

Draft Environmental Hazards Element 4/10/19 version

Draft Goals, Policies, and Programs	Origin of Goal, Policy, or Program
<p>GOAL EH-1: HAZARD MITIGATION</p> <p>Minimize San Rafael’s risk and vulnerability to the impacts of environmental hazards. The City will reduce the potential for damage and losses to property, health and human life, the economy, and the environment.</p>	<p>The goal to the left is from the recently adopted Local Hazard Mitigation Plan. It will replace Safety Goal 1 in General Plan 2020, which was as follows:</p> <p>“It is the goal of San Rafael, as the first priority for city government, to provide excellent fire, public safety, and paramedic services and to be prepared in the case of disaster or emergency. San Rafael residents deserve to feel safe and secure wherever they live, work, and play.”</p> <p>Although the existing goal remains relevant, it doesn’t really fit the Environmental Hazards Element as written. A goal to provide excellent fire, public, safety and paramedic services will be located in the new Community Services and Facilities Element. Disaster and emergency preparedness is now covered by Goal S-4.</p>
<p>POLICY EH-1.1: Local Hazard Mitigation Plan</p> <p>The San Rafael Local Hazard Mitigation Plan is adopted by reference into the General Plan. Policies and actions throughout the General Plan shall be consistent with the LHMP and support its goals and objectives.</p>	<p>NEW. This is a new policy. SB 379 requires that cities incorporate their Local Hazard Mitigation Plans into their General Plans. LHMP policies are necessary to qualify for FEMA funding.</p>
<p>Program EH-1.1A: Mitigation Action Plan.</p> <p><i>Implement the Mitigation Action Plan in the LHMP. The City will consider opportunities to advance each action in the Plan through future operating procedures, development approvals, budgets, and capital improvement projects.</i></p>	<p>NEW. This is a new program, intended to implement the policy.</p>
<p>Program EH-1.1B: Mitigation Program Funding</p> <p><i>Develop an overall funding strategy to prioritize and pursue mitigation projects, including identification and tracking of grants and regular coordination with FEMA and State hazard mitigation agencies.</i></p>	<p>NEW. This has been adapted from the Local Hazard Mitigation Plan, which has many actions related to funding.</p>
<p>Program EH-1.1C: LHMP Updates</p> <p><i>Periodically update the Local Hazard Mitigation Plan to reflect new data, current conditions, available resources, and state and federal requirements.</i></p>	<p>REPLACES Program S-21.A, which was:</p> <p>Local Hazard Mitigation Plan. Prepare and adopt a local/ multi-hazard mitigation plan, which includes addressing rise in sea level and measures for disaster preparedness and adaptation.</p>

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<p>POLICY EH-1.2: Location of Future Development</p> <p>Permit development only in those areas where potential danger to the health, safety, and welfare of the community can be adequately mitigated. Land uses and densities should take natural hazards into consideration.</p>	<p>REPLACES Policy S-1, which is shown below. Second sentence reflects Committee input:</p> <p>Location of Future Development</p> <p>Permit development only in those areas where potential danger to the health, safety, and welfare of the residents of the community can be adequately mitigated.</p>
<p>Program EH-1.2A: Entitlement Process <i>Use the entitlement process to evaluate the potential for hazards and to require appropriate mitigation measures and approval conditions.</i></p>	<p>REPLACES Program S-1A, which is shown below. Proposed language applies more broadly to all hazards, consistent with the LHMP.</p> <p>Entitlement Process. Through the entitlement process, evaluate applications for geo-seismic and hazardous materials dangers and require appropriate mitigations.</p>
<p>POLICY EH-1.3: Location of Public Improvements</p> <p>Avoid locating public improvements and utilities in areas with high hazard levels. When there are no feasible alternatives, require effective mitigation measures to reduce the potential for damage.</p>	<p>REPLACES Policy S-2 in the 2020 General Plan, which is shown below. Policy has been simplified and more broadly applied to “high hazard areas,” consistent with the LHMP:</p> <p>Location of Public Improvements</p> <p>Avoid locating public improvements and utilities in areas with identified flood, geologic, and/or soil hazards to avoid any extraordinary maintenance and operating expenses. When the location of public improvements and utilities in such areas cannot be avoided, effective mitigation measures will be implemented.</p>
<p>Program EH-1.3A: Critical Facilities in Vulnerable Areas. <i>Prepare a Public Facility Vulnerability Assessment to identify City buildings and other infrastructure that is susceptible to natural hazards. Measures should be taken to minimize damage potential and interruption of service following a disaster.</i></p>	<p>NEW. This is a new high priority program, taken from the Local Hazard Mitigation Plan.</p>
<p>Program EH-1.3B: Use of Hazard Maps in Development Review <i>Review slope stability, seismic, flood hazard, sea level rise, and wildfire hazard maps when development is proposed. Require appropriate studies to ensure that hazards are identified and mitigated.</i></p>	<p>REPLACES Policy S-3 in the 2020 General Plan, which is shown below. Other hazard maps are now listed (Committee member suggestion):</p> <p>Use of Hazard Maps in Development Review</p> <p>Review Slope Stability, Seismic Hazard, and Flood Hazard Maps at the time a development is proposed. Undertake appropriate studies to assure</p>

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	identification and implementation of mitigation measures for identified hazards.
<p>POLICY EH-1.4: Geologic Hazards</p> <p>Minimize potential risks associated with geologic hazards, including earthquake-induced ground shaking and liquefaction, landslides, erosion, sedimentation, and settlement. Development proposed within geologic hazard areas shall not be endangered by, nor contribute to, hazardous conditions on- or off-site. New development should only be approved in areas of identified geologic hazard if the hazard can be appropriately mitigated.</p>	<p>REPLACES Policies S-4 and S-5 in the 2020 General Plan, which are shown below.</p> <p>Policy S-4: Geotechnical Review</p> <p>Continue to require geotechnical investigations for development proposals as set forth in the City's Geotechnical Review Matrix (Appendix F). Such studies should determine the actual extent of geotechnical hazards, optimum design for structures, the advisability of special structural requirements, and the feasibility and desirability of a proposed facility in a specified location.</p> <p>Policy S-5: Minimize Potential Effects of Geological Hazards.</p> <p>Development proposed within areas of potential geological hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. Development in areas subject to soils and geologic hazards shall incorporate adequate mitigation measures. The City will only approve new development in areas of identified hazard if such hazard can be appropriately mitigated.</p>
<p>Program EH-1.4A: Geotechnical Review</p> <p><i>Continue to require geotechnical studies and peer review for proposed development as set forth in the City's Geotechnical Review Matrix (Appendix F). Such studies should determine the extent of geotechnical hazards, optimum design for structures, the need for special structural requirements, and the feasibility and desirability of a proposed facility in a specific location.</i></p>	<p>REPLACES Program S-4A in the 2020 Plan and incorporates the Appendix F (Matrix) reference in Policy S-4 above. Former Program S-4a is shown below:</p> <p>Geotechnical Review of Proposed Development. Require soils and geologic peer review of development proposals in accordance with the Geotechnical Review Matrix to assess such hazards as potential seismic hazards, liquefaction, landsliding, mudsliding, erosion, sedimentation and settlement in order to determine if these hazards can be adequately mitigated. Levels of exposure to seismic risk for land uses and structures are also outlined in the Geotechnical Review Matrix, which shall be considered in conjunction with development review.</p>

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<p>Program EH-1.4B: Geotechnical Review Matrix <i>Periodically review and update the City's Geotechnical Review Matrix, which describes procedures for site-specific investigations for projects being reviewed according to proposed occupancy, types, and hazard zone. The Matrix should support and implement the Local Hazard Mitigation Plan.</i></p>	<p>CARRIES FORWARD Program S-4B from 2020 Plan, with new sentence to link to LHMP. Program S-4b in the 2020 Plan is shown below:</p> <p>Geotechnical Review Matrix. Periodically review and update the Geotechnical Review Matrix, which describes procedures for site-specific investigations for projects being reviewed according to proposed occupancy, type and hazard zone(s) within which the site is located.</p>
<p>Program EH-1.4C: Earthquake Hazard Study <i>As recommended by the Local Hazard Mitigation Plan, complete an Earthquake Hazard Study that examines geologic hazards in the city,</i></p>	<p>NEW action program, from the LHMP</p>
<p>POLICY EH-1.5: Seismic Safety of New Buildings Design and construct all new buildings to resist stresses produced by earthquakes. The minimum level of seismic design shall be in accordance with the most recently adopted building code as required by State law.</p>	<p>CARRIES FORWARD Policy S-6 in the 2020 General Plan, which was:</p> <p>Seismic Safety of New Buildings Design and construct all new buildings to resist stresses produced by earthquakes. The minimum level of seismic design shall be in accordance with the most recently adopted building code as required by State law.</p>
<p>Program EH-1.5A: Seismic Design. <i>Adopt and enforce State building codes which ensure that new or altered structures meet the minimum seismic standards set by State law.</i></p>	<p>REPLACES Program S-6A in the 2020 General Plan, which simply repeated the second sentence of Policy S-6 as follows:</p> <p>Seismic Design. The minimum seismic design of structures should be in accordance with the building code, as adopted in accordance with State law.</p>

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<p>POLICY EH-1.6: Minimize the Potential Effects of Landslides.</p> <p>Development proposed in areas with existing or potential landslides (as identified by a registered geologist or geotechnical engineer) shall not be endangered by, or contribute to, hazardous conditions on a site or adjoining properties. Landslide mitigation should consider multiple options to reduce impacts such as loss of vegetation and grading. The City will only approve new development in areas of identified landslide hazard if the hazard can be appropriately mitigated.</p>	<p>REPLACES Policy S-7 in the 2020 General Plan, which is shown below. Landslide design factors (1.0 and 1.5) are not typically included in General Plan. These types of standards are typically established in State Building Codes, with local modifications made as needed.</p> <p>Minimize Potential Effects of Landslide</p> <p>Development proposed in areas with existing landslides or with the potential for landslides (as identified by a registered engineering geologist or geotechnical engineer) shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. Development in areas subject to landslide hazards shall incorporate adequate mitigation measures that have a design factor of safety of at least 1.5 for static conditions and 1.0 for pseudo-static (earthquake) conditions. The landslide mitigation should consider multiple options in order to reduce the secondary impacts (loss of vegetation, site grading, traffic, visual) associated with landslide mitigation. The City will only approve new development in areas of identified landslide hazard if such hazard can be appropriately mitigated.</p>
<p><i>Program EH-1.6A: Landslide Mitigation and Repair Projects.</i> Undertake landslide hazard mitigation and repair projects, as outlined in the LHMP. These projects include the repair of the Bret Harte sewer easement, a landslide identification and management program, and repair of the Fairhills Drive landslide.</p>	<p>NEW Program, derived from multiple action items in the LHMP</p>
<p>POLICY EH-1.7: Seismic Safety of Existing Buildings</p> <p>Encourage the rehabilitation or elimination of structures susceptible to collapse or failure in an earthquake. Historic buildings shall be treated in accordance with the historic preservation ordinance.</p>	<p>CARRIES FORWARD Policy S-8 in the 2020 Plan, which was:</p> <p>Seismic Safety of Existing Buildings</p> <p>Encourage the rehabilitation or elimination of structures susceptible to collapse or failure in an earthquake. Historic buildings shall be treated in accordance with the Historic Preservation Ordinance.</p>

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<p>Program EH-1.7A: Seismic Safety Building Reinforcement. Enforce State and local requirements for reinforcement of existing buildings, including the City’s remaining unreinforced masonry (URM) buildings.</p>	<p>REPLACES Program S-8 in the 2020 Plan, which is shown below. The change incorporates new LHMP programs:</p> <p>Seismic Safety Building Reinforcement. Enforce State and local requirements for reinforcement of existing buildings.</p>
<p>Program EH-1.7B: Soft-Story Building Mitigation Plan</p> <p>Complete a citywide assessment of soft-story buildings and develop a mitigation strategy to modify these structures to minimize their potential to collapse during an earthquake.</p>	<p>NEW program, carried forward from the LHMP and also suggested by the Steering Committee.</p>
<p>POLICY EH-1.8: Post-Earthquake Inspections</p> <p>Require post-earthquake building inspections of critical facilities and restrict entry into compromised structures as appropriate. Following a major earthquake, inspections shall be conducted as necessary in conjunction with other non-city public agencies and private parties to ensure the structural integrity of water storage facilities, storm drainage structures, transmission and telecommunication facilities, major roadways, bridges, elevated freeways, levees, canal banks, and other important utilities and essential facilities.</p>	<p>REPLACES Policy S-9 in the 2020 General Plan, which is shown below. Per Building Official, reference to the Modified Mercalli Intensity scale has been dropped so that inspections are done as needed:</p> <p>Post-Earthquake Inspections</p> <p>Require post-earthquake building inspections of critical facilities, and restrict entry into compromised structures. Inspections shall be conducted when the earthquake intensity is VII or higher per the Modified Mercalli Intensity Scale. Require inspections as necessary in conjunction with other non-city public agencies and private parties for structural integrity of water storage facilities, storm drainage structures, electrical transmission lines, major roadways, bridges, elevated freeways, levees, canal banks, and other important utilities and essential facilities.</p>
<p>Program EH-1.8A: Inspection List. Develop and maintain a list of facilities that would be inspected after a major earthquake, including a prioritization for inspection-scheduling purposes.</p>	<p>REPLACES Program S-9A in the 2020 General Plan, which is shown below. Simplifies the action and removes outdated code references.</p> <p>Inspection List. Identify a list of facilities that would be inspected after a major earthquake. The list shall identify City-owned essential or hazardous facilities as defined by Category 1 and 2 of Table 16-K of the Uniform Building Code, and shall prioritize the list for inspection scheduling purposes in case of an earthquake.</p>

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<p>POLICY EH-1.9: Erosion Control</p> <p>Require appropriate control measures in areas susceptible to erosion, in conjunction with proposed development. Erosion control measures should incorporate best management practices (BMPs) and should be coordinated with requirements for on-site water retention, water quality improvements, and runoff control.</p>	<p>REPLACES Policy S-22 in General Plan 2020, which is shown below (eliminates references to ABAG document from 1988 and RWQCB document from 2002 in favor of broader reference to “best management practices”)</p> <p>Erosion. Require appropriate control measures in areas susceptible to erosion, in conjunction with proposed development. Erosion control measures and management practices should conform to the most recent editions of the Regional Water Quality Control Board’s <i>Erosion and Sediment Control Field Manual</i> and the Association of Bay Area Governments’ <i>Manual of Standards for Erosion and Sediment Control</i> or equivalent.</p>
<p>Program EH-1.9A: Erosion and Sediment Control Plans. <i>Require Erosion and Sediment Control Plans (ESCPs) for projects meeting the criteria defined by the Marin County Stormwater Pollution Prevention Program, including those requiring grading permits and those with the potential for significant erosion and sediment discharges. Projects that disturb more than one acre of soil must prepare a Stormwater Pollution Prevention Plan, pursuant to State law.</i></p>	<p>REPLACES Program S-22A in General Plan 2020, which is shown below. Program description has been updated to reflect current requirements:</p> <p>Erosion Control Programs. Review and approve erosion control programs for projects involving grading one acre or more or 5,000 square feet of built surface as required by Standard Urban Stormwater Management Plans (SUSUMP). Evaluate smaller projects on a case-by-case basis.</p>
<p>Program EH-1.9B: Grading During the Wet Season. <i>Discourage grading during the wet season and require that development projects implement erosion and/or sediment control measures based on their potential to impact creeks and drainageways.</i></p>	<p>REPLACES Program S-22B in General Plan 2020, which is shown below:</p> <p>Grading During the Wet Season. Discourage grading during the wet season and require that development projects implement adequate erosion and/or sediment control and runoff discharge measures.</p>

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<p>POLICY EH-1.10: Septic Systems</p> <p>Discourage the use of septic systems within San Rafael’s Planning Area. If no other alternatives exist, then soil tests shall be required to determine if the on-site soils are suitable for a septic system for disposal of wastewater. In hillside areas, an evaluation of the additional water from a septic system on hillside stability shall be required. New or improved septic systems shall be designed by a registered civil engineer that specializes in septic design.</p>	<p>Carrying forward Policy S-23 from GP 2020 with no edits. Policy S-23 reads as follows:</p> <p>Septic Systems</p> <p>Discourage the use of septic systems within San Rafael’s Planning Area. If no other alternatives exist, then soil tests shall be required to determine if the on-site soils are suitable for development of a septic system for disposal of wastewater. In hillside areas, an evaluation of the additional water from a septic system on hillside stability shall also be required. New or improved septic systems shall be designed by a registered civil engineer that specializes in septic design.</p>
<p>POLICY EH-1.11: Flood Protection of New Development</p> <p>Design new development in flood-prone areas so that minimum floor elevations provide protection from potential impacts of a 100-year flood (a flood with a one percent chance of occurring in any given year). In addition, the elevation of the first floor of habitable space shall account for:</p> <p>(a) the ultimate settlement of the site due to consolidation of the bay mud from existing and new loads, taking into account soils conditions and the type of structure proposed. Design for settlement over a 50-year period is typically considered sufficient; and</p> <p>(b) The likely impacts of sea level rise over the lifetime of the structure, as defined by the Bay Conservation and Development Commission, the National Oceanic and Atmospheric Administration, and other research institutions.</p>	<p>REPLACES Policy S-17 from 2020 General Plan, which is as follows:</p> <p>Flood Protection of New Development</p> <p>Design new development within the bay mud areas to minimum floor elevation that provides protection from potential impacts of flooding during the “100-year” flood. The final floor elevation (elevation of the first floor at completion of construction) shall account for the ultimate settlement of the site due to consolidation of the bay mud from existing and new loads, taking into account soils conditions and the type of structure proposed. Design for settlement over a 50-year period is typically considered sufficient.</p>
<p>Program EH-1.11A: Title 18 Flood Protection Standards. Evaluate and revise Title 18 of the Municipal Code (Protection of Flood Hazard Areas) to address anticipated sea level rise and any changes elated to Federal or regional flood reduction criteria.</p>	<p>REPLACES Program S-17A from 2020 General Plan, which is as follows:</p> <p>Title 18 Flood Protection Standards. Evaluate and revise the City's Title 18 flood protection standards for new development based on Federal and regional criteria.</p>

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<p>Program EH-1.11B: National Flood Insurance Program (NFIP). Continue to comply with the federal NFIP by maintaining a flood management program and flood plain management regulations. In addition, develop a Community Rating System (CRS) to notify residents of the hazards of living in a flood area, thereby reducing local flood insurance rates.</p>	<p>NEW program, incorporates major action of the LHMP</p>
<p>POLICY EH-1.12: Storm Drainage Improvements Require new development to mitigate potential increases in runoff through a combination of measures, including improvement of local storm drainage facilities. Other measures, such as the use of porous pavement, bioswales, and “green infrastructure” also should be encouraged.</p>	<p>REPLACES S-18 from General Plan 2020, which is shown below. The edits incorporate alternatives to storm drain improvements, per Steering Committee input.</p> <p>Storm Drainage Improvements Require new development to improve local storm drainage facilities to accommodate site runoff anticipated from a “100-year” storm.</p>
<p>Program EH-1.12A: Storm Drainage Improvements. Consistent with Countywide and regional stormwater management programs, require new development with the potential to impact storm drainage facilities to complete hydrologic studies that evaluate storm drainage capacity, identify improvements needed to handle a 100-year storm, and determine the funding needed to complete those improvements.</p>	<p>REPLACES Program S-18A from General Plan 2020, which is shown below. The edits link this to water quality requirements</p> <p>Storm Drainage Improvements. Require that new development proposals which are likely to affect the limited capacity of downstream storm drainage facilities provide a hydrological analysis of the storm drain basin of the proposed development and evaluate the capacity of existing downstream storm drainage facilities and fund improvements to accommodate increased drainage from the project</p>
<p>Program EH-1.12B: Green Infrastructure Guidelines. Evaluate potential measures to more sustainably manage stormwater, erosion, and improve water quality associated with urban runoff.</p>	<p>NEW. Based on Steering Committee input and CCAP.</p>

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<p>POLICY EH-1.13: Flood Control Improvements Funding</p> <p>Support Federal and State legislation that provides funding for the construction of flood control improvements in urbanized areas, including those aimed at reducing flooding caused by with rising sea level. The City will pursue such funding as it becomes available, and will continue to use available local sources of funding to provide flood control improvements.</p>	<p>REPLACES Policy S-19 from 2020 General Plan, which is shown below:</p> <p>Flood Control Improvements Funding Support Federal and State legislation that provide funding for the construction of flood control improvements in urbanized areas, and seek such funding as it becomes available. Additionally, continue to use any available local sources of funding to provide flood control improvements.</p>
<p>Program EH-1.13A: Incremental Flood Control Improvements. <i>Where needed and possible, new development/ redevelopment projects shall include measures to improve area flood protection. Such measures would be identified and required through the development review process.</i></p>	<p>REPLACES Program S-19A from 2020 General Plan, which is shown below:</p> <p>Incremental Flood Control Improvements. Where needed and possible, new development/ redevelopment projects shall include measures to improve area flood protection. Such measures would be identified and required through the development review process.</p>
<p>Program EH-1.13B: Flood Hazard Mitigation Projects. <i>Undertake flood hazard mitigation projects as outlined in the Local Hazard Mitigation Plan, including sewer relocation and replacement projects, pump station rehabilitation, corrugated metal pipe replacement, and improvements to Beach Drive.</i></p>	<p>NEW, adapted from the LHMP</p>
<p>Program EH-1.13C: Restoration and Dredging Projects. <i>Implement restoration and dredging projects that will increase stormwater drainage capacity and reduce flood hazards. As noted in the LHMP, this could include restoration of the Freitas Parkway flood channel and dredging of Gallinas Creek and the San Rafael Canal.</i></p>	<p>NEW, adapted from the LHMP</p>

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<p>GOAL EH-2: CLIMATE RESILIENCE</p> <p>Improve the City’s resilience to climate-related hazards, including sea level rise, wildfire, more frequent and potentially damaging storms, drought, and extreme heat events. San Rafael’s land use patterns, transportation system, and infrastructure, should be planned to anticipate the impacts of climate change, and its open spaces and natural areas should be managed to mitigate climate-related impacts on residents and businesses.</p>	<p>NEW Goal, responds to LHMP, Wildfire Action Plan, Climate Action Plan, and Steering Committee discussions.</p>
<p>POLICY EH-2.1: Resilience to Tidal Flooding</p> <p>Improve San Rafael’s resilience to coastal flooding and sea level rise through a combination of structural measures and adaptation strategies.</p>	<p>NEW POLICY, incorporates LHMP, Climate Action Plan, BayWave, and related documents</p>
<p><i>Program EH-2.1A: Adaptation Plans</i></p> <p><i>Develop adaptation plans that respond to anticipated sea level rise and include specific strategies, capital improvements, and restoration programs to make the City more resilient. The starting point for these plans should be the Adaptation Report accompanying the 2040 General Plan, the 2030 Climate Change Action Plan, and other documents that assess the vulnerability of the San Rafael shoreline and bayfront areas to sea level rise and coastal flooding impacts.</i></p>	<p>NEW PROGRAM, incorporates best practices and anticipates City’s completion of an “Adaptation Report” during the next 12 months to provide a foundation for future adaptation planning.</p>
<p><i>Program EH-2.1B: Standards for Development in Vulnerability Zone</i></p> <p><i>Develop standards for new development in the sea level vulnerability zone (as identified on the General Plan Map), addressing such issues as the required base elevation of habitable space, provisions for fill, and requirements for improving levees and contributing to flood prevention and shoreline protection programs.</i></p>	<p>NEW PROGRAM, reflects City’s intent to identify an overlay on the General Plan Map corresponding to areas that may be subject to sea level rise by 2100</p>

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<p>Program EH-2.1C: Habitat Restoration as an Adaptation Strategy <i>Undertake wetland and tidal marsh restoration projects and other conservation-focused measures that reduce the risk of flooding associated with sea level rise</i></p>	<p>NEW PROGRAM, reflects best practices in adaptation planning and current direction</p>
<p>Program EH-2.1D: Monitoring Sea Level Forecasts Monitor changes in sea level rise projection information, data, and technology, and adjust adaptation plans accordingly</p>	<p>REPLACES Policy S-21 in General Plan 2020, which is shown below. Clause (a) is part of this action. Clauses (b) and (c) listed below are now covered elsewhere in this section.</p> <p>Rise in Sea Level</p> <p>Support efforts to address rise in sea level by: a) continually monitoring changes in projection information, data and technology; b) utilizing the “Climate Adaptation – Sea Level Rise” San Rafael White Paper (January 2014) as a starting point for pursuing critical tasks and actions including the preparation of a vulnerability assessment; and c) coordinating with the County of Marin and other local, state, federal agencies in planning for long-term adaptation.</p>
<p>POLICY EH-2.2: Shoreline Levees Improve and expand San Rafael’s shoreline levee system as one part of a strategy to reduce coastal flood hazards and respond to future sea level rise impacts.</p>	<p>REPLACES Policy S-20 in the 2020 General Plan, which is shown below:</p> <p>Levee Upgrading When waterfront properties are developed or redeveloped, require levee upgrading, as appropriate, based on anticipated high tide and flood conditions, to maintain an appropriate levee height.</p>
<p>Program EH-2.2A: Levee Improvement Plans. <i>Continue to develop improvement plans for levees, berms, and flood control systems based on existing conditions and projected needs, sea level rise forecasts, ecological restoration objectives and other factors. This should include an improvement study for the Spinnaker Point levee, as recommended by the LHMP.</i></p>	<p>NEW PROGRAM, from the LHMP</p>
<p>Program EH-2.2B: Financing Levee Improvements. <i>Coordinate with property owners; residents and businesses; federal, state, and regional agencies; utilities; and other stakeholders to evaluate potential</i></p>	<p>RRPLACES S-20A from GP 2020, shown below:</p> <p>Levee Maintenance Funding. Coordinate with property owners to ensure adequate levee heights. Evaluate potential ways for affected private</p>

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<p><i>methods of improving levees and funding ongoing levee maintenance.</i></p>	<p>property owners to fund levee maintenance such as Assessment or Maintenance Districts</p>
<p>Program EH-2.2C: Ground Elevation Surveys. <i>Perform periodic ground elevation surveys in the Sea Level Rise vulnerability zone. The result of the surveys should be considered when developing responses to coastal flooding potential, including levee improvements, horizontal levees, managed retreat, and other measures.</i></p>	<p>REPLACES S-20B from GP 2020, shown below:</p> <p>Ground Elevation Surveys. Perform periodic ground elevation surveys within the Canal Neighborhood to determine ground elevations throughout the area, including the levee system. The result of the survey shall be used to determine the need for levee heightening for flood protection purposes. When a need for levee heightening is determined, the City shall heighten the levees as necessary on public property and require that levees on private property be heightened</p>
<p>POLICY EH-2.3: Interagency Coordination Coordinate and work with federal, state, County, and local agencies in assessing vulnerability and planning for long-term adaptation This should include continued involvement in the BayWAVE Countywide Vulnerability Assessment, and implementation of strategies identified in that Program.</p>	<p>REPLACES Program S-21B in General Plan 2020, which is shown below:</p> <p>Vulnerability Assessment-BayWAVE. Coordinate and work with the County of Marin and other local jurisdictions in the BayWAVE Program to prepare and adopt a vulnerability assessment of the bay shoreline and areas susceptible to rise in sea level.</p>
<p>POLICY EH-2.4: Infrastructure Resilience Improve the resilience of transportation and infrastructure systems likely to be impacted by sea level rise.</p>	<p>NEW Policy, from LHMP and BayWave</p>
<p>Program EH-2.4A: Elevation of Roads and Infrastructure. <i>Survey low-lying roadways and critical infrastructure and evaluate the feasibility of elevating such facilities to reduce the potential for damage during flood events.</i></p>	<p>NEW Program, from LHMP</p>
<p>POLICY EH-2.5: Drought Preparedness Undertake plans and projects that Improve resilience to drought and related water shortages.</p> <p><i>[See the infrastructure element for programs to encourage water conservation, replace leaky pipes, increase water storage, explore desalination, and increase the use of reclaimed water]</i></p>	<p>NEW Policy, from LHMP</p>

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<p>POLICY EH-2.6: Minimizing Wildfire Hazards. Minimize the risk of wildfire through a combination of prevention measures, preparedness, capital improvements, and land use and construction decisions that recognize risks and hazard levels.</p>	<p>NEW, from LHMP and Wildfire Action Plan</p>
<p><i>Program EH-2.6A: Wildfire Prevention and Action Plan. Implement the Wildfire Prevention and Protection Action Plan adopted in March 2019 in a manner consistent with the direction provided by the San Rafael City Council.</i></p>	<p>NEW, from LHMP and Wildfire Action Plan</p>
<p>POLICY EH-2.7: Wildfire Hazards on Undeveloped Land Continue vegetation management and maintenance programs to reduce the possibility of wildfire ignition hazards and damaging fires in the hills, wildland areas, and urban interface areas. Staffing levels should be adequate to implement such programs.</p>	<p>REPLACES Policy S-30 from 2020 General Plan to reflect direction of LHMP and Wildfire Action Plan. Policy S-30 was: Maintenance and Landscaping for Fire Safety Encourage, where appropriate, special planting, removal and maintenance programs to reduce potential fire hazards in the hills, wildland areas and urban interface areas.</p>
<p><i>Program EH-2.7A: Fire Hazard Maps. Improve and maintain maps identifying potential fire hazards in San Rafael and use these maps for vegetation management and planning purposes.</i></p>	<p>REPLACES Program S-30A from 2020 General Plan to reflect direction of LHMP and Wildfire Action Plan. Program S-30A was: Fire Hazard Maps. As part of the City’s Fire Hazard Program, maintain maps identifying potential fire hazard areas in San Rafael.</p>
<p><i>Program EH-2.7B: Fire Protection Ordinance. Continue to implement Municipal Code standards to reduce fire hazards in areas, including vegetation management requirements and the designation of a Wildland-Urban Interface (WUI) Zone. Periodically update these standards and the WUI map to implement Wildfire Action Plan measures and other programs to further reduce wildfire risks.</i></p>	<p>REPLACES Program S-30B from 2020 General Plan to reflect direction of LHMP and Wildfire Action Plan. Program S-30B was: Fire Protection Ordinance. Continue to implement Wildlife-Urban Interface (WUI) standards within the Ordinance to reduce fire hazards in areas in the urban interface area.</p>

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<p>Program EH-2.7C: Wildfire Fuel Breaks. Create new fuel interruption zones in Wildland Urban Interface areas and maintain and expand zones that are already in place. Flammable vegetation should be strategically removed in these areas to slow the spread of wildfire and reduce threats to homes.</p>	<p>NEW program, from LHMP and Wildfire Action Plan</p>
<p>Program EH-2.7D: Vegetation Management on Open Space Lands. Increase the use of goat grazing through cooperative relationships with contractors and public agencies.</p>	<p>NEW, from Wildfire Action Plan</p>
<p>Program EH-2.7E: Encampment-Related Hazards. Work collaboratively with homeless service providers to reduce fire hazards associated with encampments and illegal burning.</p>	<p>NEW, from Wildfire Action Plan and LHMP</p>
<p>POLICY EH-2.8: Fire Resilience in Existing Neighborhoods Improve the resilience of existing neighborhoods and structures to wildfire hazards.</p>	<p>NEW Program, from Wildfire Action Plan and LHMP</p>
<p>Program EH-2.8A: Reducing Structure Hazards. Implement measures to reduce wildfire hazards to existing structures, including defensible space standards, clearance requirements around structures, limits on highly flammable plant materials, enforcement and abatement programs, and phasing out of wood shake roofs.</p>	<p>NEW Program, from Wildfire Action Plan and LHMP</p>
<p>Program EH-2.8B: Tree Maintenance. Undertake a tree safety maintenance program to manage trees along public roadways and minimize safety impacts from trees falling in road rights of way.</p>	<p>NEW program, from Wildfire Action Plan and LHMP</p>
<p>Program EH-2.8C: Public Education on Fire Resilience. Improve public education and awareness about fire-safe landscaping and hardening of structures. This should include demonstration projects (“Resilient Landscape Templates”) that help property owners understand what species to remove and what to plant. It should also include signage in high risk areas.</p>	<p>NEW program, from Wildfire Action Plan and LHMP</p>

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<p>POLICY EH-2.9: New Development in Fire Hazard Areas</p> <p>Design new development located on or adjacent to hillsides to minimize fire hazards. Densities and land uses should reflect the level of wildfire risk and evacuation capacity at a given location.</p>	<p>REPLACES Policy S-31 in 2020 General Plan, which was:</p> <p>New Development in Fire Hazard Areas Design new development located on or adjacent to natural hillsides to minimize fire hazards to life and property.</p>
<p><i>Program EH-2.9A: Mitigating Fire Hazards in New Development. Through the development review process, require appropriate mitigation measures such as fire preventive site design, landscaping and building materials, and the use of fire suppression techniques such as interior and exterior sprinklers. Building Codes should be updated as needed to reduce the potential for structure ignition.</i></p>	<p>REPLACES Program S-31A in 2020 General Plan, which was:</p> <p>New Development. Through the development review process, require appropriate mitigation measures such as fire preventive site design, landscaping and building materials, and the use of fire suppression techniques such as sprinklering.</p>
<p><i>Program EH-2.9B: Review development applications in fire prone areas to ensure adequate emergency vehicle access, adequate water pressure and supply for fire-fighting purposes.</i></p>	<p>REPLACES Program S-32A in 2020 General Plan, which is shown below. Landscaping and building siting/design are addressed in EH-2.9A.</p> <p>Safe Buildings. Continue to review development applications to insure that landscaping, lighting, building siting and design, emergency access, adequate water pressure and peakload storage capacity, and building construction materials reduce the opportunity for crime and fire hazards.</p>
<p><i>Program EH-2.9C: Funding for Wildfire Prevention. Develop new partnerships, revenue opportunities, and funding avenues for wildfire prevention and hazard abatement.</i></p>	<p>NEW Program, from Wildfire Action Plan</p>

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<p>GOAL EH-3: HAZARDOUS MATERIALS</p> <p>Protect those who live, work, and visit San Rafael from risks associated with hazardous materials</p>	<p>NEW goal, addresses topics not directly addressed in LHMP but covered in General Plan 2020 and required to be included under State General Plan law.</p>
<p>POLICY EH-3.1: Hazardous Waste Management</p> <p>Support State, regional, countywide and local programs to responsibly manage hazardous waste consistent with protection of public health, welfare, safety and the environment.</p>	<p>REPLACES an simplifies Policy S-15 from General Plan 2020, which is shown below:</p> <p>Hazardous Waste Management Support measures to responsibly manage hazardous waste consistent with protection of the public health, welfare, safety and the environment. The City of San Rafael supports the Marin County Hazardous Waste Management Plan as adopted by the State, County and Cities within Marin County.</p>
<p>POLICY EH-3.2: Hazardous Materials Storage, Use and Disposal</p> <p>Enforce regulations regarding proper storage, labelling, use and disposal of hazardous materials to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal.</p>	<p>REPLACES Policy S-14 from General Plan 2020, which is shown below:</p> <p>Hazardous Materials Storage, Use and Disposal Enforce regulations regarding proper storage, use and disposal of hazardous materials to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal.</p>
<p><i>Program EH-3.2A: CUPA Program. Continue to participate in the Certified Unified Program Agency (CUPA) program. The CUPA’s responsibilities shall include overseeing the investigation and closure of contaminated underground storage tank sites.</i></p>	<p>REPLACES Programs S-13C and S-14A from General Plan 2020, which are both shown below:</p> <p>(former 13C) Local Implementing Agency. The Certified Unified Program Agency (CUPA) shall oversee the investigation and closure of contaminated underground storage tank sites.</p> <p>(former 14A) CUPA Program. Continue to participate in the Certified Unified Program Agency (CUPA) program.</p>

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<p>POLICY EH-3.3: Protection of Sensitive Uses Provide safe distances between areas where hazardous materials are handled or stored and sensitive uses such as schools, public facilities, and residences. When the location of public improvements in such areas cannot feasibly be avoided, effective mitigation measures will be implemented.</p>	<p>REPLACES Policy S-10 from 2020 General Plan, which was:</p> <p>Location of Public Improvements To minimize threat to human health or any extraordinary construction and monitoring expenses, avoid locating improvements and utilities in areas with dangerous levels of identified hazardous materials. When the location of public improvements and utilities in such areas cannot feasibly be avoided, effective mitigation measures will be implemented.</p>
<p>Program EH-3.3A: Reducing Hazards Near Schools. Consistent with CEQA and the California Public Resource Code 21151.4, limit activities with the potential to release hazardous materials within one-quarter mile of schools.</p>	<p>REPLACES Policy S-11 from General Plan 2020 to be less negative; also framing it as a program implementing Policy EH-3.2 (rather than as a separate policy).</p> <p>Restriction of Businesses</p> <p>Restrict siting of businesses or expansion of businesses that have the potential for a significant hazardous materials release within one-quarter mile of schools.</p>
<p>Program EH-3.3B: Inventory of Existing Hazards. Work with State and County GIS data to identify existing hazardous materials permit holders near schools, evaluate relative risk levels, and determine actions in the event of an accidental release.</p>	<p>REPLACES Program S-11A from general Plan 2020, which was:</p> <p>Survey of Facilities. Survey existing industrial facilities within one-quarter mile of the schools. The survey would be used to determine the presence of hazardous materials and evaluate the risk of an accidental release that could adversely affect the health and safety of students and school staff.</p>

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<p>POLICY EH-3.4: Development on Formerly Contaminated Sites</p> <p>Ensure that the necessary steps are taken to clean up residual hazardous materials on any contaminated sites proposed for redevelopment or reuse. Properties that were historically used for auto service, industrial operations, agriculture, or other land uses that may have involved hazardous materials, should be evaluated for the presence of toxic or hazardous materials in the event they are to be redeveloped with a more sensitive land use.</p>	<p>NEW Policy, provides the context for the other policies and actions being carried forward from General Plan 2020</p>
<p>Program EH-3.4A: Use of Environmental Databases in Development Review. When development is proposed, use environmental and hazardous materials data bases (such as the State GeoTracker data base) to determine whether the site is contaminated as a result of past activity. As appropriate, require studies and measures to identify and mitigate identified hazards. The requirements for site-specific investigation are contained in the Geotechnical Review Matrix.</p>	<p>REPLACES Policy S-12 and Program S-12A from General Plan 2020 (shown below), and changes S-12 from a policy to a program (in light of new Policy EH-3.2 above)</p> <p>Former S-12: Use of Environmental Databases in Development Review</p> <p>When development is proposed, determine whether the site has been recorded as contaminated. Undertake appropriate studies to assure identification and implementation of mitigation measures for sites on or near identified hazards.</p> <p>Former S-12A: Environmental Database. Maintain environmental and hazardous materials-related databases, and update information on an ongoing basis. In addition, include the information in the State GeoTracker database (database of contaminated Underground Storage Tanks sites).</p>
<p>Program EH-3.4B: Hazardous Soils Clean-Up</p> <p><i>Work with appropriate State and County agencies to require remediation and clean-up prior to development of sites where hazardous materials have impacted soil or groundwater. The required level of remediation and clean-up shall be determined by the Certified Unified Program Agency (CUPA) based on the intended use of the site and health risk to the public.</i></p>	<p>REPLACES Program S-13B from General Plan 2020, which is shown below:</p> <p>Hazardous Soils Cleanup. Require remediation and cleanup in accordance with regional and local standards in order to develop on sites where hazardous materials have impacted soil or groundwater. At a minimum, remediation and clean up of contaminated sites shall be in accordance with regional and local standards. The required level of remediation and clean-up shall be determined by the Certified Unified Program Agency (CUPA) based on the intended use of the site and health risk to the public.</p>

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<p>POLICY EH-3.5: Transportation of Hazardous Materials</p> <p>Enforce Federal, State and Local requirements and standards regarding the transportation of hazardous materials.</p>	<p>REPLACES Policy S-16 from General Plan 2020, which is shown below:</p> <p>Transportation of Hazardous Materials Enforce Federal, State and Local requirements and standards regarding the transportation of hazardous materials. Support, as appropriate, legislation that strengthens safety requirements for the transportation of hazardous materials.</p>
<p><i>Program EH-3.5A: Safe Transport of Hazardous Materials. Support California Highway Patrol's efforts to ensure the safe transport of hazardous materials.</i></p>	<p>CARRIES FORWARD Program S-16A from existing General Plan, shown below:</p> <p>Safe Transport of Hazardous Materials. Support California Highway Patrol's efforts to ensure the safe transport of hazardous materials.</p>
<p><i>Program EH-3.5B: Pipeline Safety. Coordinate with regulatory agencies and utilities to ensure the safety of all fuel pipelines and ensure that maintenance and operating conditions are fully compliant with all state and federal safety regulations</i></p>	<p>NEW Program, reflects emerging issue of concern</p>
<p>POLICY EH-3.6: Hazardous Building Materials</p> <p>Reduce the presence of hazardous building materials both by reducing the use of such materials in the future, and by implementing programs to mitigate lead, friable asbestos, and other hazardous materials where they exist today. If such materials are disturbed during building renovation or demolition, they must be handled and disposed in a manner that protects human health and the environment.</p>	<p>NEW Policy, adapted from Steering Committee member suggestions</p>
<p>POLICY EH-3.7: Household Hazardous Waste</p> <p>Promote education about the safe disposal of household hazardous waste, such as motor oil and batteries, including the location of designated household hazardous waste disposal sites.</p>	<p>NEW Policy, reflects ongoing activity relevant to the topic area</p>

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<p>GOAL EH-4: EMERGENCY PREPAREDNESS</p> <p>Enhance public outreach, awareness, education, and preparedness for all hazards to minimize hazard-related losses. The City should improve its resiliency and capacity to mitigate losses and be prepared for, respond to, and recover from, a disaster event.</p>	<p>NEW GOAL, which incorporates one of the core goals of the Local Hazard Mitigation Plan. This also incorporates a portion of the existing Safety Element goal in General Plan 2020 (“to be prepared in the case of disaster or emergency”)</p>
<p>POLICY EH-4.1: Disaster Preparedness Planning</p> <p>Conduct disaster preparedness planning in cooperation with other public agencies and public interest organizations.</p>	<p>REPLACES S-33 (second sentence moved to a different policy)</p> <p>Disaster Preparedness Planning</p> <p>Ensure disaster preparedness in cooperation with other public agencies and appropriate public-interest organizations. Expand abilities of residents to assist in local responses to disasters.</p>
<p>Program EH-4.1A: Mutual Aid Agreements. Continue, and where feasible expand, mutual aid agreements that augment public safety personnel in times of emergency.</p>	<p>REPLACES S-35B from the 2020 Plan</p> <p>Mutual Aid Agreements. Continue to explore the feasibility of mutual aid agreements that provide public safety personnel in times of emergency.</p>
<p>Program EH-4.1B: Standardized Emergency Management System (SEMS). Maintain a SEMS-based emergency plan that provides direction and identifies responsibilities after a disaster. Continue to train all City employees in SEMS procedures.</p>	<p>REPLACES S-33d from the 2020 Plan</p> <p>Standardized Emergency Management System. Continue to train City employees in the Standardized Emergency Management System offered by the Governor’s Office of Emergency Services.</p>
<p>Program EH-4.1.C: Emergency Preparedness Plan. Update and publicize the City’s emergency preparedness plan in conformance with State guidelines, including information on evacuation routes and shelter locations. This City’s Emergency Operations Center Handbook also should be updated.</p>	<p>REPLACES S-33A from the 2020 Plan and incorporates direction from the LHMP</p> <p>Disaster Preparedness Plan. Update and publicize the City’s emergency response (disaster) plan in conformance with State guidelines.</p>

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<p>Program EH-4.1D: Urban Search and Rescue Techniques. Continue to ensure that Urban Search and Rescue techniques remain current. Opportunities for trained volunteers to participate should be provided as appropriate.</p>	<p>REPLACES Program S-33B from the 2020 Plan, which is shown below (addition is from the Steering Committee)</p> <p>Urban Search and Rescue Techniques. Continue to ensure that Urban Search and Rescue techniques remain current.</p>
<p>POLICY EH-4.2: Neighborhood Disaster Preparedness Programs</p> <p>Encourage educational outreach to promote awareness and readiness among residents regarding disaster preparedness. Outreach and education should be targeted for each hazard type and risk area, including climate-related incidents. Community involvement is an essential part of resilience and recovery, and residents should be able to assist in local responses to disasters.</p>	<p>REPLACES Policy S-40 from the 2020 Plan, which is shown below. Change reflects Steering Committee input and direction in the LHMP.</p> <p>Outreach</p> <p>Encourage educational outreach to promote awareness and caution among residents regarding disaster preparedness of possible natural hazards, including soil conditions, earthquakes, flooding, and fire hazards. Establish an outreach program, including establishing programs. Publicize disaster plans by neighborhood.</p>
<p>Program EH-4.2A: Educational and Training Programs. Support educational and training programs through the Police and Fire Departments and community-based organizations. These Programs include Community Emergency Response Teams (CERT), Citizens Police Academy, and Neighborhood Response Groups (NRGs), among others. Neighborhood teams should supplement City resources during emergency situations and can assist in disaster preparedness and mitigation efforts.</p>	<p>REPLACES Programs S-33C, S-33E, S-40B, and S-40C from the 2020 General Plan. Consolidates these into one program.</p> <p>Formerly S-33C: Neighborhood Disaster Preparedness. Continue to coordinate neighborhood disaster response preparedness planning efforts through Fire and Police Department programs and through coordination with the American Red Cross, American Heart Association and other community groups.</p> <p>Formerly S-33E: Training of Citizen Police Academy and CERT Graduates. Organize neighborhood teams of Citizen Police Academy and CERT graduates and provide training on how to maintain public safety in their neighborhood during emergency situations.</p> <p>Formerly S-40B: Enrollment in Training Programs. Increase enrollment in the training programs for residents and neighborhood associations.</p> <p>Formerly S-40C: Neighborhood Educational Programs. Support educational programs, such as CERT and Citizen’s Police Academy in the neighborhoods.</p>

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<p>Program EH-4.2B: Disaster Management Drills. <i>Conduct emergency response drills to test the effectiveness of local procedures, including evacuation and emergency shelter drills in neighborhoods prone to flooding and wildfire.</i></p>	<p>NEW, from LHMP</p>
<p>Program EH-4.2C: Neighborhood Disaster Plans. <i>Provide technical assistance as needed to develop and update neighborhood disaster plans.</i></p>	<p>REPLACES last sentence of Program S-33C from 2020 General Plan, which is:</p> <p>Provide technical assistance as needed to review adequacy of neighborhood disaster plans.</p>
<p>Program EH-4.2D: Website Improvements. <i>Regularly update the Fire Department’s website and social media presence to provide information on disaster preparedness, resources, and links to other sites.</i></p>	<p>REPLACES S-40A in 2020 General Plan, which is:</p> <p>City’s Website. Manage and update the Fire Department’s website to provide information and links to meet the fire servicing needs of the community.</p>
<p>Program EH-4.2E: Outreach to Vulnerable Populations. <i>Develop and target outreach programs that are specifically targeted to vulnerable populations, including multi-lingual communications.</i></p>	<p>New, from LHMP and also consistent with SB 1000 directives.</p>
<p>POLICY EH-4.3: Engaging Local Businesses Coordinate emergency planning with the business community, hospitals and medical facilities, and school districts, including local employees as well as residents in preparedness programs.</p>	<p>NEW, from Steering Committee discussion</p>
<p>POLICY EH-4.4: Emergency Operations Centers Maintain a centralized Emergency Operation Center to coordinate emergency responses to emergencies, complemented by other locations in the city that provide for emergency evacuation and service delivery following a major disaster.</p>	<p>REPLACES Policy S-34 and Program 34-A from General Plan 2020, which are shown below:</p> <p>(former S-34) Emergency Operation Center Create a well-equipped Emergency Operation Center that is permanent and centrally located to coordinate emergency responses to emergencies.</p> <p>(former 34-A) Emergency Operations Center. Determine the location of and explore funding sources for a permanent and centrally located Emergency Operation Center as well as alternative emergency locations.</p>

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<p>Program EH-4.4A: Evacuation Shelters. <i>Identify locations of post-disaster evacuation shelters and provide the necessary training and supplies so that these centers can function effectively after a disaster.</i></p>	<p>NEW, from LHMP</p>
<p>POLICY EH-4.5: Post-Disaster Recovery Planning Incorporate post-disaster recovery planning in the City’s emergency management programs. Recovery planning should include measures to improve resilience in the event of future disasters, reduce the interruption of essential services, and mitigate the potential for further damage.</p>	<p>NEW, from Steering Committee comments</p>
<p>Program EH-4.5A: Essential Services Following Disasters. <i>Make provisions to continue essential emergency public services during and after natural disasters and other catastrophes.</i></p>	<p>REPLACES Policy S-35 in General Plan 2020 and makes it a program instead of a policy. Policy S-35 was as follows: Safety Personnel in Times of Emergency Make provisions to continue essential emergency public services during natural and other catastrophes.</p>
<p>Program EH-4.5B: Employee Transportation. <i>To ensure adequate safety personnel in an emergency, explore ways to transport first responders from outlying areas when damaged infrastructure prevents them from driving to San Rafael.</i></p>	<p>REPLACES Program S-35A in General Plan 2020, which was as follows: Employee Transportation. To ensure adequate safety personnel in an emergency, explore ways to transport public safety employees from outlying areas when damaged infrastructure prevents them from driving to San Rafael.</p>
<p>Program EH-4.5C: Housing Incentives. <i>Support state legislation and City initiatives that would provide incentives for public safety personnel to live in San Rafael, so they may be readily available if a disaster should occur.</i></p>	<p>REPLACES Program S-35C in General Plan 2020, which was as follows: Housing Incentives. Support State legislation and City initiatives that would provide incentives for public safety employees to live in San Rafael, so that they may be readily available if a disaster should occur.</p>

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<p>POLICY EH-4.6: Effective Communication Systems Ensure that all City agencies with a role in emergency response are provided with effective, reliable and robust emergency communications systems and equipment. The systems and equipment should have adequate capacity and redundancy to ensure these agencies can accomplish their missions. Consideration should also be given to the communications needs of the County of Marin and other agencies that may be required to supply mutual aid to or from other jurisdictions.</p>	<p>REPLACES Policy S-29 in General Plan 2020, which was as follows:</p> <p>Effective Communication System Ensure that all City agencies with public safety responsibilities are provided with effective, reliable and robust emergency communications systems and equipment. The system and equipment should have adequate capacity and redundancy to ensure these agencies can accomplish their missions. Appropriate consideration should also be given to the communications needs of agencies that may be required to supply mutual aid to or from other jurisdictions.</p>
<p><i>Program EH-4.6A: Involvement with Marin Emergency Radio Authority Maintain active involvement with Marin Emergency Radio Authority (MERA) and pursue installation and activation of the MERA radio system.</i></p>	<p>REPLACES Program S-29A in General Plan 2020, which was as follows:</p> <p>Involvement with Marin Emergency Radio Authority Maintain active involvement with Marin Emergency Radio Authority (MERA) and pursue installation and activation of the MERA radio system.</p>
<p><i>Program EH-4.6B: Emergency Alert Systems. Use wireless emergency alerts and other notification systems to warn resident of an active threat such as a flood or wildfire. The use of emergency warning sirens and other types of mass notification alters also should be considered.</i></p>	<p>NEW, from Steering Committee input and also from the LHMP</p>
<p>POLICY EH-4.7: Emergency Connectors Pursue the development of road connections for emergency vehicles only to improve access within San Rafael and between San Rafael and adjacent communities</p>	<p>REPLACES Policy S-36 in General Plan 2020, which was as follows:</p> <p>Emergency Connectors Pursue the development of local emergency connectors in the short-term and permanent roadway connections between Terra Linda and Downtown San Rafael. Seek adequate emergency connectors to all areas of San Rafael, and between San Rafael and adjacent communities.</p>

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<p>Program EH-4.7A: Emergency Connectors. Maintain the following existing access routes for emergency vehicles:</p> <ol style="list-style-type: none"> (1) the existing connection between Freitas Parkway and Fawn Drive (2) the all-weather connections between Freitas and Fawn and between Ridgewood and Fawn (3) The connection between Del Ganado and Butterfield Road in Sleepy Hollow (4) The private portion of Sienna Way in the Dominican area (5) The access drive between Peacock and Biscayne <p>Consider the need for additional emergency connectors, including the costs, effectiveness, impacts, and potential to use such routes for evacuation in the event of a wildfire.</p>	<p>REPLACES Program S-36A in General Plan 2020, which was as follows:</p> <p>Emergency Connectors. Evaluate and improve the following emergency connectors in light of costs, effectiveness, and impacts:</p> <ol style="list-style-type: none"> 1. Provide emergency street connectors throughout the City, including the existing connection between Freitas Parkway and Fawn Drive, the all-weather connection between Freitas and Fawn and between Ridgewood and Fawn, and the connection between Del Ganado and Butterfield Road; 2. Maintain the ability to use the private portion of Sienna Way in Dominican in case of emergency, as an alternative exit for Mountain View. 3. Maintain emergency access between Peacock and Biscayne Drives for emergency vehicle use only.
<p>Program EH-4.7B: Obstruction of Evacuation Routes. Reduce obstacles for emergency vehicles and evacuation routes, including parked cars that constrict emergency vehicle passage.</p>	<p>NEW, from Wildfire Action Plan</p>
<p>POLICY EH-4.9: Building Code and Fire Code Update</p> <p>Regularly update Building and Fire Codes to address natural hazards and support efforts to abate hazardous structures.</p>	<p>REPLACES Policy S-38 in General Plan 2020, which was as follows:</p> <p>Building Code and Fire Code Update</p> <p>Continue updating the Building and Fire Codes as necessary to address earthquake, fire and other hazards and support programs for the identification and abatement of existing hazardous structures</p>

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<p>POLICY EH-4.8: Design of Public Safety Facilities and Utilities</p> <p>Ensure that public safety facilities, critical utilities, and telecommunication facilities are designed and constructed to deliver necessary services with minimal interruption in times of disaster.</p>	<p>REPLACES Policy S-37 and S-39 in General Plan 2020, which were as follows:</p> <p>S-37: Functioning Public Utilities Following Earthquake</p> <p>Locate and construct vital public utilities as well as communication and transportation facilities in a way that maximizes their potential to remain functional during and after an earthquake.</p> <p>S-39: Public Safety Facilities</p> <p>Ensure that public safety facilities are designed and constructed adequately to efficiently operate paramedic, fire and police services, including in times of disaster.</p>
<p>Program EH-4.8A: Facility Evaluations. <i>Regularly evaluate the need to upgrade essential public safety facilities, equipment, and technology, and identify funding mechanisms to meet these needs.</i></p>	<p>REPLACES Program S-39A in General Plan 2020, which is as follows:</p> <p>Public Safety Facilities. Evaluate needed upgrades to public safety facilities, particularly seismic safety improvements, and seek funding mechanisms. In order to meet the existing and projected future needs of the San Rafael Police Department, the City will determine the department’s existing and project facility needs; obtain the necessary funding for the needed improvement; and, purchase, construct, and/or renovate the necessary additional facilities.</p>
<p>Program EH-4.8B: Energy Storage Plan. <i>Develop an Energy Storage Plan, including microgrids and expanded battery capacity, to improve reliability of the power system following a major disaster.</i></p>	<p>NEW, from LHMP</p>
<p>POLICY EH-4.9: Use of Technology</p> <p>Leverage new technologies to reduce losses and save lives following a disaster. Implement improvements such as traffic signal pre-emption for first responders and vehicle tracking devices to facilitate response and recovery time.</p>	<p>NEW, from LHMP</p>