

10. SONOMA VALLEY FIRE DISTRICT

10.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

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This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 10-1.

Table 10-1. Local Hazard Mitigation Planning Team Members

Name	Title
Steve Akre	Fire Chief
Trevor Smith	Fire Marshal

10.2 JURISDICTION PROFILE

10.2.1 Overview

The Sonoma Valley Fire District (SVFD) is a newly formed special district created when the Valley of the Moon Fire District, Glen Ellen Fire Protection District and the Mayacamas Volunteer Fire Company joined as one to create the new district effective July 1, 2020. This new district also provides fire and emergency medical services under contract to the incorporated City of Sonoma.

The climate of the Sonoma Valley Fire District is heavily influenced by its close proximity to nearly 60 miles of Pacific Coast shoreline, and its cool nights and temperate days create the perfect conditions to draw in layers of oceanic fog to chill Sonoma's warm interior valleys. Daytime temperatures average a comfortable 71°F, with the warmest summer days rarely topping 84°F. Nighttime temperatures stay mostly in the 40s, meaning hard frosts are a rarity, even during critical flowering time for grapes. At the start of fall harvest, the weather remains moderate with little to no rainfall. Sonoma County experiences no measurable snow or hail and normal rainfall measures between 25 and 30 inches a year.

The Sonoma Valley Fire District Board of Directors made up of seven elected board members, a president, vice president, treasurer and four directors.

The Sonoma Valley Fire District Board of Directors assumes responsibility for the adoption of this plan; the Sonoma Valley Fire District will oversee its implementation.

10.2.2 Service Area

The Sonoma Valley Fire District is located within the Sonoma Valley.

The current boundaries generally extend from Leveroni Rd to the North to the southern border of Kenwood Community between the Sonoma mountain range to the Mayacamas mountain range. The Sonoma Valley Fire District encompasses a large area of lands including residential, commercial, mixed use and agriculture land in unincorporated Sonoma County lands. We also provide service to the incorporated City of Sonoma.

According to the 2019 Sonoma County Economic Development Board City Profile And Projections Report, the population of the City of Sonoma as of December of 2019 is estimated to be 11,253, an average annual population growth rate of 0.65% percent. While we are unable to find Census tract data to determine exact populations for the Sonoma Valley Fire District, we estimate that in addition to the City’s population, we serve an additional 37,000 residents within the Fire District.

10.2.3 Assets

Table 10-2 summarizes the assets of the District and their value.

Asset	Value
Property	
Fire Station #1 and Headquarters, 630 Second Street West, Sonoma Land—1.5 Acres \$300,000 per acre	\$450,000
Fire Station #2, 877 Center Street, Sonoma Land—0.75 Acres \$300,000 per acre	\$225,000
Fire Station #3, 1 West Agua Caliente Road, Sonoma Land—0.9 Acres \$300,000 per acre	\$270,000
Fire Station #4, 18798 Prospect Avenue, Sonoma Land—0.5 Acres \$300,000 per acre	\$150,000
Fire Station #5, 13445 Arnold Drive, Glen Elen Land—0.7 Acres \$300,000 per acre	\$210,000
Fire Station #6, 7301 Sonoma Mountain Road, Glen Ellen Land Lease	\$0.00
Fire Station #8, 3252 Trinity Road, Glen Ellen Land—0.5 Acres \$300,000 per acre	\$150,000
Fire Station #9, 4501 Cavedale Road, Glen Ellen Land—0.5 Acres \$300,000 per acre	\$150,000
Vacant Land APN 128-301-029 Arnold Dr @ Leveroni Rd (20600 Arnold Dr) Land—1 Acres \$300,000 per acre	\$300,000
Total Property Value	\$1,905,000.00
Equipment	
BC33 Command Vehicle Chevrolet Tahoe SUV 2020	\$65,000
DC33 Command Vehicle Chev 4x4 2012	\$50,000
3300 U-12 Command Vehicle Chevy Tahoe 2016	\$67,000
3340 U-14 Shop Service Truck Chev Utility Body 2018	\$77,000
3314 U-10 Command Vehicle Chevy Silverado 4x4 2012	\$50,000
3320 U-11 Command Vehicle 4X4 Pickup 2012	\$60,750
3330 R-33 Medium Rescue International 2010	\$250,000

Asset	Value
3335 GE-R-1 Command Vehicle GMC 2003	\$28,250
3340 Utility Vehicle GMC 2001	\$50,000
U-8 Utility Vehicle Highlander Hybrid SUV 2008	\$50,000
3341 U-4 Utility Vehicle GMC 2001	\$50,000
3342 U-13 Command Vehicle Chev 4x4 2018	\$60,000
3343 U-5 Utility Vehicle GMC 2001	\$50,000
3344 U-6 Utility Vehicle Jeep SUV 2001	\$50,000
3345 GE-U-3 Utility Vehicle Chevrolet 2018	\$77,000
3346 U-9 Utility Vehicle Chevy Tahoe 4x4 2008	\$50,000
3347 GE-U-2 Utility Vehicle GMC 2007	\$44,500
3348 Ford F-350 Utility 2003	\$60,000
3351 Trk-2 Ladder Truck Smeal 105' RM Aerial 2010	\$1,000,000
3357 GE-E-4 Type 6 Engine Ford/Skeeter 4x4 2019	\$300,000
3388 MYC-E-4 Type 2 Engine F-550 crew cab XLT 4x4 2020	\$300,000
3359 Ford 550 Type 6 Engine 2013	\$200,000
3361 E-7 Type 3 Engine KME 2014	\$400,000
3362 E-10 Type 3 Engine HME 2017	\$445,000
3375 GE-E-3 Type 3 Engine International 7400 2003	\$400,000
3376 GE-E-2 Type 3 Engine International 2002	\$400,000
OES-319 (2101) Type 1 Engine HME Westates2005	Owned by State of CA
3381 E-8 Type 1 Engine Rosenbauer 2015	\$745,000
3382 E-9 Type 1 Engine Rosenbauer 2015	\$745,000
3383 E-3 Type 1 Engine Pierce 2001	\$490,000
3385 GE-E-1 Type 1 Engine HME 2001	\$257,500
E-11 Type 1 Engine Pierce Dash 1999	\$257,500
3388 Type 1 Engine International 4900 1989	\$257,500
3392 WT-2 Water Tender Kenworth Bluegrass 2009	\$300,000
3395 GE-WT-1 Water Tender International 2006	\$300,000
3398 Water Tender International 9200 2005	\$300,000
301 A-12 Ambulance Type III E-450 Leader 2019	\$275,000
302 A-9 Ambulance Type III Ford E-350 Leader 2010	\$222,500
303 A-11 Ambulance Type III Ford 2016	\$275,000
304 A-10 Ambulance Type III Ford E-450 Leader 2013	\$222,500
305 A-3 Ambulance Type III Ford E-350 Lifeline 2004	\$222,500
306 A-1 Ambulance Type III Ford E-350 Lifeline 2003	\$222,500
UTV-33 U-15 Polaris Ranger XP 1000 2019	\$20,000
GE-T-1 Trailer Interstate 2017 \$10,000 \$0	\$10,000
GE-T-3 Animal Rescue Trailer (enclosed) 2018	\$10,000
T-1 Carry-On-Car Car Trailer 2018	\$6,000
T-2 Rescue Trailer Cargo Express Enclosed 2019	\$10,000
T-3 UTV-33 Trailer (enclosed) 2018	\$9,000
Total:	\$9,792,000
Critical Facilities and Infrastructure	
Fire Station #1 and Headquarters, 630 Second Street West, Sonoma Building 15,260 sq. ft. \$1,225.00 per sq. ft	\$18,693,500

Asset	Value
Fire Station #2, 877 Center Street, Sonoma Building 7,600 sq. ft. \$1,225.00 per sq. ft	\$9,310,000
Fire Station #3, 1 West Agua Caliente Road, Sonoma Building 8,251 sq. ft. \$1,225.00 per sq. ft	\$10,107,475
Fire Station #4, 18798 Prospect Avenue, Sonoma Building 700 sq. ft. \$1,225.00 per sq. ft	\$260,400
Fire Station #5, 13445 Arnold Drive, Glen Ellen Building 7,350 sq. ft. \$1,225.00 per sq. ft	\$9,003,750
Fire Station #6, 7301 Sonoma Mountain Road, Glen Ellen Building 700 sq. ft. \$1,225.00 per sq. ft	\$260,400
Fire Station #8, 3252 Trinity Road, Glen Ellen Building 1,300 sq. ft. \$1,225.00 per sq. ft	\$483,600
Fire Station #9, 4501 Cavedale Road, Glen Ellen Building 900 sq. ft. \$1,225.00 per sq. ft	\$334,800
Total:	\$48,453,925.00

10.3 CURRENT TRENDS

Development in all zoning areas occurs at a moderate level. The Springs redevelopment project is changing some local zoning regulations and is bringing in new opportunities.

10.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 10-3.
- An assessment of fiscal capabilities is presented in Table 10-4.
- An assessment of administrative and technical capabilities is presented in Table 10-5.
- An assessment of education and outreach capabilities is presented in Table 10-6.
- Classifications under various community mitigation programs are presented in Table 10-7.
- The community’s adaptive capacity for the impacts of climate change is presented in Table 10-8.

Table 10-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Ordinance No. 6295 Amending Chapters 7 (Building Regulations) of the Sonoma County Code, and Adopting by Reference with Local Amendments, Selected Provisions, Chapters and Appendices of Title 24 of the California Code Of Regulations, 2019 Editions Of The California Building Standards Code	12/02/2019	Adoption and amendments to existing State Codes that are more restrictive designed to reduce hazards and provide for occupant and rescuer safety.
Ordinance No. 6296 Amending Chapter 13 (Fire Safety Ordinance) and Adopting by Reference with Local Amendments, Selected Provisions, Chapters and Appendices of Title 24 of the California Code Of Regulations, 2019 Edition Of The California Fire Code, to Amend Portions of the Fire Safe Standards,	12/02/2019	Adoption and amendments to existing State Codes that are more restrictive designed to reduce hazards and provide for occupant and rescuer safety.
Chapter 13A—Duty to Maintain Defensible Space and Abate Hazardous Vegetation and Combustible Material	12/02/2019	County Ordinance to provide for increased requirements for property owners to maintain vegetation and defensible space with the intention of reducing the risk of wildfire.
Ordinance # 06-2019 An Ordinance of The City of Sonoma Adopting New Administrative Provisions and Adopting by Reference Parts 2, 2.5, 3, 4, 5, 6, 8, 9, 10, 11 and 12 of the 2019 California Building Standards Code and Amendments.	11/04/2019	Adoption and amendments to existing State Codes that are more restrictive designed to reduce hazards and provide for occupant and rescuer safety.
Sonoma Valley Fire District Vegetation Management and Weed Abatement Programs.	11/04/2019	An internal plan to ensure compliance with applicable vegetation management and weed abatement ordinances within the district to provide for risk reduction.
Sonoma Valley Fire District, Sonoma Citizens Organized to Prepare for Emergencies.	01/01/2020	The Sonoma Valley Fire District, in cooperation with the City of Sonoma, has developed guidelines for emergency preparedness in our community.
Sonoma County CWPP	In process	The goal of the CWPP is to enhance efforts to protect communities, watersheds and other at-risk lands from catastrophic wildfire. A CWPP is not a regulatory document, but provides wildfire hazard and risk assessments, community descriptions, options for addressing issues of structural vulnerability to wildfire (Home Hardening), and provides a prioritized list of projects which, if implemented, can serve to reduce wildfire hazards.
Sonoma Valley Fire District Capital Improvement Plan	07/2020	Plan outlines timelines, funding sources and responsible staff to ensure maintenance, repair and replacement of capital assets.
Sonoma Valley Fire District Fire Impact Fee	02/2021	Impact fees are necessary to ensure that the District can adequately expand its fire protection facilities, apparatus, and equipment needed for the resident and employee growth and new structural area created by new development.

Table 10-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
<i>If yes, specify:</i>	
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes/No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Federal Grant Programs	Yes—Staffing for Adequate Fire and Emergency Response Grant

Table 10-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i>	No
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i>	No
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i>	No
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i>	No
Surveyors <i>If Yes, Department /Position:</i>	No
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i>	No
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i>	No
Emergency manager <i>If Yes, Department /Position:</i> Fire / Sonoma Valley Fire District	Yes
Grant writers <i>If Yes, Department /Position:</i> Fire / Sonoma Valley Fire District / Multiple	Yes
Other <i>If Yes, Department /Position:</i>	No

Table 10-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	No
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> svfra.org contains references on hazard mitigation to include wildfire preparedness, hazard mitigation, disaster response plan.	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> The Sonoma Valley Fire District maintains a social media presence on multiple platforms to include— Facebook, Website Blog, Next Door, Ring that is utilized to communicate public education information to reduce community risk.	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> The Sonoma Valley Fire District Board of Directors is made up of elected members of the community.	Yes
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> The Sonoma Valley Fire District is responsible for the Sonoma Citizens Organized to Prepare for Emergencies. The Program organizes and instructs the community on hazard reduction and emergency preparedness.	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Partners with the Sonoma County Office of Emergency Services Alert and Warning Systems.	Yes

Table 10-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No		
DUNS#	Yes	965293157	
Community Rating System	No		
Building Code Effectiveness Grading Schedule	No		
Public Protection	No		
Storm Ready	No		
Firewise	No		
Tsunami Ready	No		

Table 10-8. Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating ^a
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts <i>Comment:</i>	Low
Jurisdiction-level monitoring of climate change impacts <i>Comment:</i>	Low
Technical resources to assess proposed strategies for feasibility and externalities <i>Comment:</i>	Low
Jurisdiction-level capacity for development of greenhouse gas emissions inventory <i>Comment:</i>	Low
Capital planning and land use decisions informed by potential climate impacts <i>Comment:</i>	Low
Participation in regional groups addressing climate risks <i>Comment:</i>	Low
Implementation Capacity	
Clear authority/mandate to consider climate change impacts during public decision-making processes <i>Comment:</i>	Low
Identified strategies for greenhouse gas mitigation efforts <i>Comment:</i>	Low
Identified strategies for adaptation to impacts <i>Comment:</i>	Low
Champions for climate action in local government departments <i>Comment:</i>	Low
Political support for implementing climate change adaptation strategies <i>Comment:</i>	Low
Financial resources devoted to climate change adaptation <i>Comment:</i>	Low
Local authority over sectors likely to be negative impacted <i>Comment:</i>	Low
Public Capacity	
Local residents knowledge of and understanding of climate risk <i>Comment:</i>	Low
Local residents support of adaptation efforts <i>Comment:</i>	Low
Local residents' capacity to adapt to climate impacts <i>Comment:</i>	Low
Local economy current capacity to adapt to climate impacts <i>Comment:</i>	Low
Local ecosystems capacity to adapt to climate impacts <i>Comment:</i>	Low

a. High = Capacity exists and is in use; Medium = Capacity may exist, but is not used or could use some improvement; Low = Capacity does not exist or could use substantial improvement; Unsure= Not enough information is known to assign a rating.

10.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

10.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Sonoma Citizens Organized to Prepare for Emergencies**—Training and organization of community members and groups designed to facilitate emergency preparation and response.
- **Staffing for Adequate Fire and Emergency Response Grants**—Provide funding directly to fire departments and volunteer firefighter interest organizations to help them increase or maintain the number of trained, "front line" firefighters available in their communities. The goal of this grant program is to enhance the local fire departments' abilities to comply with staffing, response and operational standards established by the NFPA (NFPA 1710 and/or NFPA 1720).
- **Community Risk Reduction Messaging Program**—In collaboration with the Northern California Fire Prevention Officers Association and the National Fire Protection Agency our agency actively engages the community in Community Risk Reduction Messaging via in person training, social media outreach and engagement, website publications and through the press.
- **Hazardous Vegetation Inspection & Abatement Program**—In cooperation with the Sonoma County PRMD Fire Prevention Office the Sonoma Valley Fire District inspects properties for compliance. Selected properties that are not within city limits (improved and unimproved) may be part of the inspection program. Critical to protect homes from wildfire, defensible space includes a "lean, clean and green" zone 30 feet (or to the property line) from buildings, and a "reduced fuels zone," which can have more natural vegetation, from 30 feet to 100 feet (or to the property line) from structures.
- **Community Fire Safe Councils**—The Sonoma Valley Fire District continues to work with local community groups in the formation of Fire Safe Councils.
- **Creation of a newly formed fire district**—The creation of the newly formed Fire District (Sonoma Valley Fire District) along with a contract for services with the City of Sonoma allows the fire department to take advantage of shared resources. These shared resources and realized cost savings allow the newly formed district to operate more effectively.

10.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Building & Fire Code amendments and modifications**—The Sonoma Valley Fire District in collaboration with the County of Sonoma, and the incorporated City of Sonoma has the opportunity to amend and modify existing codes to make them more restrictive. Opportunities may be available to direct future changes to mitigate risks identified through this process.
- **Sonoma Valley Fire Unmanned Aircraft Fire Prevention & Safety Unit**—The Sonoma Valley Fire District has recently implemented a sUAS (small unmanned aircraft system) program that may provide intelligence and information used to meet or identify future hazard mitigation goals.
- **Expand our Community Risk Reduction division in personnel and capability**
- **Sonoma County—CWPP**—Integrate the Sonoma County Wildfire Mitigation Plan with this plan

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

10.6 RISK ASSESSMENT

10.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 10-9 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 10-9. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Wildfires	DR-4569-CA	September 4 – November 17, 2020	Unknown
Wildfires	DR-4558-CA	August 14 – September 26, 2020	Unknown
Covid-19 Pandemic	DR-4442-CA	January 2020 – Present	Unknown
Kincade Fire	FM-5295-CA	October 23 – November 7, 2019	Unknown
PG&E Power Shutoff	N/A	October 2019	Unknown
Severe Winter Storms Flooding	DR-4434-CA	February 24 – March 1, 2019	Unknown
PG&E Power Shutoff	N/A	October 2018	Unknown
Wildfires	DR-4344-CA	October 8 – 31, 2017	Unknown
Nuns Fire	FM-5220-CA	October 8, 2017	Unknown
Severe Winter Storms Flooding	DR-4308-CA	February 1 – 23, 2017	Unknown
Severe Winter Storms Flooding	DRE-4301-CA	January 3 – 12, 2017	Unknown
Valley Fire	DR-4240-CA	September 12 – 25, 2017	Unknown
South Napa Earthquake	DR-4193-CA	August 24, 2014	Unknown
Drought	N/A	2014-2016	Unknown
H1N1 Influenza	N/A	April/May 2009	Unknown
New Year's Floods	DR-1628-CA	December 31 – January 3, 2006	Unknown
Geysers Fire	FM-2554-CA	September 3 – 8, 2004	Unknown
Rio Nido Debris Flow	DR-1203-CA	February 2, 1998	Unknown
New Year's Flood	DR-1155-CA	December 28 – January 4, 1997	Unknown
Cavedale Fire	N/A	July 31 – August 20, 1996	Unknown
Freeze of 1991	N/A	December 1990 – February 1991	Unknown

10.6.2 Hazard Risk Ranking

Table 10-10 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 10-10. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Earthquake	38	High
2	Wildfire	32	High
3	Landslide	30	Medium
4	Flood 100/yr.	18	Medium
5	Flood Awareness	18	Medium
6	Flood 500/yr.	16	Medium
7	Sea Level Rise	9	Low
8	Dam Failure	6	Low
9	Tsunami	0	Low

10.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Earthquake
- Wildfire
- Landslide

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

10.7 HAZARD MITIGATION ACTION PLAN

Table 10-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 10-12 identifies the priority for each action. Table 10-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 10-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action SVF-1 —Provide earthquake retrofitting for hardening and to build resilience to critical infrastructure within the Sonoma Valley Fire District, specifically Sta.5.						
<i>Hazards Mitigated:</i> Earthquake, wildfire						
Existing	3, 4, 6, 9	Sonoma Valley Fire District	None	High	HMGP, BRIC, OES	Short-term
Action SVF-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> All hazards						
New & Existing	1, 5, 8	Sonoma Valley Fire District	None	Low	Staff Time, General Funds	Short-term
Action SVF-3 —Participate in hazard fuel reduction projects based on the findings of the Sonoma County CWPP and along major transportation and evacuation corridors within the SVFD						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	1, 2, 3, 6, 7, 8	Sonoma Valley Fire District	CalFire, Sonoma County, City of Sonoma, Fire Safe Sonoma, Local Fire Safe Councils	Cost varies on complexity of projects	HMGP, PDM, Private Funding, Private Grants	Ongoing
Action SVF-4 —Participation in regional groups addressing climate risks.						
<i>Hazards Mitigated:</i> Wildfire, Flooding, Landslide, Seal Level Rise, Dam Failure						
New & Existing	1, 2, 3, 4, 5, 6, 8	Sonoma Valley Fire District	Various	Low	Staff Time, General Funds	Ongoing
Action SVF-5 —Provide training to SVFD staff and secure necessary equipment and resources to have the ability to provide internal GIS functions.						
<i>Hazards Mitigated:</i> Wildfire, Flooding, Landslide, Sea Level Rise, Dam Failure						
New & Existing	4, 5, 8	Sonoma Valley Fire District	None	Low	Staff Time, General Funds	Short-term
Action SVF-6 —Provide training to SVFD in website development.						
<i>Hazards Mitigated:</i> All Hazards						
New & Existing	4, 5, 6, 8	Sonoma Valley Fire District	None	Low	Staff Time, General Funds	Short-term
Action SVF-7 —Actively engage the community within our District on practices designed to mitigate the effects of climate change.						
<i>Hazards Mitigated:</i> Landslide, Sea Level Rise, Flooding, Dam Failure						
New & Existing	4, 5, 6	Sonoma Valley Fire District	None	Low	Staff Time, General Funds	Ongoing
Action SVF-8 —Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including the Sonoma County CWPP and other SVFD Plans as indicated in Section 1.5.1.						
<i>Hazards Mitigated:</i> Wildfire, Flooding, Landslide, Sea Level Rise, Dam Failure, Earthquake						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8	Sonoma Valley Fire District	None	Low	Staff Time, General Funds	Ongoing
Action SVF-9 —Educate the public on the landslide hazard and appropriate risk reduction alternatives.						
<i>Hazards Mitigated:</i> Landslide						
New & Existing	4, 5, 6	Sonoma Valley Fire District	None	Low	Staff Time, General Funds	Ongoing

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 10-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
SVF-1	4	High	High	Yes	Yes	No	Medium	High
SVF-2	3	High	Low	Yes	No	Yes	High	Low
SVF-3	6	High	High	Yes	Yes	No	Medium	High
SVF-4	7	Medium	Low	Yes	No	Yes	High	Low
SVF-5	3	Medium	Low	Yes	Yes	Yes	High	Low
SVF-6	3	Medium	Low	Yes	Yes	Yes	High	Low
SVF-7	3	Medium	Low	Yes	No	Yes	High	Low
SVF-8	8	High	Low	Yes	No	Yes	High	Low
SVF-9	3	Medium	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 10-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
High-Risk Hazards								
Earthquake	SVF-8	SVF-1, 8	SVF-8		SVF-1, 2, 5, 6, 8		SVF-2, 4, 8	SVF-6, 7
Wildfire	SVF-8	SVF-1, 8	SVF-8	SVFD-3, 4	SVF-1, 2, 3, 5, 6, 8		SVF-2, 4, 8	SVF-6, 7
Medium-Risk Hazards								
Landslide	SVF-8	SVF-8	SVF-7, 9	SVFD-3	SVF-2, 3, 4, 5, 6, 7, 8, 9		SVF-2, 4, 8	SVF-6, 7, 9
Flood	SVF-8	SVF-8	SVF-7, 9		SVF-2, 4, 5, 6, 7, 8		SVF-2, 4, 8	SVF-6, 7
Low-Risk Hazards								
Sea Level Rise	SVF-8	SVF-8	SVF-7, 9		SVF-2, 4, 5, 6, 7, 8		SVF-2, 4, 8	SVF-6, 7
Dam Failure	SVF-8	SVF-8	SVF-7, 9		SVF-2, 4, 5, 6, 7, 8		SVF-2, 4, 8	SVF-6, 7
Tsunami	SVF-8	SVF-8	SVF-7, 9		SVF-2, 4, 5, 6, 7, 8		SVF-2, 4, 8	SVF-6, 7

a. See the introduction to this volume for explanation of mitigation types.

10.8 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed for this annex.

- **Sonoma Valley Fire District’s fire records management software**—Used to analyze incident data, apparatus and equipment resource data, occupancy and fire inspection data and history.
- **Previous City of Sonoma HMP document**—Used as reference.
- **Technical data and values for fire apparatus and other infrastructure obtained from department records and vendor data**—Used as reference.

- **Sonoma Valley Fire District Fire Impact Fee Nexus Study 2020**—Used as reference

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.
- **Area population census data**— Used as reference.
- **Community Wildfire Protection Plan (Sonoma County)**—Used as reference.
- **County of Sonoma GIS Website**— Used as reference.
- **Grove Street Fire Safe Council**—Used as reference