing that Town staff has reviewed the draft document prepared by the County. This draft plan also has to be reviewed by both California Emergency Management Agency (CALEMA) and the Federal Emergency Management Agency (FEMA). As a result, there may be minor, non-substantive modifications to the plan, correction of typos etc. between the final draft version the Town Council is approving on December 1, 2009 and the final adopted completed version.

**RESOLUTION NO. 2009-113**

**A RESOLUTION OF THE CITY OF CALISTOGA CITY COUNCIL  
APPROVING THE NAPA OPERATIONAL AREA PRE-DISASTER  
HAZARD MITIGATION PLAN**

**WHEREAS**, the City of Calistoga, as a member of the Napa County Operational Area, has joined with other county jurisdictions and the County of Napa to participate in the development of a joint Hazard Mitigation Plan to advance better mitigation planning and projects for the entire county; and

**WHEREAS**, each city, special district member and the public have contributed to this planning approach under the direction of the Federal Disaster Mitigation Act of 2000 (DMA 2000); and

**WHEREAS**, the City Council of the City of Calistoga has reviewed the Plan and agrees to abide by the DMA 2000 grant guidelines and this Plan represents compliance with same.

**NOW, THEREFORE, BE IT RESOLVED** that the Plan entitled "The Napa County Operational Hazard Mitigation Plan" is formally adopted to be used as a road map to a more disaster resistant community.

**PASSED, APPROVED, AND ADOPTED** by the City Council of the City of Calistoga at a regular meeting held this 15<sup>th</sup> day of December, 2009, by the following vote:

**AYES:** Councilmembers Garcia, Kraus, Slusser,  
Vico Mayor Dunsford, and Mayor Gingles

**NOES:** None

**ABSTAIN/ABSENT:**None

  
\_\_\_\_\_  
**JACK GINGLES, Mayor**

**ATTEST**  
  
\_\_\_\_\_  
**SUSAN SNEDDON, City Clerk**

**RESOLUTION NO. 09-19(PC)**

**RESOLUTION OF THE GOVERNING BOARD OF THE NAPA COUNTY  
FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
AUTHORIZING DEPUTY DISTRICT ENGINEER TO ACCEPT THE  
DRAFT NAPA COUNTY OPERATIONAL AREA HAZARD MITIGATION  
PLAN**

**WHEREAS**, the Napa Operational Area Council has completed a draft Hazard Mitigation Plan to advance better mitigation planning and projects for Napa County; and

**WHEREAS**, each city, town and special district members and the public have contributed to this planning approach under the direction of the Federal Disaster Mitigation Act (DMA) 2000; and

**WHEREAS**, the updated Plan has been submitted to the California Emergency Management Agency (Cal-EMA) and Federal Emergency Management Agency for review and approval as being in compliance with the DMA 2000 requirements; and

**WHEREAS**, the Napa County Flood Control and Water Conservation District Board of Directors has read and agrees to abide by the DMA 2000 guidance and grant guidelines and this plan represents the compliance with same;

**NOW, THEREFORE BE IT RESOLVED** by the Governing Board of the District that the plan entitled "Napa County Operational Area Hazard Mitigation Plan" is hereby formally accepted by the Deputy District Engineer as the County's plan and road map to a more disaster-resistant community.

**THE FOREGOING RESOLUTION WAS DULY AND REGULARLY ADOPTED** by the Board of Directors of the Napa County Flood Control and Water Conservation District at a regular meeting of the Board held on December 15, 2009, by the following vote, with the number following the name of each voting Director indicating the number of votes cast by the Director:

///  
///  
///





Barbara G. Adams, Ph.D.  
Superintendent  
(707) 253-5970

### Letter of Adoption

Student Services  
(707) 253-6919

Approval Date: 1 December 2009

Financial Services  
(707) 253-6932

General Services  
(707) 253-6728

To: Officials, Employees, Staff and Students of the Napa county Office of Education

Hazard Mitigation  
(707) 253-6824

The Preservation of life, property and the environment is an inherent responsibility of all governmental institutions. The Napa County Office of Education in cooperation with the members of the Napa County Operational Area, have prepared this updated mitigation plan to ensure the most effective and economical allocation of resources for the protection of people, property and the environment prior to the onset of a natural or technological disaster.

Educational Services  
(707) 253-6810

Class & Community Activities  
(707) 253-6897

Continuation of Instruction  
(707) 253-6999

Adult Learning Services  
(707) 253-6851

Regional Occupational Programs  
(707) 253-6839

SEI/PA & Special Education Services  
(707) 253-6860

While no plan can completely prevent death and destruction, good plans carried out by knowledgeable and well trained people can and will minimize losses. This plan continues the work began in the initial Hazard Mitigation Plan promulgated in 2004 and establishes the priorities and processes for making the greater Napa County Area a more disaster resist community.

Special Projects  
(707) 253-6812

The overall goal of this plan is to incorporate and coordinate the best possible approaches to mitigation from our four major threats, flooding, earthquakes, wildfire and technological hazards, as well as identifying overarching mitigation strategies that would be useful in the event of any threat to our community. By implementing over time, and as funds allow these approaches to mitigation, we enhance the survivability of our facilities, services and personnel, while enhancing our ability to respond to and recover from any crises or disaster.

**CITY OF ST. HELENA**

**RESOLUTION NO. 2009-135**

**APPROVING THE DMA 2000 OPERATIONAL AREA AND NAPA COUNTY  
HAZARD MITIGATION PLAN**

**RECITALS**

- A. The City of St. Helena has participated in the development of the Napa Operational Area Hazard Mitigation Plan to advance better mitigation planning and projects for the entire county.
- B. The City of St. Helena agrees to abide by the DMA 2000 guidance and grant guidelines and this plan represents the compliance with DMA 2000.

**RESOLUTION**


NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

- 1. The plan entitled "Napa Operational Area Pre-disaster Hazard Mitigation Plan" is formally adopted as our plan and road map to a more disaster resistant community.

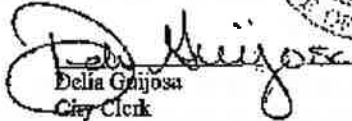
Approved at a Regular Meeting of the St. Helena City Council on December 8, 2009 by the following vote:

AYES: Councilmembers Sklar, Schoch, Sanchez, Crull, Mayor Britton  
NOES: None

APPROVED:

  
Clifford Britton  
Mayor

ATTEST:

  
Delia Gujosa  
City Clerk





### Letter of Adoption - Napa Operational Area Hazard Mitigation Plan

Approval Date:

The Preservation of life, property and the environment is an inherent responsibility of all governmental institutions. The Napa Valley Community College District in cooperation with the members of the Napa County Operational Area, have prepared this updated annex to the Napa County mitigation plan to ensure the most effective and economical allocation of resources for the protection of people, property and the environment prior to the onset of a natural or technological disaster.

While no plan can completely prevent death and destruction, good plans carried out by knowledgeable and well trained people can and will minimize losses. This plan continues the work began in the initial Hazard Mitigation Plan promulgated in 2004 and establishes the priorities and processes for making the greater Napa County Area a more disaster resist community.

The overall goal of this plan is to incorporate and coordinate the best possible approaches to mitigation from our four major threats, flooding, earthquakes, wildfire and technological hazards, as well as identifying overarching mitigation strategies that would be useful in the event of any threat to our community. By implementing over time, and as funds allow these approaches to mitigation, we enhance the survivability of our facilities, services and personnel, while enhancing our ability to respond to and recover from any crises or disaster.

This letter adopts the updated **Napa Operational Area Hazard Mitigation Plan** as an official standing annex of the Napa Valley College Community College District Emergency Operations Plan. This plan reflects the philosophy, in accordance with State and Federal guidance, that repetitive and avoidable disaster loss must be prevented to make all communities, disaster resistant communities.

Signed: Amnd Philips  
Amnd Philips, Interim Superintendent/President

2277 Napa-Vallejo Highway, Napa, CA 94558



### 1.3. EXECUTIVE SUMMARY

Napa County, California and participating jurisdictions developed this Multi-Jurisdictional Hazard Mitigation Plan Update in a continuing effort to reduce or eliminate future loss of life and property resulting from natural disasters. This plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000; to update the plan adopted in 2004; and to achieve eligibility for the Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs.

The Napa County Multi-Hazard Mitigation Plan is a multi-jurisdictional plan that covers the following local governments that participated in the planning process:

- Napa County
- City of American Canyon
- Town of Yountville
- City of St. Helena
- City of Calistoga
- Napa County Flood Control and Water Conservation District
- Napa Valley College
- Napa County Office of Education

The City of Napa supports this planning effort and collaborated with Napa County throughout the planning process. However, the City of Napa elected to not officially participate and adopt the mitigation plan. Instead the City of Napa produced a separate plan but, again, collaboration in the planning process resulted in many of the plan elements building a congruence of approach, direction and complementary projects.

The County's planning process followed the methodology set forth by FEMA, beginning with the formation of the Planning Committee, participating jurisdictions, and state and federal agencies and included 2 public meetings in November and December 2009 that were noticed in public meeting notices, press releases and invitations sent to each participating member organization, meetings with each of the participating members and their selected staff followed by agenda item approvals of the draft plan (copies of each agencies resolution adopting the plan is attached). Opportunities for public comment and Plan review were provided during the initial planning stages and prior to adoption. The updated plan has been presented to each of the plan participants and the adopted/approved plan will be made available on the County's website and at the public libraries.

Risk Assessments identified as a part of the planning process resulted in the profiling of hazards that pose risk to Napa County, assessed the County's vulnerability to those hazards, and examined the capabilities in place to mitigate them. The County is vulnerable to several hazards identified, profiled, and analyzed in this plan.

The County is considerably vulnerable to **flooding** which has caused the most disaster declarations and the most damage and loss of life historically. The February 1986 flood, estimated to have been a 35-year event, resulted in three lives lost, 27 injured, 5,000 evacuations,

250 homes destroyed, and another 2,500 residences damaged countywide, totaling \$100 million in damages. The most recent flooding occurred in December 2005.

**Earthquakes** also present vulnerability. Napa County is located directly on major faults including Northern San Andreas, Rodgers Creek, Northern Hayward, the Concord Green Valley and West Napa Fault. A moderate to severe seismic incident on any of the several fault zones in relatively close proximity to the County is expected to result in significant property damage, deaths and injuries, damage to water, sewer, gas line facilities and communications systems, disruption of transportation and very scarce mutual aid response resources. On September 3, 2000 a magnitude 5.2 earthquake occurred in the Napa Valley on the West Napa Fault. Its epicenter was located by USGS as 3 miles west/southwest of Yountville and 9 miles northwest of Napa in the hills west of the Napa Valley. Fortunately, there were no fatalities, only one serious injury; 40 people were treated as outpatients at local hospitals immediately after the quake. Red Cross did provide temporary shelters to approximately 70 people. Damages were estimated at \$30 - 50 million. Damages were confined to broken windows, minor exterior cracking, and extensive damage to residential contents, chimney separation and collapse. 168 homes were “yellow tagged” and 16 “red tags” to structures from the earthquake. The Governor declared a state of emergency, followed by a presidential major disaster declaration.

The USGS, Cal EMA, the California Geological Survey, and ABAG jointly conducted a loss estimation study focusing on the ten most likely damaging earthquakes forecast for the Bay Area Region. The 30 year probability for a 7.0 magnitude rupture of the Rogers Creek fault is 15.2%, the highest of any fault in the region. Our preparedness focuses on this occurrence.

The County is also substantially vulnerable to **wildland/urban interface fires**. Napa County has a rich wildfire history. In the last 30 years more than 200,000 acres of the County’s 482,000 acres have burned. Fortunately, in recent years mitigation efforts have significantly decreased wildfire incidents. The last significant wildland fire in Napa County was the Deer Fire that occurred just northeast of St. Helena on October 10, 2008 burning 233 acres and destroying one home.

Because of these vulnerabilities, Napa County has taken an aggressive approach at reducing impacts through mitigation – for example, the hugely successful Firewise program has reduced wildland fire vulnerability; the near completion of the Napa River flood mitigation project has significantly diminished the threat of flooding; and, the County Operational Areas attention to earthquake emergency response and long term recovery efforts will have an impact on lessening the societal and economic impact of a future seismic event.

Based on the risk assessment this plan has identified goals for reducing risks from hazards. The goals of this plan are to:

- Protect the life and property
- Ensure emergency services
- Increase public awareness and understanding of hazard mitigation
- Protect critical facilities properties, infrastructure and other community assets from the impacts of hazards
- Continue to strengthen communication and build on the collaborative success already achieved

- Promote a disaster resilient and sustainable economy

This plan serves as a recommendation for mitigation measures. Implementation depends on adoption by the Napa County Board of Supervisors, City Councils or Board of Trustees of each participating municipality and district. Formal adoption ensures that implementation of the action items as resources become available. This plan must also continue to be monitored, maintained and updated as addressed in Section 5.

Finally, the individuals responsible for the plan development process and the creation of the plan update document are all mentioned by name and agency in Section 2.2 of the plan. This is a collaborative group and without the able assistance of each and every one of these individuals this plan, in the furtherance of a resilient and hazard proof County, would not be possible.





## Section 2. THE PLANNING PROCESS

This section describes each stage of the planning process used to develop the 2013 Napa County Operational Area Hazard Mitigation Plan (HMP). The HMP planning process provides a framework for the document development and follows the FEMA recommended steps. The Napa County HMP follows a prescribed series of planning steps which includes organizing resources, assessing risk, developing the mitigation plan, drafting the plan, reviewing and revising the plan, adopting and submitting the plan for approval. Each is described in this section.

### 2.1. Planning Process

Hazard mitigation planning in the United States is guided by the statutory regulations described in the DMA 2000 and implemented through 44 Code of Federal Regulations (CFR) Part 201 and 206. FEMA's HMP guidelines outline a four-step planning process for the development and approval of HMPs. In order to receive approval from state and federal review bodies Table 2-1 illustrates the list of CFRs that must be followed in a standardized process.

Table 2-1: DMA 2000 CFR Breakdown

DMA 2000 (44 CFR 201.6)	Plan Section
<b>(1) Organize Resources</b>	<b>Section 2.2</b>
201.6(c)(1)	
201.6(b)(1)	
201.6(b)(2) and (3)	
<b>(2) Assess Risks</b>	<b>Section 3</b>
201.6(c)(2)(i)	
201.6(c)(2)(ii) and (iii)	
<b>(3) Develop the Mitigation Plan</b>	<b>Section 4</b>
201.6(c)(3)(i)	
201.6(c)(3)(ii)	
201.6(c)(3)(iii)	
<b>(4) Plan Maintenance</b>	<b>Section 5</b>
201.6(c)(5)	
201.6(c)(4)	

For the development of the updated Napa County HMP, a planning process was customized to meet Napa County's unique population and demographic. However, all the basic federal guidance documents and regulations are met through the customized process. As shown in Figure 2-1, the HMP planning process included organizing resources, assessing risk, developing the mitigation action strategy, drafting the plan, reviewing and revising the plan, and adopting and submitting the plan.

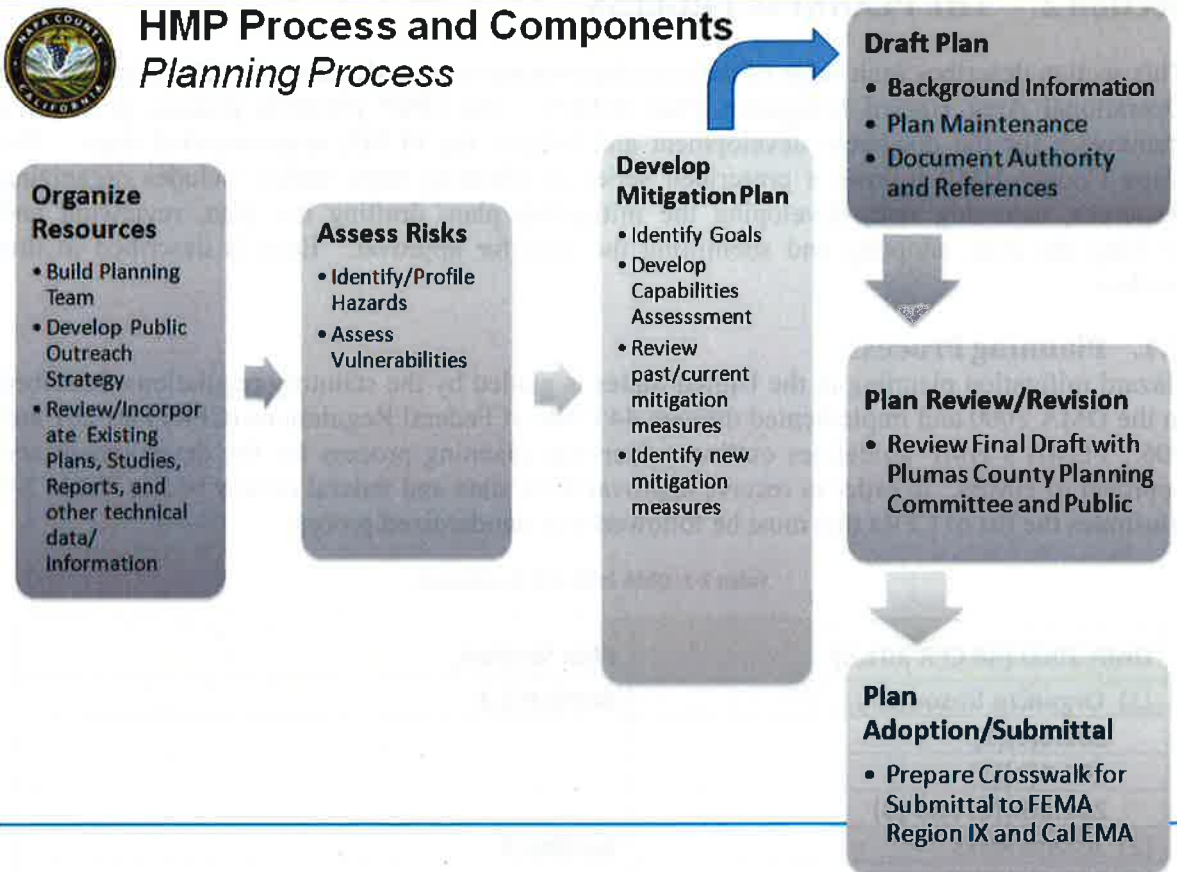


Figure 2-1: Napa County HMP Planning Process

## 2.2. Organize Resources

This section describes the first step of the 2013 Napa County HMP planning process – Organizing Resources. It outlines the HMP Planning Team, and includes information on the development of the HMP Planning Committee, and Jurisdictional Focus Groups. As part of this step, the Project Team reviewed and incorporated, as appropriate, a variety of existing plans, studies, reports, and other technical data/information into the HMP document.

### 2.2.1. Build Planning Team

The Planning Team is responsible for the back bone of the planning process and provided direction for the development of the HMP. For this planning process, the Planning Team consisted of a Planning Committee and Jurisdictional Focus Groups. The planning team consists of key decision makers from each jurisdiction, and also represents the public face of the HMP Planning Process.

During the development of this plan, the City of Napa was also producing their own Hazard Mitigation Plan in tandem to the Napa County HMP. The plans were developed in collaboration in order to build a congruence of approach on many of the plan elements.

**2.2.1.1. Planning Committee**

The HMP Planning Committee includes members of Napa County Staff as well as jurisdictional stakeholders. HMP Planning Committee meeting members included those who actively participated in the planning process (i.e., attended meetings/workshops, provided input during information solicitations, etc.). Table 2-2 provides a list of the HMP Planning Committee members who provided active input in the planning process.

The HMP Planning Committee is used to guide the planning process and ensure the mitigation plan meets the goals of the County, State and Federal Hazard Mitigation Plan requirements.

The Planning Committee was responsible for the following tasks:

- Attended and participated in two facilitated meetings
- Provided important local information and data to assist in the development of the plan
- Made decisions on plan process and content
- Coordinated and participated in the public input process
- Reviewed and responded to comments on plan drafts
- Identified mitigation actions for the HMP

The preparation of the HMP included two facilitated meetings with Napa County Office of Emergency Services staff and participating jurisdictional stakeholders such as the City of St. Helena, City of Calistoga, City of American Canyon, Town of Yountville, etc.



**Table 2-2: 2013 HMP Planning Committee**

Name	Organization
Ken Arnold	Napa Valley College Police Department
Brianna Benson	St. Helena Hospital
Steve Brassfield	Napa City Fire/Disaster Management
Steve Campbell	Calistoga Fire Department
Memoree McIntire	CalEMA-Coastal
Steven Rogers	Town of Yountville
Jacqueline Rubin	St. Helena Police Department
Anne Steinhauer	Napa Red Cross
Jim Tomlinson	Napa County Office of Education

Scott Upton	Napa County Fire/CAL FIRE
Glen Weeks	City of American Canyon Fire District
Martha Banuelos	City of American Canyon Fire District
Richard Thomasser	Napa County Watershed & Flood Control
John Ferons	City of St. Helena
Kevin Twohey	Napa County Emergency Services
Kerry Whitney	Napa County Risk Management
John McDowell	Napa County Planning Department
Darrell Mayes	Napa County Building Department
William T. Imboden	Saint Helena Police Department
Andrew Butler	Napa County Watershed & Flood Control
Steve Hawks	Napa County Fire/CAL FIRE
Jennifer Jones	Napa Red Cross
Nick Neisius	Napa Red Cross
Stephen Gort	Napa Communities Firewise Foundation
Matt Christenson	Napa Valley College
Katy Wallis	Napa County GIS
Pete Munoa	Napa County Fire Department
Mike Randolph	Napa Fire Department
Lynn Goldberg	City of Calistoga Planning Department
Karen Harnois	City of Napa Public Works Department

#### 2.2.1.2. *Jurisdictional Focus Groups*

The planning committee members were broken up into jurisdictional focus groups in order to focus on the specific vulnerabilities of each community within Napa County. Together with the HMP Consultant Team, each jurisdictional group identified changes in development within their communities, reviewed and confirmed information used to create the hazard and community profiles, and developed mitigation actions to address the specific hazards that are present in their

communities. These groups were initiated at the first jurisdictional planning meeting on May 23, 2013, which was facilitated by the consultant team.

An appendix for each jurisdiction within Napa County was created in order to consolidate information and determine each jurisdiction’s vulnerabilities, capabilities and specific mitigation actions. Each jurisdictional appendix can be found in Appendices B – H.

**2.2.1.3. Consultant Team**

To provide assistance to the planning team, the county enlisted the support of a consultant Michael Baker Jr., Inc (Baker). Baker assisted the county through facilitation in the planning process, data collection, meeting material and document development. The consultant team, as shown in Table 2-3 consists of a variety of hazard mitigation professionals. Baker has expertise to assist public sector entities with developing hazard mitigation planning and strategies for particular hazard prone areas.

**Table 2-3: HMP Consultant Team**

HMP Update Project Team	HMP Update Project Team Role
Ethan Mobley, AICP	Project Manager
Desirae Hoffman	Hazard Mitigation Planner
Lane Simmons	GIS Specialist/Spatial Analyst
Carver Struve, CFM	Senior Technical Advisor

**2.2.1.4. Planning Committee Meetings**

The HMP Planning Committee assembled in meetings throughout the development of the updated HMP document. Some meetings were conducted in person, while others were conducted via conference calls. The Napa Operational Area Council met quarterly with key representatives from the included jurisdictions, during the initial draft development, in order to give input on the plan content and direction. The Emergency Services Coordinator for each partner agency provided review of the draft revisions and input into the content. The Flood Control District, American Red Cross, Community College District and the County Office of Education also contributed to these meetings and participated in the progress reviews.

In addition to initial Napa Operational Area Council meetings, two facilitated meetings were held to develop the capabilities assessment, community profiles, mitigation strategies and mitigation actions to assess each jurisdiction’s overall change in vulnerability. Table 2-4 summarizes the two facilitated meetings conducted throughout the planning process, including meeting date, type, and topics discussed. Materials provided at each meeting are included in Appendix I. Meeting documentation, including agendas, hazard maps, PowerPoint presentations, sign-in sheets, and other relevant handouts, are provided in Appendix I.





Figure 2-2: Planning Committee Meeting #1

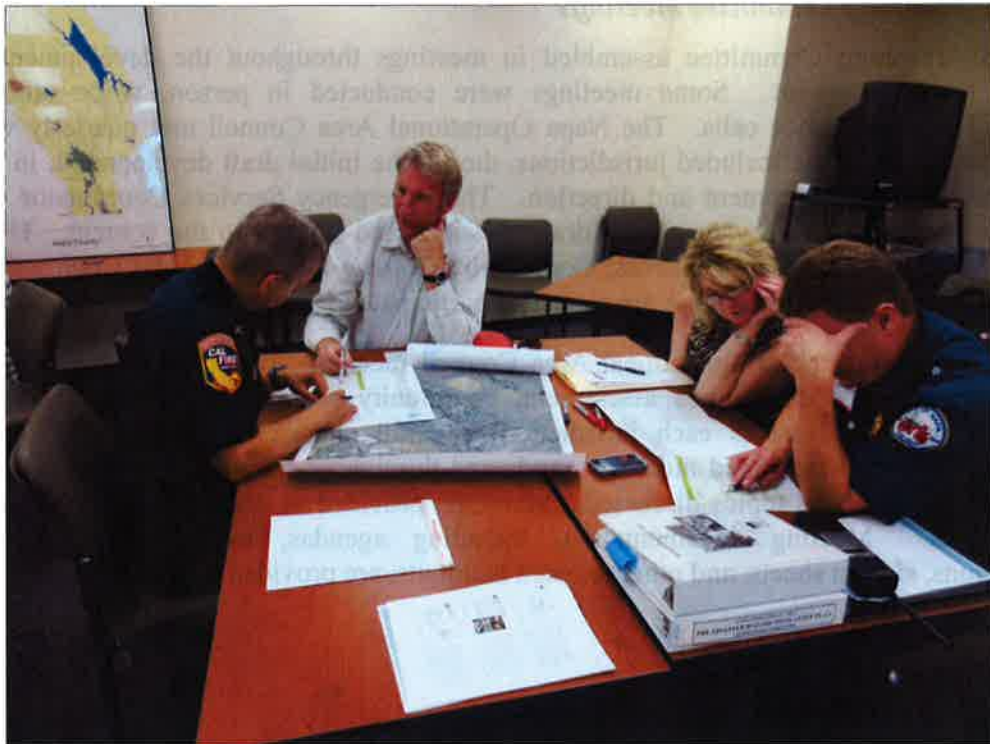


Figure 2-3: Jurisdictional Focus Groups at Planning Committee Meeting #1

Table 2-4: Planning Committee Meeting Summary

Date	Meeting Type	Topics
May 23 <sup>rd</sup> , 2013	Planning Committee #1	<i>Part 1:</i> <i>Project Overview</i> <i>MHP Update Process and Components</i> <i>Overview of Existing HMP</i> <i>Project Timeline</i>  <i>Part 2:</i> <i>Risk Factor Development</i> <i>Community Profiles</i> <i>Capabilities Assessment</i>
June 20 <sup>th</sup> , 2013	Planning Committee #2	<i>Part 1:</i> <i>Mitigation Action Review</i>  <i>Part 2:</i> <i>Existing Planning Mechanisms</i> <i>Review and Update Tempo</i> <i>Tools and Templates</i>

**2.2.2. Public Outreach**

Public outreach is a major and required component of the HMP Update. The Napa County HMP Public Outreach Strategy was developed to maximize public involvement in the HMP planning process. Instead of building a process from scratch, it was built on the existing work of the Firewise Working Group and associated and newly created Firewise councils, the combined Operational Area Council and Terrorism Working Group (TWG) and the Napa County Flood Control and Water Conservation District. In November and December 2009 a series of Public Meetings were conducted to meet the guidance requirements and receive additional public input. On November 3, 2009 Napa County co-hosted the first with the City of Napa, followed by meetings in Calistoga, St Helena and American Canyon. Each meeting was announced the week before on local radio as well as noticed in each local newspaper. The participants demonstrated a high degree of awareness of the potential major threats to Napa County and were very supportive at the scope of the revisions to the plan and programs proposed to address them.

After these meetings the public had another opportunity to address the plan when the drafts went to Councils and Boards. During this process the comments were overwhelming positive from the public comments, staff reviews and the elected officials themselves. The draft revised HMP received the approval of all four city or town Councils involved, the County Board of Supervisors and the three District Boards involved in the planning process. Copies of their Board actions are included in the Legal Requirements section.

**2.2.3. Incorporation of Earlier Plans and Studies**

The HMP Update clearly demonstrates the integration of special studies, projects, programs and plans.

The Napa River/Napa Creek Flood Protection Project and funding provided through Napa County Measure A are the foundation of all the detailed flood mitigation threat and mitigation actions. The ongoing Flood Project was recognized by both the Federal and State governments as a model project for creating a more disaster resistant community. The concept of a living river that naturally protects the community from flooding, versus the previously used engineered concrete ditch approach, was the first in the nation.

This plan also integrates the findings of the 2003 Firewise workshop in both the description of the interface fire threat and the mitigation actions. Firewise is a nationally recognized mitigation program, the input from over ninety public and private participants was invaluable in setting the foundation for the fire portion of this plan.

During the elected officials briefing following the Napa Earthquake of 2000, Napa Mayor Ed Henderson requested of the federal government a special earthquake study. The study was a collaboration of Napa County, the State Office of Mine and Geology, FEMA, OES and the USGS. The findings are the centerpiece of the earthquake section of this plan along with the previously published California Mines and Geology/USGS special studies.

Napa County also updated their General Plan in 2009. A major element of the process was updating the Safety Element of the General Plan. The Safety Element contains goals, policies, objectives, and actions which seek to make the county of Napa a safe place for residents, businesses, and travelers. Napa County has a FEMA approved Flood Plain Management ordinance. The Safety Plan recognizes that the Hazard Mitigation Plan is critically important to maintaining a safe environment for all residents and businesses in Napa County. By implementing the Hazard Mitigation Plan the goals and policies of the Safety Plan will be met. The County has committed to regularly update this Hazard Mitigation Plan to ensure that it remains current and useful.

#### **2.2.4. Access Risks**

In accordance with FEMA requirements, this step of the HMP planning process required the Planning Committee to identify and prioritize the natural hazards affecting Napa County and assessed the vulnerability from such. Results from this phase in the HMP planning process aided subsequent identification of appropriate mitigation actions for reducing risk in specific locations and hazards. This section of the HMP Update planning process is detailed in Section 3 for Napa County, and is further detailed for each jurisdiction in Appendices B-H.

##### **2.2.4.1. Identify/Profile Hazards**

Based on a review of past hazards as well as a review of the existing plans, reports, and other technical studies/data/information, the Planning Committee determined the existing hazards that have the potential to affect Napa County. Updated content for each hazard profiled is provided in Section 3.1.

##### **2.2.4.2. Assess Vulnerabilities**

Hazard profiling exposes the unique characteristics of individual hazards and begins the process of determining which areas within Napa County are vulnerable to specific hazard events. The vulnerability assessment included field visits, a Hazus risk assessment for flooding, as well as a GIS overlaying method for other hazards. Using these methodologies, vulnerable populations,



infrastructure and potential loss estimates impacted by natural hazards was able to be determined. Detailed information on each hazard vulnerability assessment is provided in Section 3.

### **2.2.5. Develop Mitigation Plan**

When the initial draft revisions were completed in early October 2009 it was distributed to the Operational Area Council. Each participating jurisdiction completed an internal staff review and returned changes to the Operational Area Emergency Manager. The Op Area Emergency Manager and the consultants integrated those changes into the coordinating draft that was used for the series of public meetings.

The HMP Update was prepared in accordance with DMA 2000 and FEMA's HMP guidance documents. As such, this document provides the explicit strategy and blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and Napa County's ability to expand on and improve these existing tools. Developing the mitigation plan involved identifying goals, developing a capabilities assessment, reviewing 2004 mitigation actions, and identifying new mitigation actions. This step of the HMP planning process is detailed in Section 4 and summarized below.

#### **2.2.5.1. Identify Goals**

The HMP Planning Committee reviewed the 2004 HMP goals and hazards profiles, developed vulnerability assessments for each jurisdiction, and set new goals and objectives for the 2013 HMP based on current and revised information. The Goals and Objectives are outlined in Section 4.

#### **2.2.5.2. Develop Capabilities Assessment**

A capabilities assessment is a comprehensive review of all the various mitigation capabilities and tools currently available to Napa County to implement the mitigation actions that are prescribed in the HMP Update. The HMP Planning Committee identified the technical, financial, and administrative capabilities to implement mitigation actions of the County and each participating jurisdiction as detailed in Section 4 and Appendix A.

#### **2.2.5.3. Identify Mitigation Actions**

Mitigation strategy consists of broad goal statements as well as specific mitigation actions for each jurisdiction participating in the planning process. Updated strategies are found in Section 4 and Appendix A, and provide the foundation for detailed mitigation action plans that link jurisdictionally specific mitigation actions to locally assigned implementation mechanisms and target completion dates. Section 4 and Appendix A are designed to make the Plan practical through the identification of both long-term goals and near-term actions that will guide day-to-day decision-making and project implementation.

As part of the HMP planning process, the Planning Committee reviewed and analyzed the status of the mitigation actions identified in the 2004 Napa County HMP and provided data and information on the status of the existing mitigation actions. Once the review and analysis of the 2004 HMP mitigation actions was complete, the HMP Consultant Team and Jurisdictional Focus Groups worked together to identify and develop new mitigation actions with implementation elements. Mitigation actions were prioritized and detailed implementation strategies were

developed during Planning Committee Meeting #2. A detailed approach of the review of the existing mitigation actions, identification and prioritization of new mitigation actions, and the creation of the implementation strategy is provided in Section 4. Implementation worksheets and progress reports for each mitigation action are provided in Appendix A.

#### **2.2.5.4. *Draft HMP Update***

Once the risk assessment and mitigation strategies were completed, information, data, and associated narratives were compiled into the 2013 Napa County HMP. Section 4 provides detailed information on existing and new mitigation strategies updated as part of the 2013 plan.

#### **2.2.5.5. *Plan Review and Revision***

Once the “Draft” 2013 Napa County HMP was completed, a public and government review period was established for official review and revision. Public comments were accepted, reviewed and incorporated into this update. Applicable comments from the public have been received and addressed prior to the BOS “authorization to submit” to FEMA and Cal EMA review parties.

#### **2.2.5.6. *Plan Adoption and Submittal***

This plan has been submitted and approved by FEMA and adopted as the official statement of Napa County’s hazards by the Board of Supervisors. A copy of the Board of Supervisors resolution is provided in Section 1.

#### **2.2.5.7. *Plan Maintenance***

Updated plan maintenance procedures found in Section 5 include the measures Napa County and participating jurisdictions will take to ensure the Plan’s continuous long-term implementation. An implementation worksheet was completed for each mitigation action and can be found in Appendix A. The procedures also include the manner in which the Plan will be regularly monitored, reported upon, evaluated and updated to remain a current and meaningful planning document.

### **2.3. Community Descriptions**

This section provides background information on the history, geography, climate, population and economy of Napa County and for each participation jurisdiction.

#### **2.3.1. Napa County Operational Area Overview**

##### **2.3.1.1. *Geography***

Napa County is located in the North Bay Area of California, north of San Pablo Bay and 50 miles north of San Francisco. It is officially one of the nine San Francisco Bay Area counties and one of four North Bay counties. Contiguous counties include Solano, Sonoma, Lake and Yolo. The land area of the County is approximately 788 square miles, of which approximately 754 square miles is land and 34 square miles is water. It extends from the Napa River Delta on the south and west to the Mayacmas Mountain range in the north. The County is located in the Governor's Office of Emergency Services Coastal Region and Mutual Aid Region II.

State Route 29 is the largest capacity road running north and south through the Napa Valley, becoming a four-lane limited-access expressway in the City of Napa. State Route 29 connects the five incorporated cities in Napa County: American Canyon; Napa; Yountville; St. Helena; and Calistoga. In the north it connects Napa to Lake County and in the south to Solano County.

State Routes 121, 128, and the Silverado Trail, provide some redundancy. State Highway 128 (east and west) cuts through the County in the east through the Berryessa Lake Resort area and to the northwest connecting the Napa Valley to the Knights Alexander and Anderson Valleys in Sonoma County. State Route 12 goes across the valley and connects Interstate 80 to 101. State Route 121 connects Napa County to Sonoma County to the west overlapping SR 12. It begins another overlap with SR 29, into the City of Napa .It continues northward and meets SR 221 in Napa. As it leaves the city, it continues northward for several miles before reaching its north end at SR 128.

#### 2.3.1.2. *Climate*

The general climate of Napa County can be typified as Mediterranean, with cool, wet winters and warm, dry summers. However, it differs slightly across the County due to variability of the terrain and geography. For instance, the southern end of the valley where American Canyon and Napa City are located is cooler than the northern part of the county due to their location near the northern tip of the San Francisco Bay, known as San Pablo Bay. Winds from the bay move upward and cool off the southern end of Napa County as far north as Yountville. The terrain north of Yountville does not allow the wind to come through to the St. Helena and Calistoga areas, therefore those regions tend to be much warmer.

Average annual rainfall in Napa County is less than 24 inches, with over half of the rain occurring in the winter months of December, January and February. The western side of the valley, in the Mayacamas Mountains, gets more rain and supports the life of redwood and fir forests and numerous streams and waterfalls. The eastern side of the valley – the Vacas Mountains – receives much less rain and therefore tends to be more desert-like with scrub brush and cactus. Temperatures in Napa County typically range from a low of 61 degrees Fahrenheit during the winter months and a high of 92 degrees Fahrenheit in the summer.

Figure 2-4 - Figure 2-7 present the average minimum and maximum temperature and monthly average precipitation statistics for the City of Calistoga (northern Napa County) and Napa City (southern Napa County).

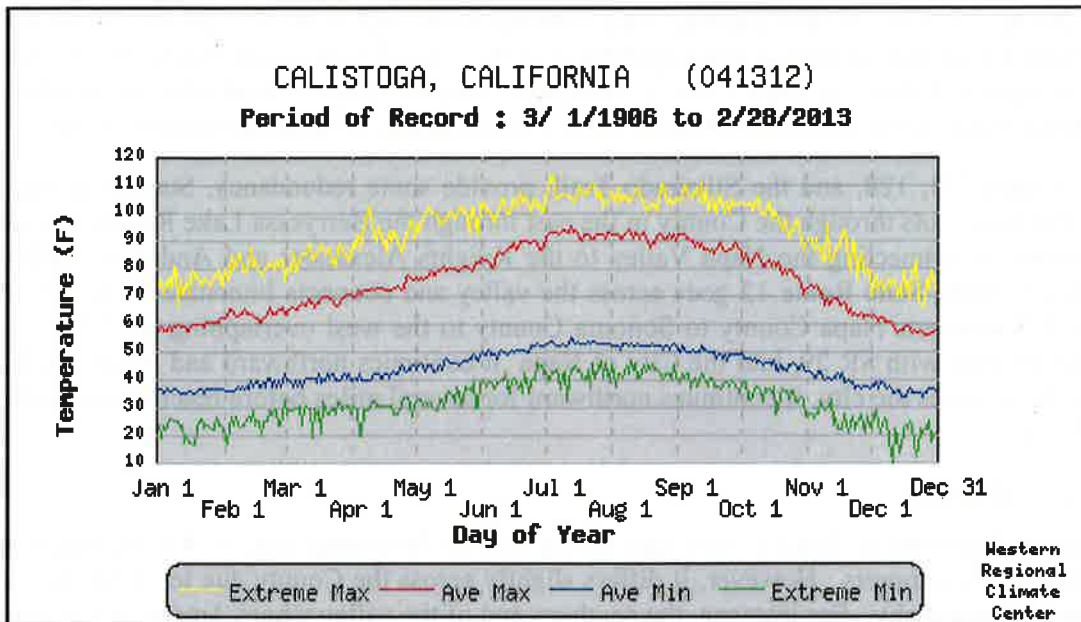


Figure 2-4: Average Daily Temperatures and Extremes for City of Calistoga, CA

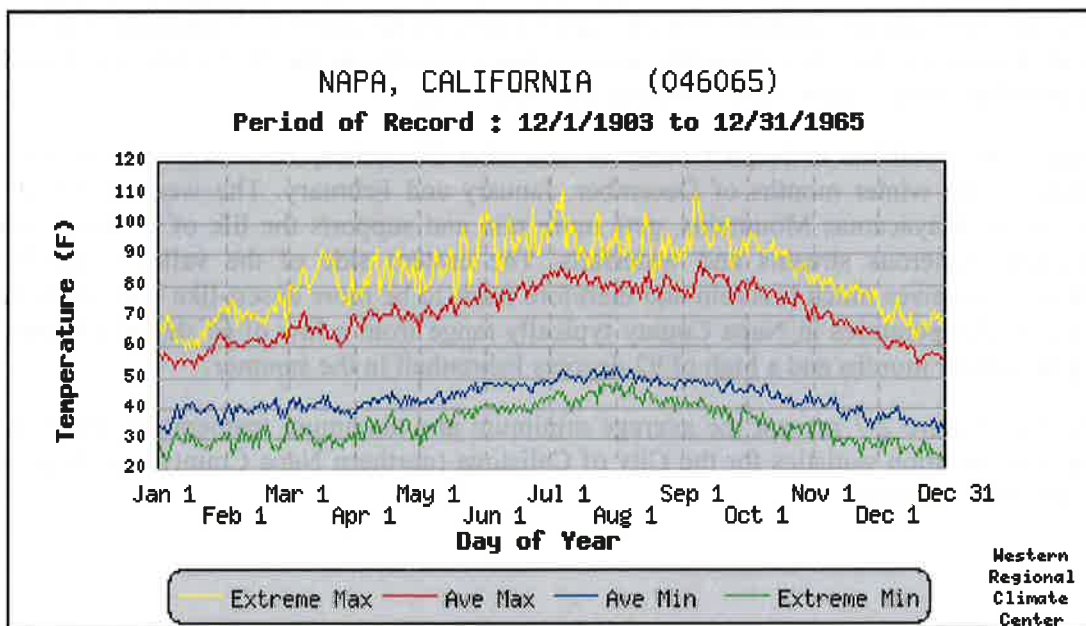


Figure 2-5: Average Daily Temperatures and Extremes for Napa City, CA

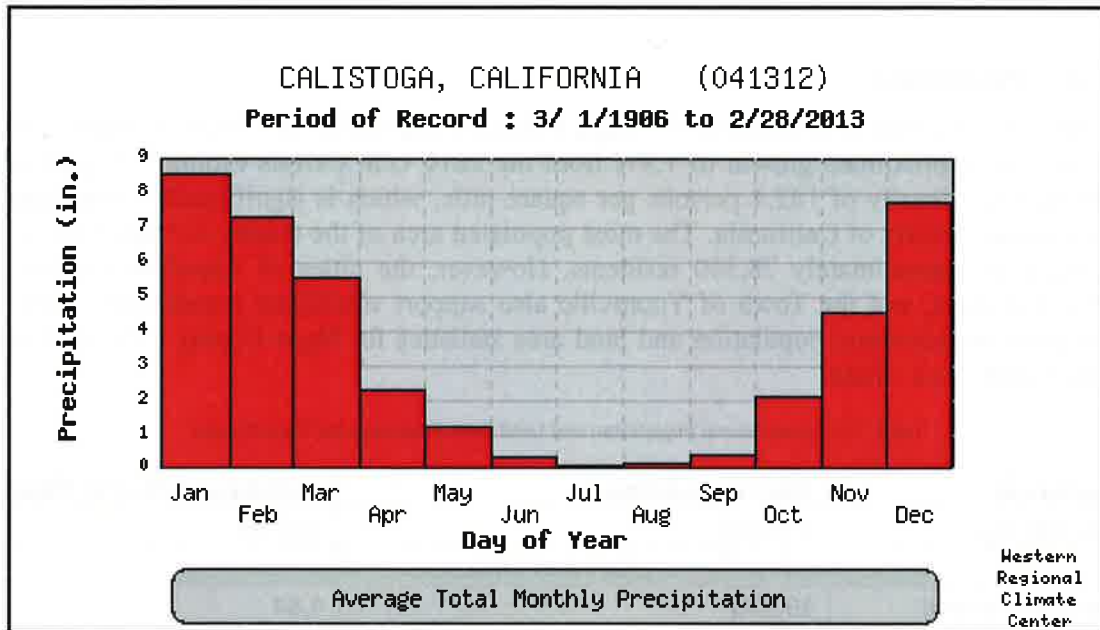


Figure 2-6: Average Monthly Precipitation for Calistoga, CA

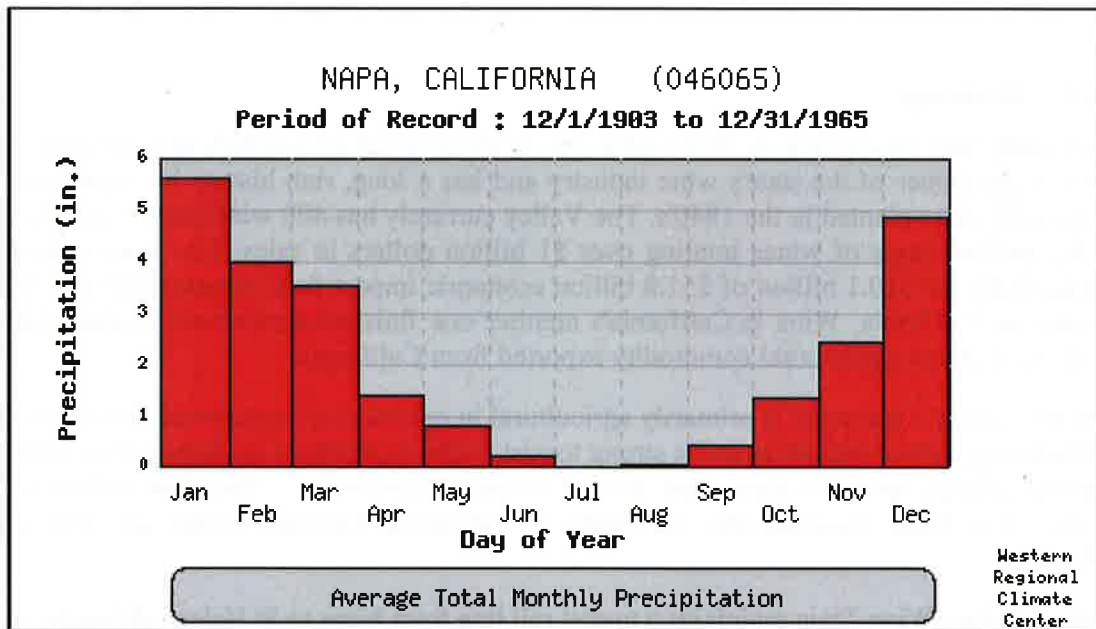


Figure 2-7: Average Monthly Precipitation for Napa City, CA

### 2.3.1.3. *Population*

The 2012 U.S. Census Bureau estimates Napa County’s population at 139,045 residents, which represents an approximate growth of 1.9% from the 2010 U.S. Census estimate. Napa County has an average density of 182.4 persons per square mile, which is significantly lower than the 239.1 average density of California. The most populated area of the county is Napa City, with a population of approximately 78,340 residents. However, the cities of American Canyon, St. Helena, Calistoga, and the Town of Yountville also support significant populations. Table 2-5 summarizes jurisdictional population and land area statistics for Napa County cities and towns and the County as a whole.

**Table 2-5: Jurisdictional Population and Land Area Estimates for Napa County**

<b>Jurisdiction</b>	<b>2012 Population</b>	<b>2010 Land Area (Sq Miles)</b>
Napa County	139,045	748.36
<b>Cities and Towns</b>		
American Canyon	19,993	4.84
Napa City	78,340	17.84
St. Helena	5,907	4.99
Calistoga	5,208	2.6
Town of Yountville	3,290	1.5

### 2.3.1.4. *Economy*

Napa County was established in 1850 and is one of the original 27 counties in California. Napa County is the center of the state's wine industry and has a long, rich history in grape growing, with the first vines planted in the 1840's. The Valley currently has 400 wineries, producing more than 9.2 million cases of wines totaling over \$1 billion dollars in sales. The wine industry in Napa accounts for \$10.1 billion of \$51.8 billion economic impact from winemaking and related industries in California. Wine is California's number one finished agricultural product and the third highest valued agricultural commodity exported from California.

While the County’s economy is primarily agricultural in nature, it is interspersed with some light manufacturing service industries and a strong tourist trade. Agriculture includes a wide diversity of varietal grapes, specialty crops and limited livestock operations. The wine industry fuels tourism. The State Hospital and the State of California Veterans Home are also major employers.

The Napa Valley Wine Train maintains a tourist rail line from Napa to St Helena along the old S&P right-of-way. The California Northern Railroad crosses the southern third of the County, connecting to the Union Pacific main line at the city of Cordelia. The Napa County Airport, between the cities of Napa and American Canyon, serves as a general aviation facility, with limited charter capability for both passengers and freight. Angwin airport is a small private airport located on Howell Mountain.



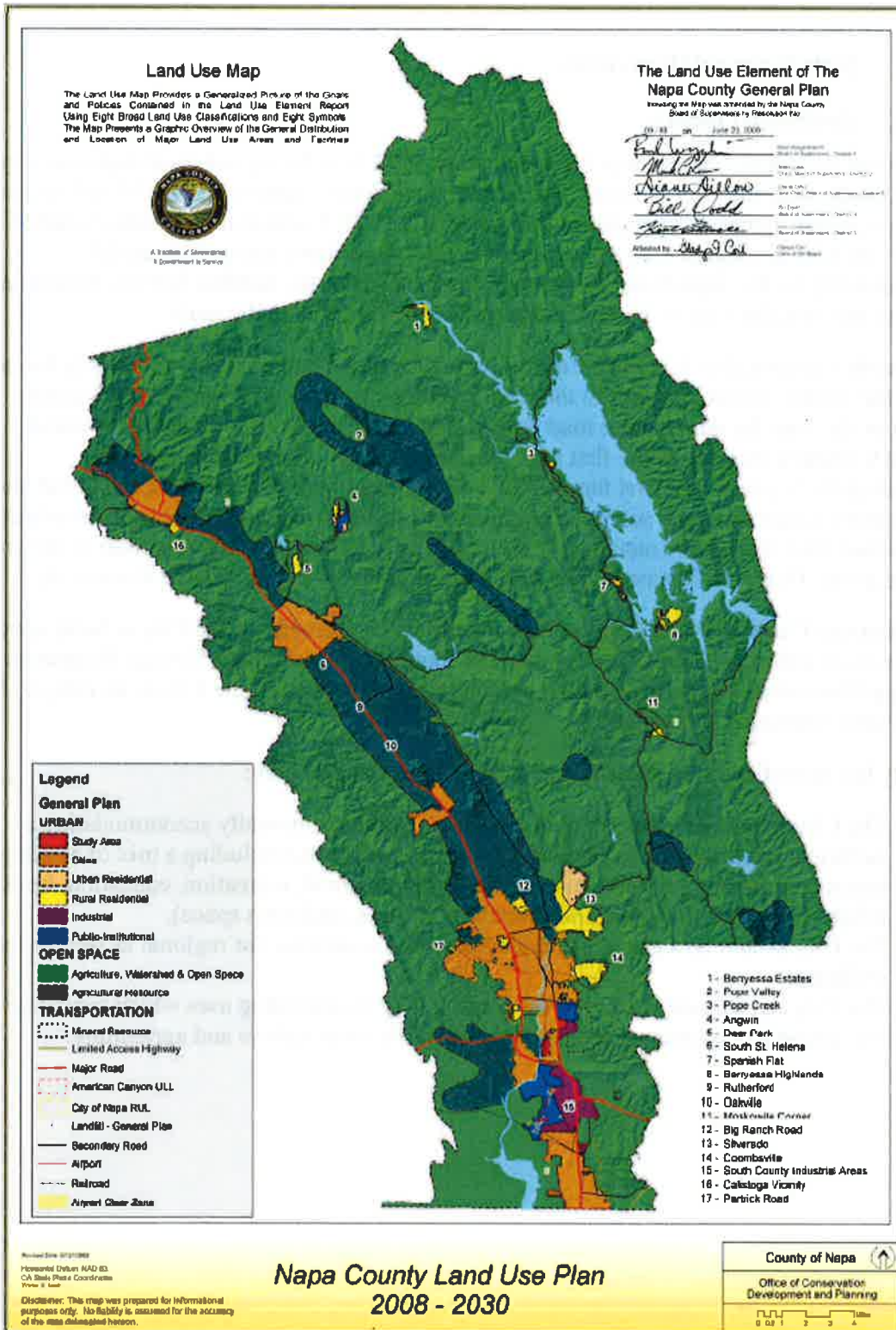


Figure 2-8: Napa County (2008-2013) General Plan Land Use Map

## **2.3.2. Jurisdictional Overviews**

### **2.3.2.1. American Canyon**

The City of American Canyon was incorporated in 1992. It is the second most populous city in Napa County, after the City of Napa. The current population is approximately 19,933 residents with a projected "build-out" population estimated at 22,000. Located at the southern end of Napa County, the City is roughly 4.84 square miles in size. American Canyon is bounded geographically by the Napa River to the west, the foothills of the Sulphur Springs Mountain Range to the east, the City of Vallejo to the south and vineyards to the north.

Early settlers migrated to American Canyon because it was a hub of activity and early business within the county. It had openings to the East, shipping on the river, access to the Southern section of the State by railroad and road through the valley north.<sup>1</sup> The Standard Portland Cement Company was one of the first main businesses in the area, and was open for approximately 32 years. The first families that settled lived in the vicinity of the railroad and cement plant which was their source of employment. In 1963, citizen residents of American Canyon had their first public meeting for the community to consider incorporation of the area to become a city. However, it wasn't until 1992 that American Canyon became its own city.

The American Canyon (2011) General Plan identifies the character of the City to build upon and reflect a rural setting as a transition between the foothills of the Sulphur Springs Mountains and the Napa River while capitalizing on the unique role and location of the City as an entry to the Napa Valley vineyards and wineries.

The city has identified three fundamental roles in their General Plan:

1. The City should be home for a residential population, internally accommodating a sufficient range of uses to support the needs of residents (including a mix of housing types, commercial services, entertainment, employment, recreation, education, health, religious, cultural facilities, transportation services, and open space).
2. The City should be a center of employment and commerce for regional as well as local residents.
3. The City can capture visitors to the Napa Valley by providing uses which capitalize on the unique environmental setting of the foothills, river valleys and agriculture.

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<sup>1</sup> <http://www.cityofamericancanyon.org/Modules/ShowDocument.aspx?documentid=1784>



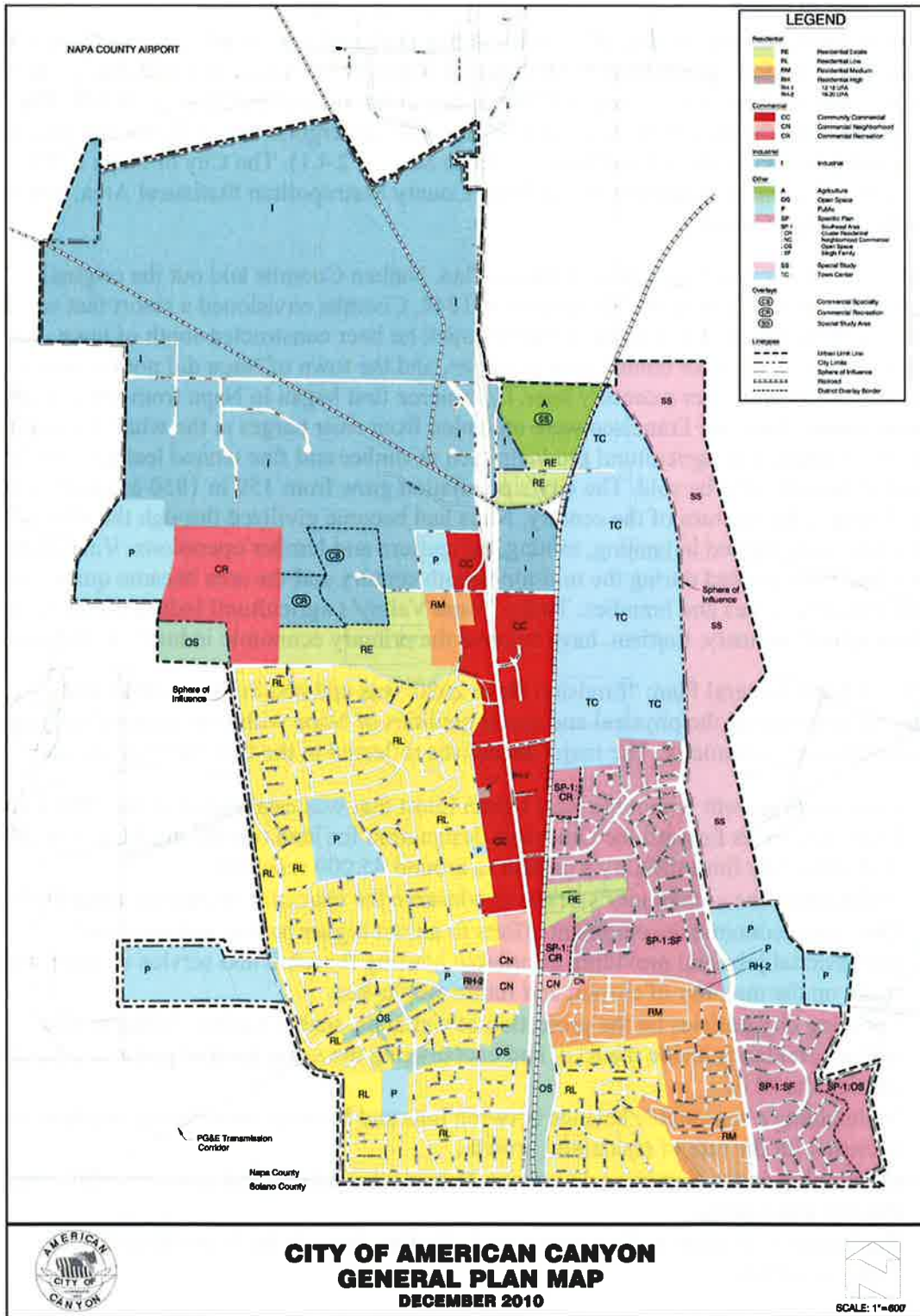


Figure 2-9: City of American Canyon (2010) General Plan Map

### 2.3.2.2. *City of Napa*

The City of Napa, incorporated in 1872, is located at the base of the world-famous Napa Valley wine-producing region, approximately 50 miles northeast of San Francisco, and 4 miles north of American Canyon. It has a land area of 17.84 square miles and a population of 78,340. The Napa River runs through the middle of Napa, and has recently undergone one of the largest restoration projects in the history of the United States (refer to Section 2.4.1). The City of Napa is the county seat and is the principal city of the Napa County Metropolitan Statistical Area, which encompasses Napa County.

According to the City of Napa (2011) General Plan, Nathan Coombs laid out the original townsite at the headwaters of the Napa River in 1848. Coombs envisioned a resort that would provide accommodations for patrons of the racetrack he later constructed south of town. The racetrack was never used for commercial purposes, and the town of Napa did not become a tourist destination until over a century later. Commerce first began in Napa from the river trade. Consumer goods from San Francisco were unloaded from river barges at the wharf located at the foot of Third Street, and agricultural products such as timber and fine tanned leather were transported downriver to be sold. The city's population grew from 159 in 1850 to nearly 3,500 in its first 30 years. By the turn of the century, Napa had become civilized through the efforts of families who were trained in tanning, mining, agriculture and lumber operations. Vineyards and orchards had been planted during the mid-nineteenth century and the area became quickly well known for its fine wines and brandies. Today, Napa Valley's agricultural industry and its most important spinoff industry, tourism, have become the primary economic industry in the region.

The City of Napa General Plan: "Envision Napa 2020" was updated in March 2011 and emphasizes maintaining the physical and social qualities of Napa within an economically healthy and self-sufficient community. The major objectives reflected in the General Plan include:

- Containing growth within the Real Urban Limit that was established in the 1982 General Plan and carries forward the Greenbelt designation for land outside the RUL. The RUL will ultimately limit the City's growth to around 85,000 residents.
- Maintaining the community's desire to conserve the character of existing neighborhoods.
- Directing economic development efforts to attract higher paying technical and professional jobs and providing affordable housing for retail and service workers which make up the majority of current and future employees.
- Focusing city policies on the protection of wetlands, scarce habitats, hillsides and agricultural lands inside the RUL and encouraging the same level of protection for land outside the RUL.
- Maintaining a reasonable balance between jobs and housing; monitoring employment growth with the rate of residential growth.
- Developing and maintaining downtown Napa as the cultural and governmental center of the city and county.
- Removing constraints to Downtown revitalization through the Napa River Flood Protection Plan.

# ENVISION NAPA 2020

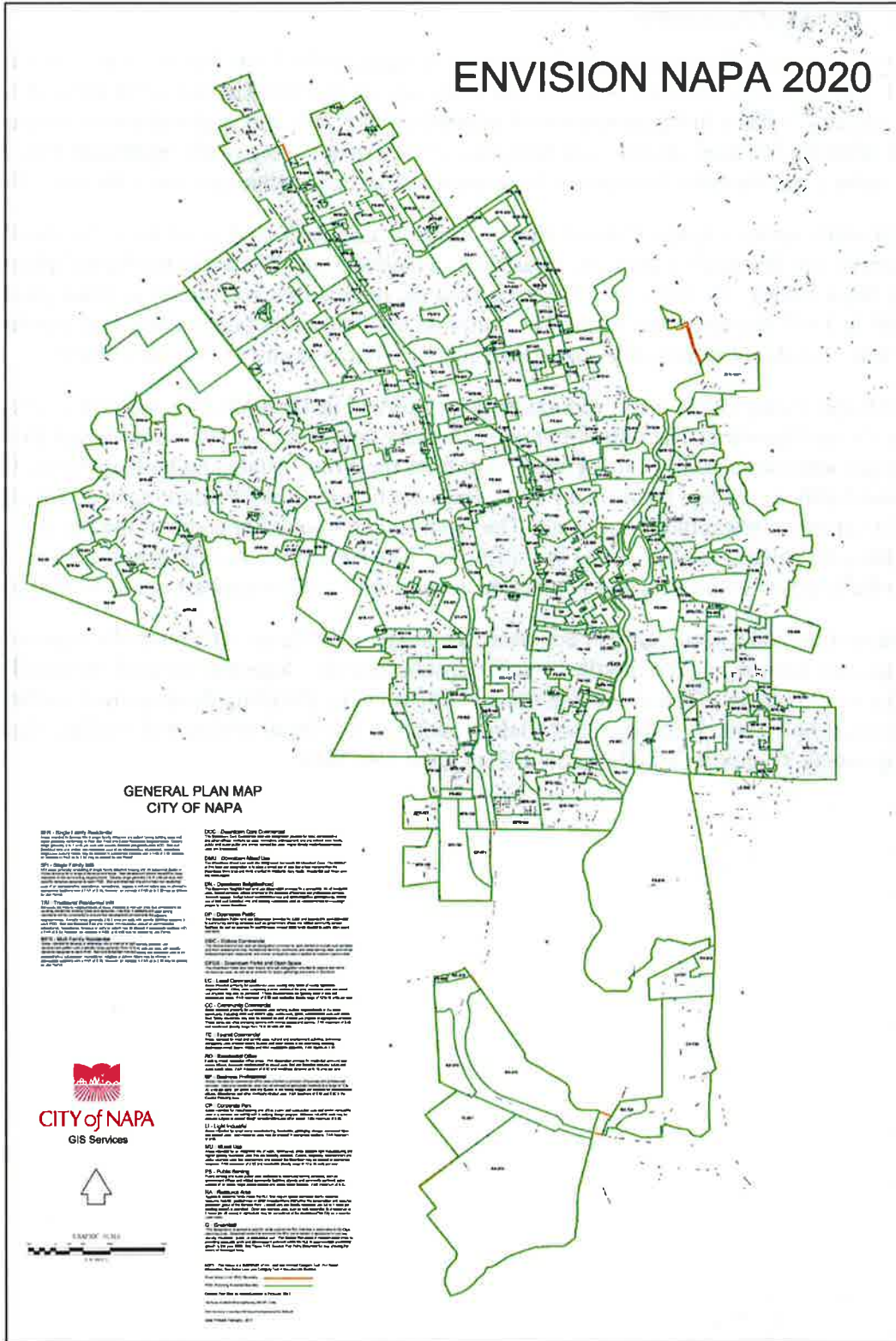


Figure 2-10: City of Napa (2020) General Plan Map

### 2.3.2.3. *Town of Yountville*

The Town of Yountville incorporated in 1965 in the heart of the Napa Valley. The Town is located approximately 60 miles North of San Francisco and halfway between the cities of Napa and St. Helena. It has a full time residential population of 3,290, and is also the host community of the California Veteran's home. The land area of the Town is very small (approximately 1.5 square miles), and the town boundaries have remained largely unchanged since the late 1800's.

The first white settler, George Calvert Yount, obtained a Spanish land grant from the Mexican government, the first such grant to be awarded to a United States citizen in northern California and the Napa Valley.<sup>2</sup> In 1855, Mr. Yount laid out the town's first boundaries and two years after his death in 1867, the town was renamed Yountville in honor of its founder and his contributions. Yount was considered responsible for establishing the first vineyard in the Napa Valley.

Like all Napa Valley cities, the introduction of the railroad in 1868 played a major influence in the town's configuration. The railroad brought in many new comers such as immigrant Gottlieb Groezinger who purchased twenty acres of land from the Yount estate and built a winery, barrel room and distillery. Today, Groezinger's buildings are home to the "V Marketplace" which houses a variety of restaurants and shops. The town is well known for some of the finest restaurants, art galleries and wineries in California. The California Veteran's home is one of Yountville's largest employers and population centers with 1,100 members and over 600 staff.

The Yountville (2003) General Plan emphasizes reshaping the future of Yountville's growth by resisting encroachment on Yountville of generic, suburban development. Instead, Yountville residents would like to preserve the historic agrarian town by directing development on the few remaining un-built parcels in ways that retain Yountville's original setting and vitality. Figure 2-11 represents Yountville's 2003 General Plan Land Use Map.

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<sup>2</sup> <http://www.townofyountville.com/index.aspx?page=56>

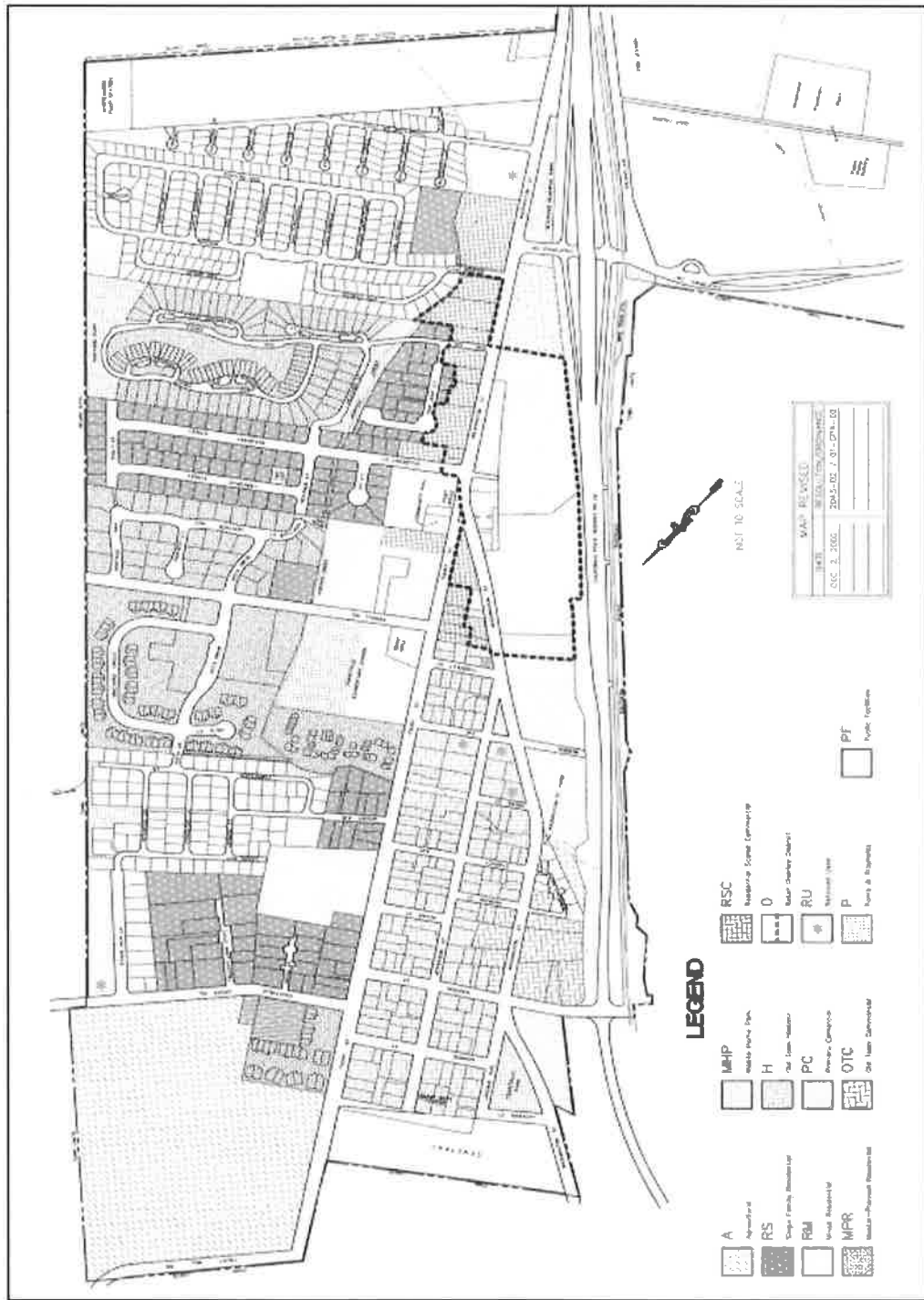


Figure 2-11: Yountville (2003) General Plan Land Use Map



#### 2.3.2.4. *City of St. Helena*

The City of St. Helena was incorporated as a City on March 24, 1876 and reincorporated on May 14, 1889. The current population is approximately 6,050 and the area of the city takes up approximately 5 square miles. The city is located 65 miles north of San Francisco is in the center of Napa Valley.

There are two theories about how the town was named. One says it was after the local branch of the Sons of Temperance; another gives credit to Mount St. Helena, a prominent landmark to the north.<sup>3</sup> The railroad came to town in 1868, allowing businesses to ship fruit, grain and mining products. The wine industry also began to thrive by the 1860's, encouraging more immigrants and vineyards to open. From early on St. Helena served as a commercial center for central Napa Valley since it had schools, dentists, doctors, churches, and many other services that nearby rural areas did not have.

Today, St. Helena continues to reflect its history as a small wine-growing town. Efforts to preserve agricultural land and maintain the downtown area as a National Historic District have helped the town retain its rural charm. The St. Helena (2030) General Plan was recently updated in 2010, and sites the major economic drivers to include agriculture, wine-making, tourism and education. The 2030 General Plan Land Use Map is shown in Figure 2-12. The General Plan vision and guiding principles focus on three overarching goals:

1. A sustainable community that preserves its history while managing change.
2. A stable economy that meets the basic needs of residents balances the benefits and effects of visitors, and provides better economic opportunities.
3. A community that focuses on environmental conservation, green choices and emission reductions that are integrated into all areas of community decision making.

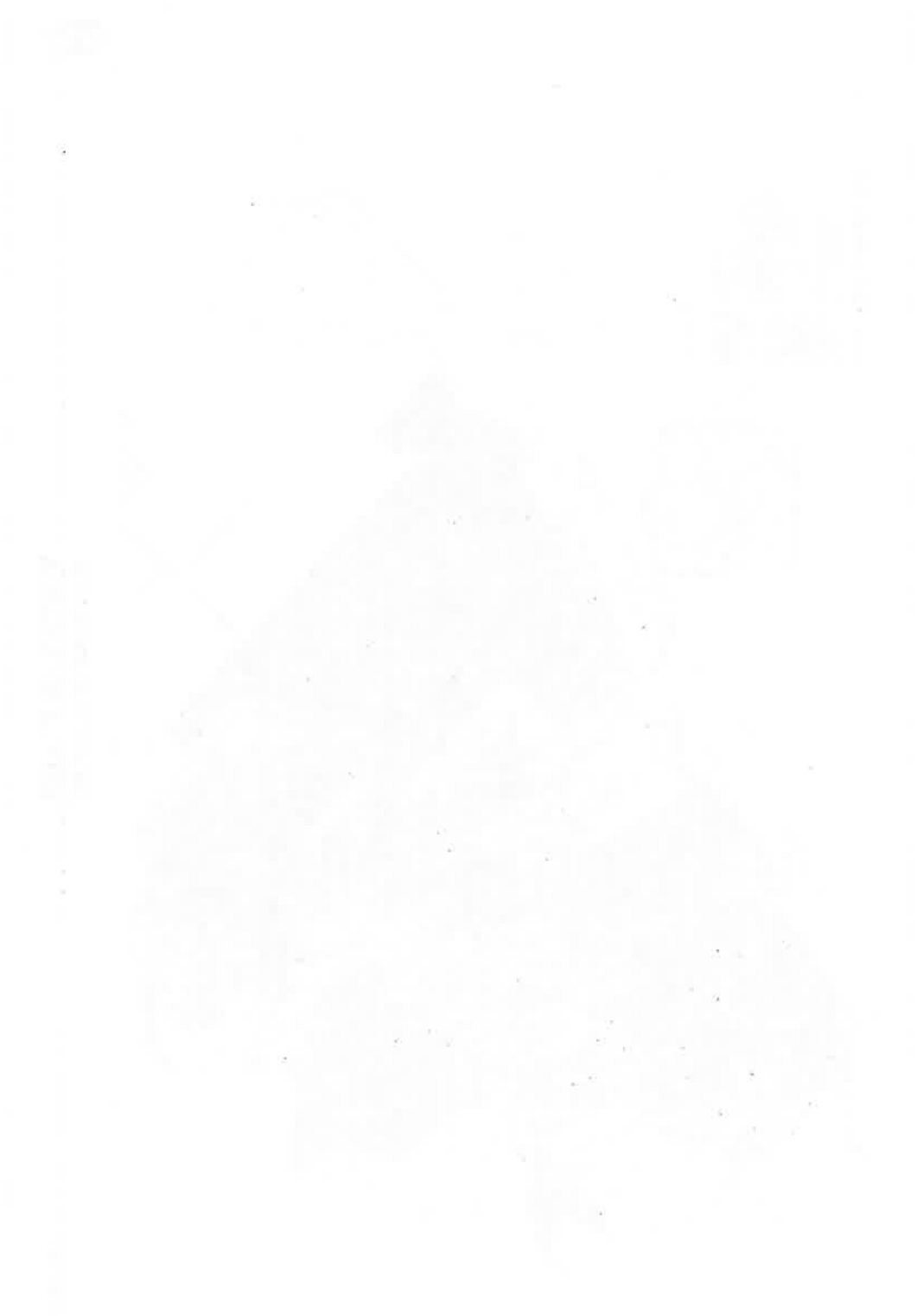
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<sup>3</sup> <http://www.ci.st-helena.ca.us/content/our-history>









### 2.3.2.5. *City of Calistoga*

The City of Calistoga is located at the North end of the Napa Valley, approximately 80 miles North of San Francisco. It is framed on its east and west sides, respectively, by the Howell and Mayacamas Mountain ridges. Calistoga is well known for its many spas and hot springs and has become a tourist oriented community. Calistoga is also a popular retirement destination and has a relatively significant number of residents over the age of 55 (30%). The City population is approximately 5,300, and the area within the city limits covers approximately 2.6 square miles<sup>4</sup>.

The first American settlers began to arrive in Calistoga in the 1840's, and news of a hot springs with "healing powers" spread quickly to nearby communities.<sup>5</sup> Samuel Brannan decided to capitalize on the hot springs and build a hot springs resort modeled after Saratoga Springs in New York to bring wealthy tourists from all over the world. Visitors began to visit the Hot Springs hotel when it opened in 1862. Brannan and a group of businessmen also built a railroad to ease transportation north through Napa Valley.

Today, Calistoga is also home to the Napa County Fairgrounds and has many fine dining establishments, local wineries, natural hot springs and volcanic mud baths, bicycle routes, and hiking in the Mayacamas Mountains that bring visitors to Calistoga. The Napa River also originates in Calistoga, gradually widening as it flows south through Napa Valley and eventually into San Pablo Bay.

The vision of the City of Calistoga (2003) General Plan focuses on retaining Calistoga's walkable, small town, pedestrian oriented neighborhoods and the surrounding wineries, vineyards and other agricultural lands. Calistoga's (2003) General Plan Map is shown in Figure 2-13.

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<sup>4</sup> U.S. Census Bureau, 2012. Calistoga, California, accessed on June 13, 2013 at <http://quickfacts.census.gov/qfd/states/06/0609892.html>

<sup>5</sup> City of Calistoga, 2013. History of Calistoga, California, accessed on June 13, 2013 at <http://www.ci.calistoga.ca.us/Index.aspx?page=35>



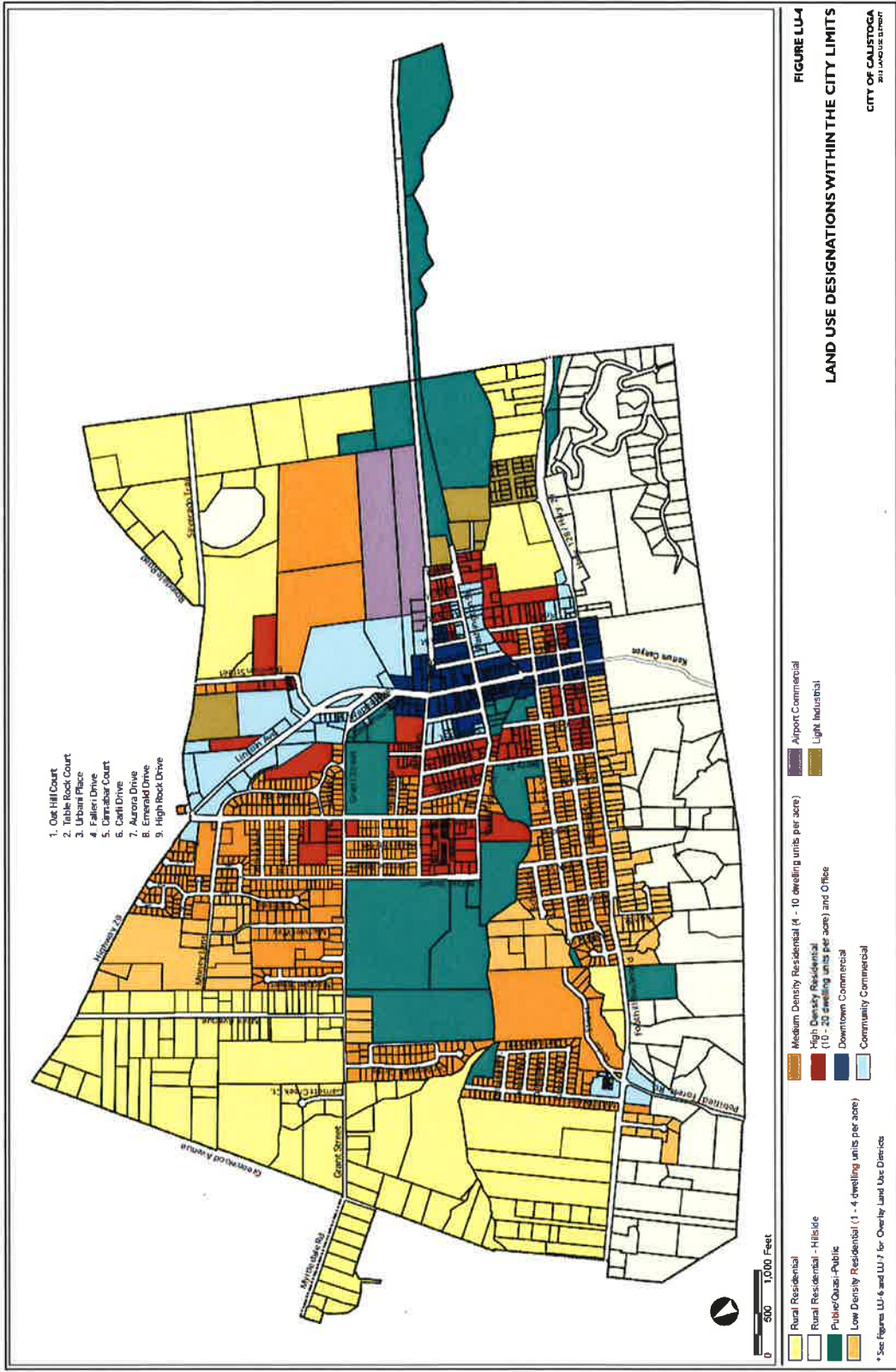


Figure 2-13: City of Calistoga (2012) General Plan Map



**2.3.2.6. *Napa Valley College (referenced from Napa Valley College Emergency Operations Plan)***

The Napa Valley Community College District covers Napa County and a very small part of Sonoma County. The main Napa Valley College campus is located on the Southern end of the City of Napa on 168 acres with 30 major buildings and has a daytime population of approximately 8,000 people. The District also has an Upper Valley Campus located on the Eastern side of the City of St. Helena on approximately 6 acres with two major buildings and a daytime population of approximately 200 people. The District also has two education centers. The Community Education Center (retired National Guard armory) located in the City of Napa, near Napa High school, with a daytime population of approximately 50 people. The Center at American Canyon High School is co-located with the American Canyon High School and has a daytime population of 40 people. The District also owns the Clyde and Vollmer Nature Preserves, totaling two hundred acres in rural Napa County. The preserve does not have any educational facilities and does not have a daytime population. Figure 2-14 displays the location of the preserves, education centers, and both Napa Valley College campuses.



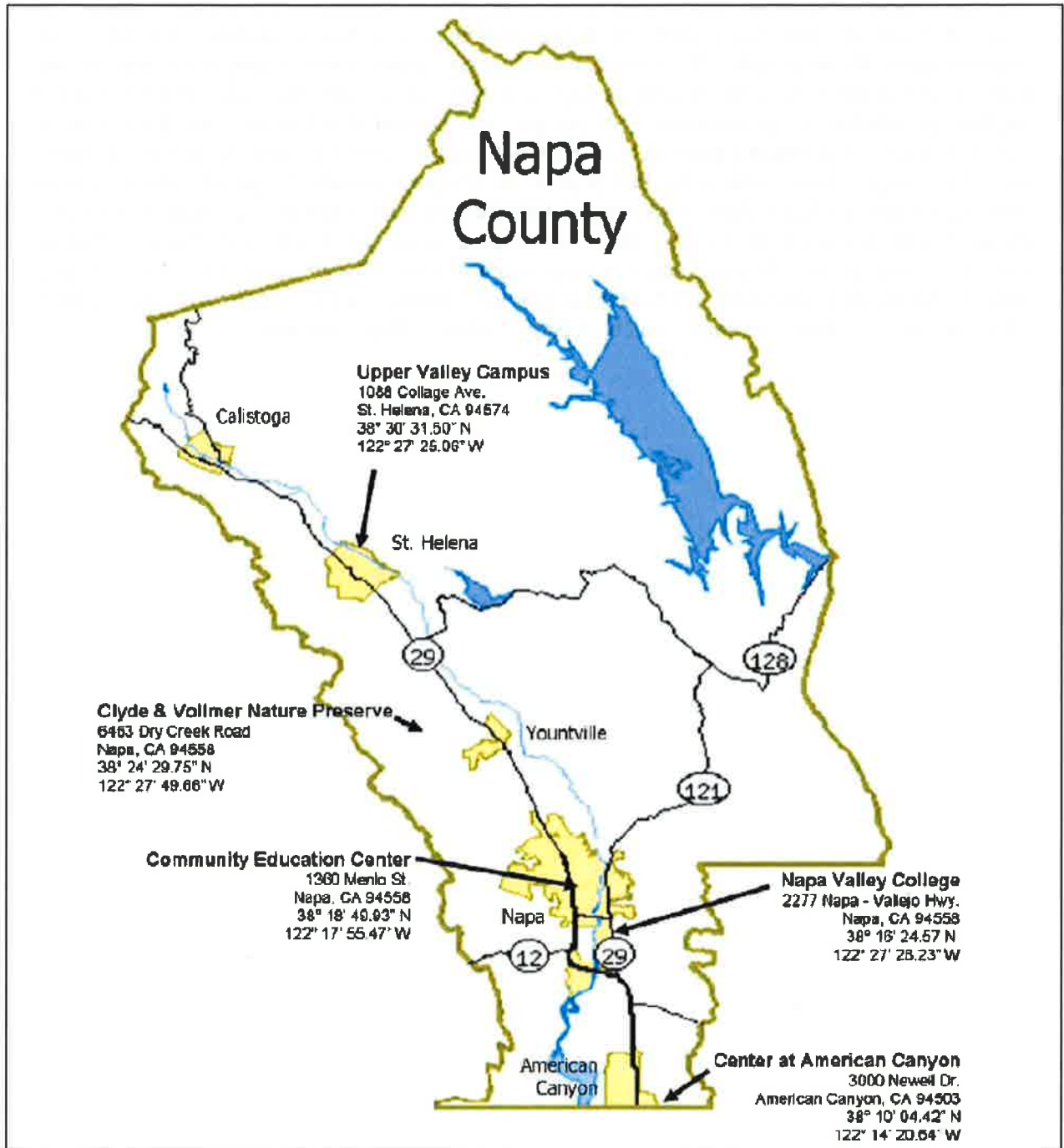


Figure 2-14: Napa Valley College Locations



### **2.3.2.7. *Napa County Office of Education***

The Napa County Office of Education (NCOE) is located at 2121 Imola Ave in the City of Napa, California. The mission of NCOE is to be a flexible, county-wide educational resource by offering a broad range of student services in response to changing community needs, to support and collaborate with local school districts, and to disseminate research-based best practices to educators locally and statewide.<sup>6</sup>

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<sup>6</sup> <http://www.napacoe.org/about-us>

### **2.3.2.8. *Napa County Flood Control and Water Conservation District***

The Napa County Flood Control and Water Conservation District is located at 804 1<sup>st</sup> Street in downtown Napa City, California. The Flood Control and Water Conservation District is the local sponsor for the Napa River Flood Management Plan and administers water supply contracts, watershed management and stormwater management programs throughout Napa County. The District's mission is the conservation and management of flood and storm waters to protect life and property; the maintenance of the County watershed using the highest level of environmentally sound practices; and to provide coordinated planning for water supply needs for the community.<sup>7</sup>

Current Napa County Flood Control programs include:

#### ***The Napa River and Creek Flood Project***

The project will restore more than 900 acres of high-value tidal wetlands of the San Francisco Bay Estuary while protecting 2,700 homes, 350 businesses, and over 50 public properties from 100-year flood levels, a savings of \$26 million annually in flood damage costs.

#### ***Watershed Management and Stream Maintenance***

Involves maintenance of the Napa River and its tributaries which includes specialized watershed programs and services funded by local assessments as well as State and federal grants.

#### ***Stormwater Management***

Napa County and the Cities of American Canyon, Napa, St. Helena, Calistoga and the Town of Yountville collectively administer the Napa County Stormwater Pollution Prevention Program.

#### ***Water Resources***

Includes the Flood District, Milliken-Sarco-Tulocay (MST) Water Project, and information on watershed projects throughout Napa County.

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<sup>7</sup> <http://www.countyofnapa.org/FloodDistrict/>

## **2.4. The Planning Process by Threat**

Hazard Mitigation Planning in Napa has been an ongoing process that Disaster Mitigation Act 2000 only has brought into sharper focus. Napa County is proud to have completed the approval process of a new general plan. The approved safety element borrowed heavily on the initial approved DMA 2000 hazard mitigation plan. The approaches incorporated into the new safety element are foundational to this plan update. Napa County has, and will continue to have, public, private and governmental input into the County's threat assessment and mitigation strategies. This section describes this input process.

### **2.4.1. Major Threat: Flooding**

Since the 1930's, Napa County residents have made several concerted efforts to address flooding. The most recent effort began in 1965, when Congress authorized the development of a detailed project proposal for flood protection. In 1975, the U.S. Army Corps of Engineers submitted the first project proposal under the 1965 Authorization. Napa County voters rejected the proposal in referendum elections in both 1976 and 1977, and it was subsequently shelved. When the floods of 1986 hit the Napa Valley, the City of Napa requested that the project be reactivated. The Corps responded with a revised proposal in 1995. The plan in those documents was a levee and channel modification project and received numerous comments. The major concerns expressed in those comments dealt with salinity intrusion due to channel deepening, degradation of water quality in the river oxbow due to construction of a "wet" bypass channel, and disposal of contaminated dredge material. Again, it was deemed unacceptable.

As frustrating as the rejections were, not just for the Corps, but for all those who desperately wanted a solution, a new approach emerged which looked at flood control from a broader, more comprehensive perspective. Citizens for Napa River Flood Management was formed, bringing together a diverse group of local engineers, architects, aquatic ecologists, business and agricultural leaders, environmentalists, government officials, homeowners and renters, and numerous community organizations.

Through a series of public meetings and intensive debates over every aspect of Napa's flooding problems, the Citizens for Napa River Flood Management crafted a flood management plan offering a range of benefits for the entire Napa region. The U.S. Army Corps of Engineers served as a resource for the group, helping to evaluate their approach to flood management. The final plan produced by the Citizens for Napa River Flood Management was successfully evaluated through the research, experience, and state-of-the-art simulation tools developed by both the Army Corps of Engineers and numerous international experts in the field of hydrology and other related disciplines. The success of this collaboration serves as a model, not just for Napa, but also for the nation.

#### **2.4.1.1. *Establishing Goals: Blending Engineering and Ecology***

Citizens for Napa River Flood Management established the following agreed-upon set of goals, initially for the City of Napa, but quickly expanded to include all of Napa County:

- 100-year flood protection;
- An environmentally-restored, "living" Napa River;
- Enhanced opportunities for economic development;
- A local financing plan that the community could support; and

- A plan that addresses the entire watershed countywide

The goal is to once again make the Napa River a living river by:

- Conveying variable flows and restoring habitat in the floodplain;
- Balancing sediment input with sediment transport;
- Providing natural fish and wildlife habitat;
- Maintaining high water quality and supply;
- Offering improved recreation opportunities
- Maintaining its aesthetic qualities

#### **2.4.1.2. *Implementation of Plans & Goals***

With the near completion of the \$160,000,000 Napa River Flood Project the downtown Napa area will be protected from a projected 100 year flood. In 2005 while the project was under construction, the Napa River flooded but the downtown Napa area was spared major damage that it had experienced in previous floods. With the Napa River Flood Management Plan extending to all rural streams & tributaries, local flooding has been mitigated and the vulnerability of properties adjacent to flood prone areas is minimized.