

Existing Hazard Mitigation Actions



This appendix compiles the existing hazard mitigation actions and general plan safety element policies of the Napa County Jurisdictions. These actions and policies are categorized by hazard topic in each of the tables below (along with a summary table). Each hazard mitigation action includes detailed information such as the responsible party, time frame, estimated capital cost, estimated maintenance cost, potential funding sources, and priority. In contrast, safety element policies typically do not contain such detailed information, so that information is not included for them. This comprehensive compilation of existing policies and actions laid the foundation to develop adaptation strategies, measures, and actions for the RCAAP. The documents reviewed in preparation for this appendix include:

- ▶ Napa County Operational Area Hazard Mitigation Plan (2020)
- ► City of Napa Hazard Mitigation Plan Update (2022)
- ▶ Napa County General Plan Safety Element (2023)
- ► City of American Canyon Flood Hazards Element (2019)
- ► City of Calistoga General Plan Public Safety Element (2014)
- ► City of Napa 2040 General Plan Safety and Noise Element (2022)
- ▶ St. Helena General Plan Update 2040 Public Health, Safety, and Noise Element (2019)
- ► Yountville General Plan Safety + Hazards Element (2019)

Summary - Number of Existing Hazard Mitigation Actions and Safety Element Policies

	Napa County	American Canyon	Calistoga	Napa	St. Helena	Yountville	Total
Wildfire	30	1	24	16	15	9	95
Extreme Heat	5	_	_	1	_	_	6
Sea Level Rise + Flooding	29	3	6	13	19	18	88
Drought + Water Supply	13	1	1	3	4	1	23
Energy Grid Impacts	3	_	3	2	2	_	10
Emergency Preparedness	39	_	5	17	5	10	76

Existing Hazard Mitigation Actions and Safety Element Policies Related to Wildfire

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
During drought conditions increase fuel reduction in parks and open space areas.	County	Annually	Unknown	Unknown	General Funds/Grants	High
Map and identify locations and implement fuel reduction projects in high-risk areas in the City such as the areas west of Highway 128.	Calistoga	Ongoing	Unknown	Unknown	Existing Department Budgets	High
Maintain and further develop the fuel reduction program to include provisions for Legacy High School fuel breaks.	American Canyon	Ongoing	Unknown	N/A	ACFPD General Fund, Fire Prevention Grant Programs, Cost Recovery Fees	Extreme
Retrofit critical public safety infrastructure.	Calistoga	5-10 Years	Unknown	Unknown	General Fund/Grants	Extreme
Revise the General Plan Safety Element with lessons learned from to include new information from HMP and fire-wise programs and analysis.	Calistoga	1-3 Years	50,000	Unknown	General Fund	Extreme
Focus on human causes of ignition and address the problem through education and enforcement actions. Develop "mitigation" resources for residents in high hazard areas including incentives for fuel reduction and building material retrofits.	Calistoga	Ongoing	Unknown	Unknown	General Fund	Extreme
Fund / augment chipper program equipment and resources.	County	1-3 Years	50,000	10,000 Annually	CAL FIRE Community Fire Prevention Grants/Fire Mitigation Grants/California Fire Safe Council	Medium
Continue technical and financial assistance to private property owners to implement fuel reduction projects.	County	Annually	50,000	10,000 Annually	CAL FIRE Community Fire Prevention Grants/Fire Mitigation Grants/California Fire Safe Council	High
Develop & conduct a Defensible Space community education program.	County	Annually	25,000	5,000 Annually	Napa County Fire Department/Fire Mitigation Grants	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Draft & promulgate Defensible Space Ordinance.	County	Annually	N/A	Staff work as necessary	N/A	High
Foster & form neighborhood based Firewise Councils through grant writing.	County	Annually	25,000	N/A	Grants	High
Retrofit critical public safety infrastructure with fire resistant materials and or create defensible space around structures.	County	5-10 Years	200,000	20,000	General Funds/Grants	High
Focus on human causes of ignition and address the problem through education and enforcement actions, to include vigorous investigation and prosecution of arson.	County	3-5 Years	50,000	10,000 Annually	General Fund	High
Conduct prescribed burns as part of wildfire mitigation strategy.	County	3-5 Years	100,000	20,000 Annually	Napa County Fire Department/Fire Mitigation Grants	Medium
Retrofit care facilities (adult care, childcare) with fire- resistant materials and or create defensible space around structures.	County	3-5 Years	50,000	10,000 Annually	Fire Mitigation Grants	High
Complete vegetation management projects as prescribed in CWPPs.	County	Annually	200,000	50,000 Annually	CAL FIRE Community Fire Prevention Grants/Fire Mitigation Grants/California Fire Safe Council/ Cal. Consv. Corps/ General Fund	High
Construct shaded fuel breaks and complete roadside treatment projects as prescribed in CWPPs.	County	Annually	750,000	50,000 Annually	CAL FIRE/ California Fire Safe Council/ California Conservation Corps/ Napa County General Fund	High
Install proper addressing in rural areas to assist in wildfire emergencies.	County	1-3 Years	25,000	5,000 Annually	Existing County Funds/Grants	Medium

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Work with utility providers to move above ground lines underground.	PG&E	5-10 Years	1,500,000	250,000 Annually	Fire Mitigation Grants	High
Construct or improve egress for wildfire emergencies in wildland urban interface (WUI) areas.	County	5-10 Years	50,000	10,000 Annually	CAL FIRE/Napa Firewise/California Fire Safe Council	High
Provide smoke/air quality mitigation measures for Critical Facility Air Intakes.	St. Helena	1-3 Years	Unknown	Unknown	Bonds, Grants, Fee Increases	Extreme
Implement fuel reduction projects to reduce impacts to homes and businesses.	St. Helena	Ongoing	Unknown	Unknown	Existing Budget, Grants	Extreme
Retrofit At-Risk Structures with Ignition-Resistant Materials or Require or Encourage Fire-Resistant Construction Techniques.	St. Helena	Ongoing	Unknown	Unknown	Existing Budget, Grants	Extreme
Develop and or share outreach material on air quality mitigation measures for residents before wildfire season.	St. Helena	Annually	10,000	2,500	Existing Budget, Grants	Extreme
Implement fuel reduction/building retrofit projects to limit combustibility to school facilities.	St. Helena	Ongoing	Unknown	Unknown	Bonds, Grants, Fee Increases	Extreme
Develop Public awareness information for wildfire season related to flame/sparking equipment.	St. Helena	Ongoing	10,000	2,500	Existing Budget, Grants	Extreme
Work with local agencies to develop evacuation plans and provide education and outreach to populations vulnerable to wildfire.	Yountville	Annually	25,000	25,000	Town General Fund And Grant Funding	High
Develop Structural Protection Plans for Wildland Urban Interface Areas.	City of Napa	1-3 Years	Medium	Unknown	HMGP/BRIC, AFG	High
Continue to support the Napa Communities Firewise Foundation in the development of Fire Safe Councils and implementation of the 2021 Community Wildfire Protection Plan.	City of Napa	Ongoing	High	Unknown	HMGP/BRIC, Internal Funding	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Continue to upgrade existing water utility infrastructure to increase redundancy in high fire hazard areas especially at the rural and urban interface to minimize the risk of losing access to infrastructure during an event.	City of Napa	3-5 Years	High	Unknown	HMGP/BRIC, AFG	Medium
Ensure the Fire Department reviews all building plans in WUI areas for defensible space, emergency vehicle access, fire flow and ignition resistant construction requirements.	City of Napa	Ongoing	Medium	Unknown	HMGP/BRIC, AFG	Low
Provide an ongoing vegetation management program such as the City's weed abatement ordinance to prohibit the spread of wildfire in ground and aerial fuels and to assist homeowners in developing defensible space.	City of Napa	1-3 Years	Medium	Unknown	HMGP/BRIC, AFG	Low
Coordinate watershed protection efforts within the Lake Hennessey and Lake Milliken watersheds to protect drinking water supplies from water quality impacts.	City of Napa	Ongoing	High	Unknown	HMGP/BRIC, Internal Funding	High
Implement Lake Hennessy Intake Pump Station Defensible Space /Construction Upgrade.	City of Napa	3-5 Years	High	Unknown	HMGP/BRIC, EMPG, Internal Funding	High
Conduct Lake Hennessy Pipeline Protection Project.	City of Napa	3-5 Years	High	Unknown	HMGP/BRIC, Internal Funding	High
Implement demonstration fuels treatment and emergency access project at Timberhill Park.	City of Napa	3-5 Years	High	Unknown	CAL FIRE, HMGP / BRIC	Extreme
Maintain Fire Access Roads and evacuation routes that have been identified throughout the City of Napa.	City of Napa	Ongoing	Medium	Unknown	Internal Funding, Cal FIRE	Extreme
Fund and implement the Milliken Raw Water Pipeline Hardening Project.	City of Napa	3-5 Years	High	Unknown	HMGP/BRIC	Extreme
Implement fuel reduction in high fire hazard severity zones.	County	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Collaborate with other agencies for the implementation of wildfire and hazard plans.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Maintain consistency with California codes.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Coordinate with fire agencies to plan for fire prevention and suppression needs.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Minimize hazards in very high fire hazard severity zones.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Meet or exceed fire safety standards for Napa County buildings and roads.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Support new technology in fire suppression and prevention.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Ensure new development complies with fire safety standards.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Preserve and maintain fire prevention techniques.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Maintain fire breaks.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Use guidance from the Community Wildfire Protection Plan.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Continue county chipper program.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Require proper addressing and signage.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Coordinate implementation of farmworker wildfire education.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Locate public facilities outside of high fire hazard severity zones.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Implement fire safety and evacuation recommendations.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Implement best practices to address wildfire prevention on open space land within and around the City.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Facilitate communication and education to the community about fire safety, wildland fire protection measures, and evacuation/emergency response to wildland fires.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Continue to educate property owners and the public about local fire hazard prevention programs, vegetation management strategies, and other disaster preparation activities in areas threatened by wildfire.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Ensure that future development plans provide adequate evacuation routes, vegetation management policies, and fire-reduction design measures, as appropriate.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Support efforts to improve the provision of emergency fire services for areas north of Fire Station 5.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Limit development in areas of High and Very High wildfire hazard as defined and mapped by the California Department of Forestry and Fire Prevention (CAL FIRE) in order to prevent the loss of lives, injuries, and property damage due to wildfires.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Ensure that all streets and roads are adequate in terms of width, turning radius, and grade in order to facilitate access by City firefighting apparatus, and to provide alternative emergency routes of ingress and egress.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Designate areas in St. Helena that are prone to fire hazards and make this information available to the community.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Continue to require implementation of best practices in fire resistance for all new and remodeled structures in fire-prone areas, including fire fuel removal, creation of defensible space for firefighters, construction with fire-resistant building materials, and installation of automatic sprinkler systems. Study the need to designate a Wildland-Urban Interface Fire Area within St. Helena to provide protection in additional areas.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Require all structures in high wildfire hazard areas to maintain a clearance of flammable vegetation away from structures and to use fire-resistant ground covers. The minimum clearance distance should be 30 feet.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Require all new development to meet the minimum fire flow rates specified by the City's Fire Code.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Require all new development plans to be approved by the Fire Department prior to the issuance of building permits, grading permits, or final map approval.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Develop a program to inform and educate the community about potential risks, resources, and roles and responsibilities for addressing fire safety in St. Helena. Inform residents of homes adjacent to public lands of their responsibility to provide fire breaks adjacent to their homes.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Develop a program to inform and educate the community about potential risks, resources, and roles and responsibilities for addressing fire safety in St. Helena. Inform residents of homes adjacent to public lands of their responsibility to provide fire breaks adjacent to their homes.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Napa County Fire Department Agreement. Maintain agreement with Napa County Fire Department for fire protection and to maintain adequate level of service.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Risk and Response Time. Coordinate with Napa County Fire Department to meet accepted levels of risk and response time.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Inspections and Site Plan Review. Maintain programs with Napa County Fire Department for inspections and site plan review.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Weed Abatement and Defensible Space. Develop weed abatement and defensible space programs which reduce risk of fire while maintaining native vegetation and wildlife habitat.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Heather Street and Heritage Court Emergency Access. Maintain the existing one-lane emergency access connection at Heather Street and Heritage Court.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
 Fire Risk in New Development. Review all development proposals for fire risk and require mitigation measures to reduce the probability of fire. Encourage attractive native and drought tolerant, low-maintenance landscaping responsive to fire hazards. Require all new development to meet the adopted State and local fire codes. Require adequate access for emergency vehicles, adequate street width and vertical clearance, driveway access and parking restrictions for new development. Require sprinkler systems for new commercial and residential development and substantial remodels and additions. 	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Water Supply for Fire Fighting. Maintain an adequate water supply, fire hydrant system, and water pressure to effectively suppress fires.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Education and Code Enforcement. Increase fire prevention effectiveness through education and code enforcement, including requirements for defensible space around structures and removal of flammable vegetation near roadways.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Plans for development in the Very High Fire Hazard Area shall be reviewed for their incorporation of design measures to reduce wildland fire risk.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
New roadways and driveways in the Very High Fire Hazard Area shall be designed and constructed to be adequate in terms of width, radius, and grade to facilitate access by fire-fighting apparatus.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Enforce wildland fire control measures required by the Fire Code.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
The City shall be fully informed about potential wildfire risks and how wildfires are likely to behave.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Prepare a community wildfire risk assessment that identifies likely severe-case wildfire characteristics; identifies sub-standard conditions, such as existing structures that do not conform to contemporary fire standards, inadequate access, and insufficient water flow; and actions that could be taken to avoid wildfires and minimize wildfire damage.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Provide opportunities for residents within the Very High Fire Hazard Area to be informed about wildfire prevention and response.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Support efforts to organize residents within the Very High Fire Hazard Area to promote fire-wise practices.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
As resources are available, educate residents about defensible space planning and construction, fire-safe landscaping, fire-wise construction, emergency supplies and evacuation, wildfire behavior and "fire hardening" their homes to survive an advancing wildland fire through workshops and providing information.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
As resources are available, work to establish a Fire Safe Council and the preparation of a community action plan that prioritizes hazard mitigation actions and provides a sustained program of wildfire mitigation.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Support events that involve residents in vegetation clean-up.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Seek fire safety grants to fund wildfire mitigation activities such as vegetation management.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Maximize the use of outside resources in responding to wildfires.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Maintain effective communications during major mutual aid incidents.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Work with CAL FIRE to develop a coordinated plan that effectively addresses wildfires in the city and its environs.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Participate in countywide local hazard mitigation planning efforts and the implementation of fire hazard mitigation actions.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Continue to implement state and federal communication and interoperability guidelines and maintain sufficient communication equipment.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Be prepared to minimize damage after a wildfire from erosion, landslides, and mudflows.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Promote appropriate revegetation after a wildfire.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Seek funding for and prepare a burn area recovery plan that provides for revegetation; control of noxious weeds; restoration of native species and wildlife habitats; minimizes flooding, sediment flows and landslides; protects water quality and reduces other risks.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Plan for the disposal of debris and ash, building inspections, and building and grading permits postwildfire.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified

Existing Hazard Mitigation Actions and Safety Element Policies Related to Extreme Heat

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Construct or identify existing locations for cooling centers near farm worker populations.	County	1-3 Years	25,000	10,000 per year	Mitigation Funds	Medium
Develop air conditioning replacement/reimbursement program for low income and elderly residents.	County	1-3 Years	250,000	10,000 annually	Grants/Bonds/Fee Increased	High
Support risk assessments in relation to warmer climate in the agriculture and wine industries.	County	1-3 Years	25,000	5,000 annually	Existing County Funding/Grants	Medium
Conduct public outreach regarding cooling center availability, especially targeting vulnerable populations; periodically review available cooling center usage, distribution, and availability throughout the City.	City of Napa	Ongoing	Low	N/A	HMGP/BRIC	Medium
Construct cooling centers near farmworker populations.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Assist vulnerable populations with acquisition of air conditioning systems.	County	Not identified	Not identified	Not identified	Not identified	Not identified

Existing Hazard Mitigation Actions and Safety Element Policies Related to Sea Level Rise + Flooding

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Plan for and construct sea level rise protection for American Canyon Critical Infrastructure such as Public Works Yard, Sewer Treatment Plant, and Pump Station.	American Canyon	Ongoing	Unknown	Unknown	FEMA	Medium
Support ongoing analysis of sea-level rise data.	County	1-3 Years	50,000	10,000 Annually	Existing County Funds	Medium
Create a comprehensive outreach strategy that informs residents in potentially affected areas of County efforts to protect and increase community resiliency to sealevel rise.	County	1-3 Years	25,000	5,000 Annually	Existing County Funds/Grants	Medium
Elevate 100 of the most flood prone residential structures along areas not receiving direct protection from Measure "A" Flood Project. Provide flood mitigation resource (e.g., ways to reduce flood risk) to residents within the American Canyon Mobile Home Park (68 parcels).	American Canyon	5-10 Years	5,000,000	Unknown	City Capital Budget Grants; Federal Grants	High
Inform American Canyon residents and in-home Adult Care providers of possible flooding during "major" flood events.	American Canyon	Ongoing	Unknown	Unknown	Existing budget or grants	High
Implement localized flood reduction projects or flood- proof 100 of the most flood-prone residential structures along with areas "not" receiving direct protection from Measure "A" Flood Project in the City of Calistoga.	Calistoga	3-5 Years	5,000,000	Unknown	City Capital Budget Grants; Federal Grants	High
Routinely inspect and maintain storm water inlets and outfalls for debris and obstructions, sand & gravel build-up, and structural damage or vandalism.	Calistoga	Annually	30,000	100,000	Local Jurisdictions Annual Budget, General Fund, Local Funding	High
Develop a localized remap of the floodplain, flood projects, or flood-proofing for Critical Facilities within the City; specifically, north of Lincoln Avenue.	Calistoga	3-5 Years	Unknown	Unknown	General Fund/Grants	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Mitigate flood risk for flood-prone residential structures along areas not receiving direct protection from Measure "A" Flood Project.	County	3-5 Years	5,000,000	Unknown	City Capital Budget Grants; Federal Grants	High
Develop a public outreach program that informs property owners located in the dam or levee inundation areas about voluntary flood insurance (preferred risk policies).	County	1-3 Years	40,000	Unknown	Existing budget or grants	High
Increase participation in the NFIP.	County	1-3 Years	25,000	Unknown	Existing budget or grants	High
Draft stream channel ordinance that would place responsibility for maintenance on the property owner and give Napa enforcement power.	County	5-10 Years	Unknown	Unknown	Bonds, grants, fee increases	Low
Construct, install and maintain warning gauges on local dams as the opportunity or need arises.	County	3-5 Years	1,500,000	Unknown	Bonds, grants, fee increases	Medium
Improve risk assessments for dams located within the county.	County	1-3 Years	20,000	5,000	Existing budget	Medium
Complete an inventory of all publicly owned stormwater facilities.	County	1-3 Years	Unknown	Unknown	Existing budget, grants, bonds, fee increases	Low
Create an inventory and establish a priority list for culvert replacement that takes into account fish passage, flood depth reduction, and future losses avoided.	County	3-5 Years	Unknown	Unknown	Existing budget, grants, bonds, fee increases	Low
Relocate farmwork centers from flood risk areas.	County	3-5 Years	Unknown	Unknown	Bonds, grants, fee increases	Medium
Elevate and/or retrofit bridges, culverts to allow proper stormwater / 100-YR flows.	County	5-10 Years	Unknown	Unknown	Bonds, grants, fee increases	Medium
Mitigate flood risk to NFIP repetitive loss properties.	County	Annually	Unknown	Unknown	Existing budget, grants, bonds, fee increases	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Construct / improve stormwater basins County-wide to accomplish 100-YR protection.	County	3-5 Years	Unknown	Unknown	Bonds, grants, fee increases	Medium
Adopt higher regulatory standards (including but not limited to freeboard, comp storage, lower substantial damage thresholds, setbacks, and fill restrictions) as a means to reduce future flood risk and support a no adverse-impact philosophy of floodplain management.	County	1-3 Years	Unknown	Unknown	Existing budget, grants, bonds, fee increases	Medium
Maintain Countywide Storm Watch System.	County	Annually	80,000	30,000	Napa County Watershed Assessment	High
Completion of the Measure "A" Flood Control Project.	County	5-10 Years	100,000,000	100,000	County sales tax/federal funding	High
Routinely inspect storm water channels for vegetation build up or encroachment, trash and debris, silt and gravel build up, and erosion or bank failure and maintain said channels permitted by California Department of Fish and Wildlife.	County	Annually	N/A	200,000	Local watershed assessment/federal funding needed	High
Secure grant funding to develop and implement a river restoration program that would reduce flood damage and increase environmental quality on the river, maintain fish habitat, decrease impediment to drainage by preventing silt build-up and loss of stream bed capacity.	County	5-10 Years	23,000,000	200,000	State and Federal grants	High
Provide flood protection resources to residents on the Napa River to reduce flood losses. Resources could include technical, education and grant application assistance for floodproofing properties.	St. Helena	Ongoing	Unknown	Unknown	Existing budget, grants	High
Provide flood mitigation resources (e.g., ways to reduce flood risk) to residents within the Vineyard Valley Mobile Home Park.	St. Helena	Ongoing	Unknown	Unknown	Existing budget, grants	High
Improve stormwater drainage system capacity and maintenance for Pratt and Pope Street bridges in St. Helena.	St. Helena	5-10 Years	Unknown	Unknown	Bonds, grants, fee increases	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Develop evacuation plans for communities and residents downstream from the Rector Creek Dam.	Yountville	Annually	25,000	25,000	General fund revenue and potential grant funding	High
Identify properties that are potential candidates for elevation, relocation or buyout based on an evaluation of flood risks, project feasibility, and planned flood risk reduction capital projects.	Yountville	Annually	12,000,000	25,000	General fund and grant funding	High
Secure grant funding to develop and implement river restoration program that would reduce flood damages and increase environmental quality on the river, maintain fish habitat, decrease impediment to drainage by preventing silt build up and loss of stream bed capacity.	Yountville	5-10 Years	Unknown	Unknown	General fund and potential grant funding	Medium
Invest in flood prediction and forecast modeling to support all facets of the Napa County floodplain management program, including, but not limited to, flood hazard identification, flood threat recognition in support of flood notification programs, climate change adaptation, and risk assessment.	Yountville	5-10 Years	Unknown	Unknown	General fund and grant funding	Low
Enhance the existing flood notification program to achieve real-time flood threat recognition capability.	Yountville	3-5 Years	Unknown	Unknown	General fund and grant funding	Medium
Complete approved Napa River Flood Protection Project by continuing to assist the U.S. Army Corps of Engineers, Napa County Flood Control and Water Conservation District, other responsible agencies, and the public to maintain funding for the development of the Flood Project.	City of Napa	Ongoing	High	Unknown	HMGP/BRIC, FMA	Extreme

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Pursue funding for the design and construction of storm drainage projects to protect properties that will not be fully protected by the Flood Protection Project, including home elevations, property acquisitions, upstream storage such as detention basins, and channel widening with the associated right-of-way acquisitions, relocations, and environmental mitigations.	City of Napa	Ongoing	High	Unknown	HMGP/BRIC, FMA	High
Coordinate with County to improve Countywide flood surveillance/early warning system.	City of Napa	Ongoing	Low	Unknown	Internal Funding	High
Continue to apply floodplain management regulations for development in the flood plain and floodway.	City of Napa	Ongoing	Medium	Unknown	HMGP/BRIC, FMA	High
Increase coverage of Storm Watch sensors to include small streams that, due to land use changes, have demonstrated an impact on existing streams and urban flooding.	City of Napa	1-3 Years	Medium	Unknown	HMGP/BRIC, FMA, Internal Funding	Medium
Distribute NOAA weather Radios to high risk, limited income families living in flood zones. Develop program of at cost NOAA radios for families in the various flood zones in Napa County. Provide weather radios to block captains.	City of Napa	1-3 Years	Medium	Unknown	N/A	Low
Periodically update the Flood Insurance Rate Maps to reflect the improvements that have been completed as part of the Flood Protection Project.	City of Napa	Ongoing	Low	Unknown	FMA	High
Implement various flood control projects after approved Flood Control Project. For example, additional pump stations are needed to increase the functionality and resilience of the flood wall along the west side of the Napa River.	City of Napa	5-10 Years	High	Unknown	HMGP/BRIC, FMA, Internal Funding	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Implement the Trower Avenue Storm Drain Improvements, Phase II project, which consists of improvements to alleviate flooding from heavy rain events along Valencia Street, Yosemite Street, Diablo Street and Glacier Drive.	City of Napa	3-5 Years	High	Unknown	HMGP/BRIC, FMA	High
Encourage public utility agencies to analyze and prepare for impacts of sea level rise on facilities.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Conduct sea level rise monitoring and public education.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Implement safety and preparation measures from the MJHMP.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Evaluate construction in new floodplains.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Maintain areas subject to flooding in agricultural or open spaces.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Review potential flood impacts for newly proposed projects in a floodway.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Ensure proper maintenance and repairs for dams and levees.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Improve stormwater basins.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Elevate new structures above the 100-year flood level.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Update National Flood Insurance Program floodplain maps.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Seek opportunities to invest in flood prevention infrastructure, including extension of integrated flooding/open space solutions, to reduce impacts from flooding to Downtown Napa and other areas located along the Napa River.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Update the Storm Drain Master Plan focusing the City's effort on condition assessment and needed repairs, storm drain capacity improvements to reduce neighborhood flooding, and assure it is complementary with the Napa River-Napa Creek Flood Protection Project (including both constructed and planned future improvements).	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Limit development in the 100-year floodplain to development which represents an acceptable use of the land in relation to the hazards involved and the costs of providing flood control facilities. Locate critical facilities, such as hospitals, fire stations, police stations, public administration buildings, and schools outside of flood hazard areas, to the extent feasible.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Require all projects in floodplains, to the extent feasible, adhere to strict design guidelines that ensure any proposed development will withstand a flooding event, and will not jeopardize the existing surrounding or downstream structures.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Minimize the risk to people, property and the environment caused by flooding hazards. Site new development to minimize potential damage from a 100-year flood. Continue to require that any new development is constructed FEMA standards. Prohibit the siting of uses within Flood Hazard Areas inconsistent with FEMA standards that could result in health and safety hazards, including those due to the release of chemicals or other substances as a result of inundation or erosion. Ensure that any new flood protection projects comply with federal and State standards.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Ensure that new development or existing lots of record within the 100-year floodplain are properly graded, sited, and constructed to mitigate flood effects and do not cause increases or expansion of the flood area that increase flood risk.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Within the 100-year floodplain, encourage open space uses, such as parks or natural areas.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Ensure that construction of flood barriers does not adversely affect natural floodplains, stream channels and natural barriers that help accommodate or channel flood waters.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Prohibit new development within areas designated as Floodway in the current FEMA Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM).	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Coordinate with the Napa County Flood Control and Water Conservation District and other responsible agencies to maintain protocols and funding for the regular inspection and maintenance of flood control facilities in the city, including levees, floodwalls, floodplain terracing, stormwater detention ponds, and pumping facilities.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Require that development within Special Flood Hazard Areas prepare and implement infrastructure and drainage plans compliant with State and federal requirements in order to minimize risk in these areas.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Locate new essential public facilities outside of Special Flood Hazard Areas, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Coordinate with the Napa County Flood Control District to ensure that stream channels are routinely cleared of vegetation and debris which could impede stormwater flows, while protecting riparian habitat.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Require developers with land adjacent to the Napa River to construct or contribute a fair share toward the construction of necessary flood control improvements.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Strengthen and enforce regulations that prohibit the dumping of litter, fill, and waste materials into creeks and waterways. Educate the public about flooding and health hazards associated with these activities.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Require that sewer and water lines in areas subject to flooding are sited to avoid contamination and flooding when pipelines break.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Prohibit the introduction of urban development in FEMA-designated Floodway zones.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Review Municipal Code Chapter 15.52, Flood Damage Prevention, to ensure that regulations reflect best practices. Periodically update the City's flood hazard regulations in accordance with FEMA/NFIP regulations.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Implement the requirements of FEMA relating to construction in Special Flood Hazards Areas as illustrated on Flood Insurance Rate Maps.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Implement low impact development practices for new development and redevelopment projects to reduce stormwater peak flow rates and volumes from smaller, more frequently occurring storm events.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Mesa-Tallent Lane Storm Drainage Benefit District. Require all development within the Mesa-Tallent Lane Storm Drainage Benefit District to participate and fund improvements which address the drainage problems of the area.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Hopper Creek. Maintain Hopper Creek as a natural creek. Preserve and enhance the riparian habitat and flood control attributes of the creek by requiring development setbacks and regulating the planting and removal of creekside vegetation.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Flood Insurance Rate Maps. Use the most recent Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps to identify 100-Year Flood Events and calculate flow rates within identified stream channels. Monitor FEMA's efforts to map the 200-year flood plain and address new requirements as appropriate.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Development within the 100-Year Flood Zone. Require development within the 100-year flood zone to comply with the floodplain management regulations of the Yountville Municipal Code.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Maintain Flood Wall. Maintain the flood wall surrounding the mobile home parks to reduce damage from flooding.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Extension of Flood Wall. Evaluate whether to extend the flood wall to the church-owned property at the far southeast corner of town.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Storm Drainage System. Maintain unobstructed water flow in the storm drainage system to the maximum extent feasible. Continue to carry out inspections and maintenance of drainage systems.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Flood Protection Easements. Ensure the retention of flood protection easements held by public agencies on private property to prevent development in these areas.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Beard Ditch. Work with Napa County to support its efforts to perform annual maintenance of Beard Ditch for drainage purposes.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Rector Creek Dam. Work with Napa County, the State, and federal agencies to encourage measures to ensure the safety of Rector Creek Dam and to prepare for and respond to potential flooding events.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Coordination with Napa County. Work with Napa County officials in urging the State and federal governments to make flood control improvements to the Napa River which will reduce or eliminate the danger of flooding caused by overflow of the Napa River.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Napa County Stormwater Pollution Prevention Program. Work with the Napa County Flood Control District to implement the Stormwater Pollution Prevention Program to minimize negative impacts of storm runoff.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
Napa County Flood Control District. Participate in the Napa County Flood Control and Water Conservation District to manage flood and storm waters to protect life and property, and to maintain the Napa River, its tributaries, and watershed.	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
No construction shall be permitted in the floodway as mapped by FEMA and modified in subsequent site-specific studies without the approval of a variance by the City Council.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Continue to administer the City's floodplain management regulations.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified
Encourage property owners in Calistoga to purchase National Flood Insurance to reduce the financial risk from flooding and mudflows.	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified

Existing Hazard Mitigation Actions and Safety Element Policies Related to Drought

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Construct and develop alternative water supplies to augment single sources of water delivery.	County	3-5 Years	1,000,000	50,000	Grants/Bonds/Fee Increases	High
Construct rainwater catchment systems to recharge groundwater in government ROWs.	County	5-10 Years	1,000,000	50,000	Grants/Bonds/Fee Increases	Low
Require mandatory water conservation measures during drought emergencies.	American Canyon	Ongoing	Unknown	Unknown	Existing Budget, grants	High
Augment City water supply systems with supply contingency projects for Drought years, such as increasing water supply and treatment capacity of Kimball Reservoir. Contingency planning/projects will include provisions for agriculture sector.	Calistoga	5-10 Years	Unknown	Unknown	Water Enterprise/General Fund/Impact Fees/Grants	High
Develop a public education campaign to encourage water conservation during drought.	County	3-5 Years	25,000	5,000	Existing County Budget/Grants	Medium
Install water monitoring devices on government-owned facilities.	County	5-10 Years	1,000,000	50,000	Grants/Bonds/Fee Increases	High
Install drought tolerant landscaping at government-owned facilities.	County	3-5 Years	250,000	25,000	Grants/Bonds/Fee Increases	Low
Amend or revise water conservation regulations for landscape design.	County	1-3 Years	50,000	10,000 Annually	Existing County Budget/Grants	Medium
Adopt a new water conservation ordinance for commercial and residential land uses limiting outdoor watering.	County	1-3 Years	50,000	10,000 Annually	Existing County Funds/Grants	Medium
Retrofit water supply systems in order to improve water supply and delivery and conserve water.	County	5-10 Years	Unknown	Unknown	Bonds, grants, fee increases	High
Develop landscape planting procedures and planting plans for residents and business wishing to reduce water usage through landscape design.	St. Helena	Ongoing	Unknown	Unknown	Existing budget, grants	High
During drought conditions increase fuel reduction in parks and open space areas.	St. Helena	Ongoing	Unknown	Unknown	Existing budget, grants	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Increase engagement between the fire and drought communities.	Yountville	Ongoing	Unknown	Unknown	General Fund and grants if available	Medium
Secure internal and external water supply sources and maintain reservoir levels to withstand drought years.	City of Napa	Ongoing	Medium	Unknown	HMGP/BRIC	High
Develop a public education campaign to encourage water conservation during drought, in collaboration with the Napa Valley Drought Contingency Plan Task Force and Napa Sanitation District. The intent is to avoid or delay issuance of water restriction emergency declarations.	City of Napa	3-5 Years	Medium	Unknown	HMGP/BRIC, Internal Funding	Medium
Implement recommendations from the Napa Valley Drought Contingency Plan. Incorporate into the City's Urban Water Management Plan.	City of Napa	3-5 Years	High	Unknown	HMGP/BRIC, Internal Funding	High
Construct rainwater catchment systems.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Develop alternative water supplies.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Continue to invest in programs that promote water conservation in Napa County's agricultural industry.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Install water monitoring devices on government-owned facilities.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Invest in water use efficiency and conservation.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Strengthen water conservation measures that result in significant reductions in local water use and the protection of local water resources.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Adopt landscape ordinances that promote drought resistant plants, and limit or restrict lawns and other highwater-demand plants unless irrigated with reclaimed or grey water systems.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified

Existing Hazard Mitigation Actions and Safety Element Policies Related to Energy Grid Impacts

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Establish tree pruning / removal standards for above ground utilities lines within City limits.	Calistoga	1-3 Years	Unknown	Unknown	Existing department budgets	High
Identify schools that have been designated as emergency shelters by the Red Cross within City Limits and ensure they have sufficient back up power generators.	Calistoga	1-3 Years	Unknown	Unknown	Grants	High
Procure backup generators in the event that public meeting spaces such as community centers or town halls will be used as Emergency Command Centers. Perform regular maintenance on generators at water treatment plants.	County	3-5 Years	1,500,000	5,000 annually	Federal Grant Funds	High
Develop microgrids to provide emergency power during natural disasters.	Calistoga	3-5 Years	Unknown	Unknown	General Funds/Grants	High
Harden and build redundant (power and other) capabilities into Public Safety buildings.	County	5-10 Years	1,000,000	20,000 Annually	Federal Grant Funds	Medium
Construct/Install back up power generators for fire stations, pump houses, emergency shelters and cooling centers.	County	1-3 Years	1,500,000	5,000 Annually	Federal Grant Funds	High
Develop microgrids to provide emergency power during natural disasters.	St. Helena	3-5 Years	Unknown	Unknown	Bonds, grants, fee increases	Medium
Provide hazard mitigation information (e.g., ways to reduce risk) to first responders living within hazard-prone areas.	St. Helena	Ongoing	Unknown	Unknown	Existing budget, grants	Medium
Construct backup generators at critical facilities (fire stations, hospital) and sheltering locations to respond to hazard events in loss of power.	City of Napa	Ongoing	Medium	Unknown	HMGP/BRIC	High
Develop cost share program to help private landowners with tree maintenance to avoid power outages and damage during windstorms.	City of Napa	3-5 Years	High	Unknown	HMGP/BRIC	Medium

Existing Hazard Mitigation Actions and Safety Element Policies Related to Emergency Preparedness

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Organize outreach to vulnerable populations, including establishing and promoting accessible shelters in the community.	County	1-3 Years	40,000	5,000	Existing County Funds/Grants	High
Develop a public information campaign on 72-hour kits.	County	1-3 Years	20,000	5,000	General Fund	Medium
Develop a "Natural Hazard Awareness Week" campaign and conduct corresponding outreach to the community and all interested parties. Activities will focus on flooding and other natural hazards, including associated hazard functions, governing laws/regulations, mitigation strategies and precautions. Outreach will also be conducted throughout the year, wherever possible.	County	1-3 Years	80,000	10,000 Annually	Existing County Funds	High
Inform residents and tourists of shelter locations and evacuation routes and procedures for storing or taking valued items before large scale evacuations.	St. Helena	Ongoing	Unknown	Unknown	Unknown	High
Improve existing communication systems, especially developing redundant communication systems and wireless infrastructure.	City of Napa	3-5 Years	High	N/A	HMGP / BRIC, EMPG	High
Build an alternate EOC.	City of Napa	3-5 Years	High	N/A	EMPG, Internal Funding	High
Create a Remote Workers Infrastructure.	City of Napa	1-3 Years	High	N/A	HMGP / BRIC	Medium
Promote greater public awareness of disaster preparedness, hazard mitigation, and disaster recovery.	City of Napa	Ongoing	Low	N/A	Internal funding, N/A	High
Maintain and equip an Emergency Operation Center (EOC) for immediate availability in the event of a disaster.	City of Napa	Ongoing	Low	N/A	N/A	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Work with local businesses to prepare Emergency Preparedness Plans by working with other agencies and advocacy organizations to distribute to and assist businesses with the preparation of plans in the case of disaster.	City of Napa	Ongoing	Low	N/A	N/A	High
Develop short-term shelter options for residents and animals by working with the American Red Cross, Humane Society, animal shelters, pet stores, local veterinarians, and others. Identify locations, necessary facilities, responders, etc.	City of Napa	Ongoing	Low	N/A	N/A	High
Develop procedures for inspecting and tagging business for occupancy after a disaster (Post Disaster Restoration Ordinance).	City of Napa	Ongoing	Low	N/A	N/A	Medium
Establish the position of Disaster Coordinator for the City of Napa.	City of Napa	1-3 Years	Medium	N/A	N/A	Medium
Develop a program to identify evacuation routes and procedures for all sensitive facilities and implement programs to practice evacuation and safety maneuvers.	City of Napa	Ongoing	Medium	N/A	N/A	Low
Develop a Climate Action Plan applicable with state and federal law.	City of Napa	Ongoing	Medium	N/A	N/A	Low
Organize outreach to vulnerable populations, including establishing and promoting accessible shelters in the community.	County	1-3 Years	40,000	5,000	Existing County Funds/Grants	High

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Promote intergovernmental cooperation and training. The County supports and will promote intergovernmental cooperation among local, state, and federal public agencies to reduce known hazards; further define uncertain hazards; and provide interagency training to effectively respond and coordinate during hazardous events. In particular, the County will work to develop cooperative working relationships with agencies having responsibility for flood and fire protection. Action Item SAF-1.1a: Participate in education programs. Participate in local, regional, and state education programs regarding fire, flood, and geologic hazards. Action Item SAF-1.1b: Promote safety training. Work to ensure that all county fire departments and local law enforcement, as well as other emergency office staff, identify potentially hazardous and cascading hazardous events and perform regular training biannually.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Provide up-to-date information. Individuals and businesses should have access to up-to-date information that allows them to collaborate with regional agencies and community-based organizations to expand communications, improve hazard preparation and response, and be able to make informed decisions about potential safety hazards and the level of risk they are willing to accept.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Perform post-disaster evaluation. Following disasters, conduct an evaluation of redevelopment, particularly after large fires.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Develop intra-county evacuation routes. The County shall cooperate with other local jurisdictions to develop intra-county evacuation routes to be used in the event of a disaster within Napa County.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Update evacuation routes.	County	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Utilize diverse communication technologies.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Maximize Alert Napa County registrations.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Address mental health in emergency planning.	County	Not identified	Not identified	Not identified	Not identified	Not identified
Disseminate emergency planning information (to the ag industry)	County	Not identified	Not identified	Not identified	Not identified	Not identified
Update evacuation planning actions	County	Not identified	Not identified	Not identified	Not identified	Not identified
36 actions on emergency preparedness	County	Not identified	Not identified	Not identified	Not identified	Not identified
Regularly assess adequacy of emergency response and evacuation routes and identify any need for road extensions to serve neighborhoods that do not have sufficient evacuation routes or access for emergency services.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Work with Downtown businesses to establish plans and procedures guiding response to natural disasters.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Inform and educate community members about natural hazards and safety procedures.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Effectively coordinate disaster response and preparation strategies with County, regional, State, and federal agencies in the event of major seismic activity, flood, or wildland fire.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Coordinate with other local public agencies to facilitate resilient telecommunication networks and infrastructure during disasters.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Facilitate expansion of the telecommunication system to ensure widespread community access during a disaster.	City of Napa	Not identified	Not identified	Not identified	Not identified	Not identified
Ensure that City emergency procedures are adequate in the event of potential natural or manmade disasters.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified

Description	Responsible Party	Timeframe	Estimated Capital Costs	Estimated Maintenance Cost	Potential Funding Sources	Priority
Maintain and periodically update the City's Emergency Response Plan.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Conduct periodic emergency response exercises to test the effectiveness of City emergency response procedures.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
Continue to collaborate with regional agencies and neighboring jurisdictions to develop and implement a regional emergency coordination plan and agreement for police, fire, and emergency medical services.	St. Helena	Not identified	Not identified	Not identified	Not identified	Not identified
7 policies/actions + 3 policies/actions on emergency management + disaster planning	Yountville	Not identified	Not identified	Not identified	Not identified	Not identified
5 Policies/actions on emergency management + disaster planning	Calistoga	Not identified	Not identified	Not identified	Not identified	Not identified