

# COMMUNITY DEVELOPMENT AGENCY

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October 11, 2022

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Honorable Board of Supervisors and  
Members of the Planning Commission  
Marin County Civic Center  
San Rafael, CA 94903

**SUBJECT:** Update on response to comments on the Draft Safety Element and Development Code Amendments related to the Safety Element.

Dear Members of the Board and Planning Commission:

**RECOMMENDATION:** Review and comment on changes to the draft Safety Element made in response to public comments and review by the Board of Forestry. Review and comment on the attached draft amendment to the Development Code (Marin County Code Title 22). After receiving comments from your Board, Planning Commission, and the public, Planning Division staff will revise the draft Safety Element and Development Code amendments and return them for further consideration concurrently with the Draft Housing Element, Safety Element, and related Countywide Plan amendments, once the EIR has been completed later this year.

**SUMMARY:** The draft Safety Element was available for public comment beginning June 1, 2022 and sent to the Board of Forestry for review on June 2, 2022. Your Board and Planning Commission reviewed it and provided direction at a joint workshop on June 14, 2022. The draft Safety Element (Attachment 1) includes edits in response to the Board of Forestry review, public comments, and direction from your Board and Planning Commission.

The proposed Development Code amendments (Attachment 2) would modify the Bayfront Conservation Combining District standards to address sea level rise, as directed in the draft Safety Element. Draft Safety Element Program EHS-6.3.b. reads, "Amend the Bayfront Conservation Combining District [BFC], Marin County Code Title 22, to incorporate sea level rise adaptation measures that promote public safety consistent with the goals of the BFC."

There are no BFC districts in the Marin County Coastal zone, and these amendments would only apply to the shoreline areas of the Bay.

**DISCUSSION:** The BFC is located along portions of the bay shoreline of unincorporated Marin County. Following the County's jurisdiction, it is broken into sections of shoreline rather than covering the continuous stretch of bay shoreline (Attachment 3, BFC Map). The inland boundary is defined by habitat type and

viewsheds, rather than by the extent of sea level rise. Except where the shoreline is steep, like along Tiburon, the BFC area is subject to inundation from sea level rise. Amending the BFC to require certain project proposals to account for sea level rise was first identified as a goal in the Land Use Planning Adaptation Guidance, developed by County staff in 2019.

Sea level rise vulnerability is addressed in the BFC amendment in several ways:

- Identifying specific sea level rise scenarios to use for design and siting of new habitable buildings;
- Requiring the elevation of the lowest habitable floor of new buildings;
- Requiring that nature-based measures be assessed for shoreline protection projects; and
- Recording a deed restriction acknowledging the risk and accepting liability for impacts of sea level rise.

These changes would mark the first time that sea level rise adaptation measures have been incorporated into Marin County’s Development Code. While they appear to be minor changes, they would represent a major change in the County’s planning permit approach.

**Draft Safety Element**

Since the joint Board of Supervisors and Planning Commission workshop on June 14, 2022, staff submitted the draft Safety Element for review and received comments from the CAL FIRE branch of the Board of Forestry. Staff met with CAL FIRE staff to provide clarification and make changes to be consistent with state regulations. The final changes were approved by the Board of Forestry on September 22, 2022 and are incorporated into the attached draft. A copy of the Board of Forestry review is included as Attachment 4.

Staff circulated the draft Safety Element for public review and received public comments (Attachment 5). One common theme was that the Safety Element provides evidence that Marin County is unable to support more housing as required by the Housing Element. The Safety Element identifies measures for preventing impacts from hazards and measures to make development more resilient to hazards. The attached draft of the Safety Element has been revised to address public comments and concerns.

Another common theme emerging from public comments on the Safety Element is concern about whether evacuation routes can support outgoing traffic in the event of a wildfire. Some comments note that State law requires that “the safety element shall be reviewed and updated as necessary to identify residential developments in any hazard area identified in the safety element that do not have at least two emergency evacuation routes.” The draft Safety Element relies on a project begun by the Marin Wildfire Prevention authority (MWPA) to accomplish this task. The MWPA is sponsoring development of the Ingress Egress Evacuation Planning Tool. As described by MWPA, the goal of the project is to construct an inventory of risk factors and dynamic models of wildland fire spread, communications processes, and transportation networks to simulate wildfire evacuation scenarios in Marin County. Based on the risk factors, scientific modeling scheme, and the results of risk analyses, an evacuation risk planning application using geographic information

system (GIS) software will be developed to assist the MWPA member agencies, city officials, and transportation planners to identify and prioritize areas of concern under different evacuation scenarios.

The information provided by the Marin evacuation risk planning software application will help agencies identify actions and/or projects that can be implemented to mitigate risks associated with evacuation throughout the county. While the project was not developed to respond to SB 99, it will go well beyond the requirements of SB 99 to evaluate ingress and egress and adequacy of transportation networks. CAL FIRE in its review recognizes the value of waiting for the results of this project rather than duplicating efforts to achieve similar, but slightly different results.

Staff also heard public comments and received written comments asking for clarification on the level of coordination between County departments working on issues related to safety. Your Board and Planning Commission also inquired about the level of coordination during the June 14<sup>th</sup>, 2022, workshop. The draft Safety Element has been reviewed by staff from County Fire, Office of Emergency Services, Marin Wildfire Prevention Authority, Department of Public Works, Health and Human Services, and County Parks. Staff met with most of the commentors and made edits prior to the public draft release on June 1<sup>st</sup> and a few edits were made subsequently.

At the June 14<sup>th</sup> workshop, staff also received direction from your Board and Planning Commission to push forward on sea level rise planning while simultaneously supporting current planning efforts. The proposed edits to the draft Safety Element as well as the BFC amendments would accomplish this goal.

**EQUITY IMPACT:** The County followed the State Adaptation Planning Guide for the Safety Element update, in part, because it provides clear guidance on assessing climate change impacts on vulnerable populations. The Vulnerability Assessment for the Safety Element identified several vulnerable populations that are at greater risk from climate change impacts because they lack adaptive capacity. For example, low-income and unhoused populations have limited financial resources to evacuate and sustain themselves in an alternate environment during a climate event. The assessment of climate impacts on a range of populations provided the necessary step for considering new policies that address inequities in how different populations are impacted by and able to respond to climate change. A new goal with policies and programs for equitable community safety planning is one of the considerations for the Board and Commission. The Development Code amendments would implement a program in the draft Safety Element and provide safer housing.

**FISCAL IMPACT:** None.

<b>REVIEWED BY:</b>	<input type="checkbox"/> County Administrator	<input type="checkbox"/> N/A
	<input type="checkbox"/> Department of Finance	<input type="checkbox"/> N/A
	<input checked="" type="checkbox"/> County Counsel	<input type="checkbox"/> N/A
	<input type="checkbox"/> Human Resources	<input type="checkbox"/> N/A

**SIGNATURES:**



**Leslie Lacko  
Senior Planner  
Advance Planning**

**Approved:**



**Tom Lai  
Director**

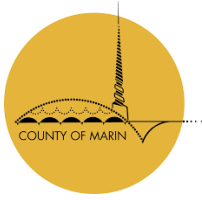
Attachments:

1. Draft Safety Element
2. Proposed amendments to the Development Code
3. BFC & Sea Level Rise Map
4. Board of Forestry Review
5. Public Comments

**Safety Element Staff Report  
for  
Board of Supervisors and Planning Commission  
Workshop**

**Attachment 1**

**Revised Draft Safety Element**



## 2.6 Environmental Hazards and Safety

### Background

[Note to Reader: Revisions to the existing Environmental Hazards and Safety text in the current County Wide Plan is shown with ~~strikeout~~ to indicate existing text and underline to show new text.

This section is all new text and is not shown with underline. Changes since the public comment period are shown in red.]

Marin County places the highest priority on the well-being and safety of its community members. Our policies and implementing programs focus on preparation for potential natural and human-caused hazards and emergencies. Effective emergency management, increased preparation for disasters, and incorporation of resilience in County activities and the development process supports the protection of life and property. This section of the Natural Systems and Agricultural Element of the Countywide Plan is considered the County's Safety Element and provides the context to identify and understand the hazards that could threaten unincorporated Marin County. Based on this understanding, proactive practices and policies enable the continued prosperity and resilience of Marin County.

### What is a Safety Element?

Section 2.6 of the Countywide Plan contains Marin County's Safety Element, one of the State-mandated elements of the Plan. It presents the County's overall goals, policies, and implementing programs to facilitate community resilience and reduce future loss of life and property, injuries, environmental damage, and social and economic disruption resulting from environmental hazards. This section meets the requirements of California Government Code Section 65302.6, 65302(g), and 8685.9. Under State planning law, this section of the Plan identifies and discusses the following hazards and topic areas of concern for the County.

- Equitable Community Safety Planning
- Disaster **Mitigation**, Preparedness, Response & Recovery
- Geology & Seismicity
- Flooding
- Wildfire
- Climate Change & Resiliency Planning

### Other Documents Incorporated by Reference

#### *Incorporated by Reference*

Consistent with Government Code Section (65302(g)(4)(D)(ii)) the CWP summarizes the Local Hazard Mitigation Plan and Vulnerability Assessment by reference.

**Marin County Multi-Jurisdictional Local Hazard Mitigation Plan.** The Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (MCM LHMP) complies with all requirements set

forth under Disaster Mitigation Act (DMA) 2000 and includes information also relevant to the Safety Element. Sections of the Safety Element are supplemented by the most recently adopted MCM LHMP, which is incorporated by reference, as allowed by California Government Code Section 65302(g). The MCM LHMP presents environmental hazard analysis, describes important transportation and utility infrastructure at risk from environmental hazards, describes emergency evacuation systems, and mitigation actions to protect Marin County populations and infrastructure from environmental hazards.

**Safety Element Vulnerability Assessment.** The Safety Element is based, in part, on the findings of a Vulnerability Assessment that evaluates how the effects of climate change could be harmful to the people, infrastructure, buildings, key services, natural and managed resources, and economic drivers in the unincorporated areas of Marin County. It identifies the environmental hazards in Marin County that climate change may affect, the damage that these hazards may cause to people and community assets, and the ability of people and assets to effectively anticipate and recover from these hazards. Preparing the Vulnerability Assessment was the first step in updating the Safety Element to include climate adaptation and resiliency planning. Hazards discussed include extreme heat, flooding, landslides and debris flows, sea level rise, severe weather, subsidence, and wildfire.#

## **Additional Reference Documents**

### ***Informational Documents***

Other documents containing information and policies relevant to the Safety Element include:

- **Marin Community Wildfire Protection Plan (2020)** which is a county-wide plan with 35 agency and group participants that addresses wildfire hazard and threats to economic assets, including homes and infrastructure, and ecological resources in the wildland urban interface (WUI), documenting factors of wildfire risk and the ability of the relevant fire agencies to respond to these wildfire hazards.
- **Marin Ocean Coast Sea Level Rise Adaptation Report (2018)** which presents potential actions to accommodate, protect against, or retreat from the threats of sea level rise and coastal hazards along the Marin Pacific Ocean coastline that can be considered by communities, homeowners, and asset managers.
- **Adaptation Land Use Planning: Guidance for Marin County Local Governments (2019)** presents adaptation measures and planning methods that can be particularly valuable in Marin County, including recommendations for the Countywide Plan.

## **Marin County Hazards**

Much of the existing and planned development in the County is or would be located in an at-risk area for at least one climate change hazard type. The County does not restrict development in areas at-risk due to climate change hazards, but will require new development to take into account projected climate change hazards through design and adaptation strategies.

MarinMap, hosted by a group of local governments, special districts, and other public agencies, is a source of Geographic Information System maps showing environmental hazards in the County on a parcel scale. MarinMap can be accessed here: [MarinMap](#). MarinMap can be used to view existing infrastructure and land uses in the context of different environmental hazards discussed in the Safety Element.

### **Geology and Seismicity**

Earthquakes can produce surface rupture and displacement, but ground shaking is a more likely threat, especially on loose soils (see Map 2-9, Seismic Shaking Amplification Hazards). The San Andreas Fault is the only local fault subject to the Alquist-Priolo Act (see Map 2-10, Fault Hazards), which prohibits specified types of habitable structures within 50 feet of an active trace. Shaking of water saturated soil can result in liquefaction, another potential source of damage (see Map 2-11, Liquefaction Susceptibility Hazards). The Seismic Hazards Mapping Act requires mapping of Seismic Hazard Zones that encompass areas prone to liquefaction and earthquake-induced landslides; the County contains liquefaction and landslide Seismic Hazard Zones, which are subject to State requirements for development planning and construction.

The San Andreas Fault was the source of the magnitude of 7.8 earthquake in 1906. Marin was sparsely inhabited at that time and experienced relatively moderate property loss and two deaths. In 1989, the 7.1-magnitude Loma Prieta earthquake occurred on the San Andreas Fault and was the largest earthquake to occur in the San Francisco Bay Area since 1906. If the fault rupture location were closer, a strong shaking such as this could have caused severe damage within Marin County.

Landslide is a general term for the dislodging and fall of a mass of soil or rocks along a sloped surface or the dislodged mass itself. A debris flow occurs when water begins to wash material from a slope or when water runs off a newly burned stretch of land, picking up speed and debris as it descends the slope. Communities in areas with steep slopes, including coastal bluffs, are generally susceptible to landslides, post-fire debris flows, and other forms of debris flows triggered by earthquakes or water (see Map 2-12: Landslide Hazard Areas).

Land subsidence is a gradual settling or sudden sinking of the Earth's surface due to removal or displacement of subsurface earth materials. Buildings and roads may suffer damage from subsidence of Bay mud and other weak soils, or differential settlement due to placement on multiple soil types.

A tsunami is a series of waves or surges most commonly caused by an earthquake, landslide, or volcanic eruption at the sea floor. Although tsunamis in California are rare, the entire California








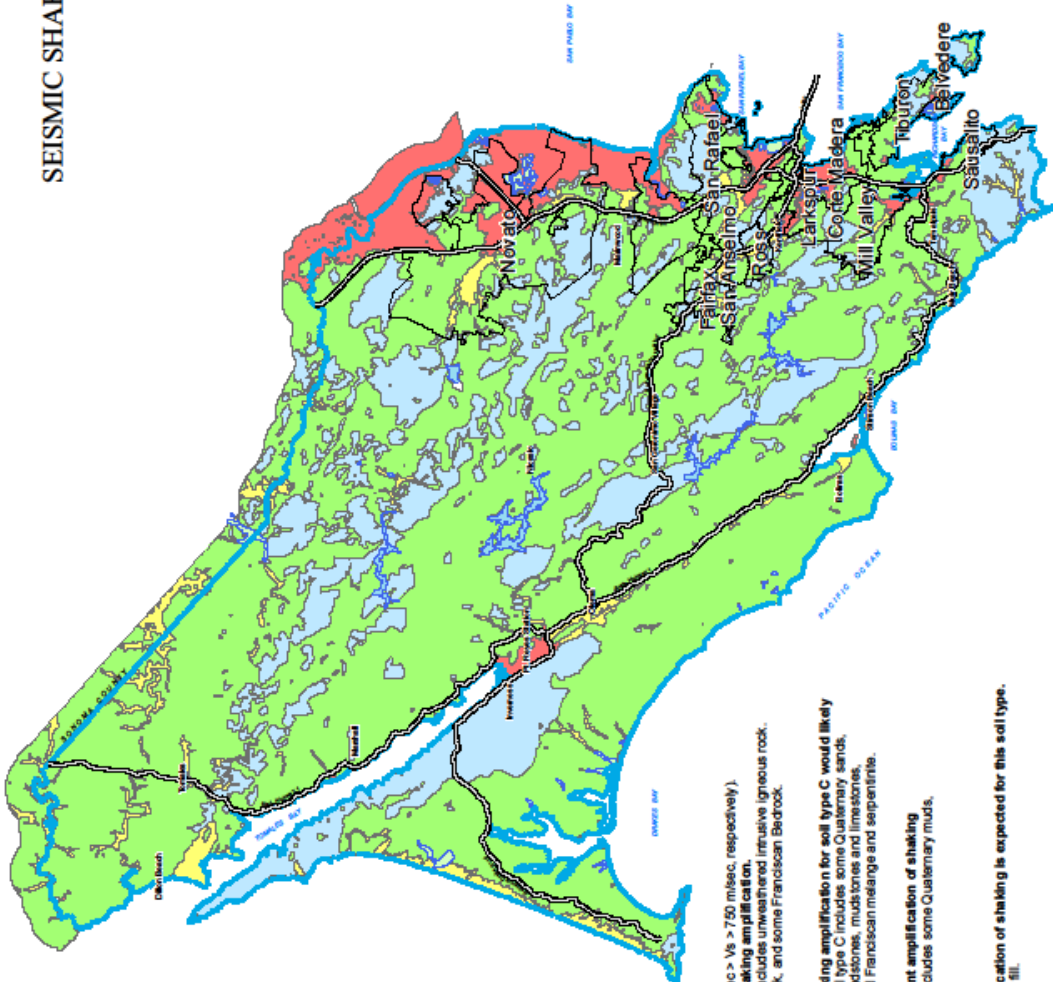
coastline is vulnerable to these events. Current tsunami inundation maps from the California Department of Conservation show inundation areas along much of the Marin County coastline and Richardson Bay shoreline. The tsunami annex of the Marin Emergency Operations Plan serves as the tsunami evacuation plan for the County and provides information on tsunami scenario modeling results, tsunami watch/advisory/warning protocols, and immediate actions to be undertaken by agencies within the County. Seiches are related to tsunamis and are triggered by the same sources, but occur in enclosed and semi-enclosed bodies of water, such as bays, inlets, lakes, and reservoirs. Seiches could occur in any reservoir located in the County and in Richardson, San Pablo, and San Francisco Bays, but are less likely than tsunami in Marin County.

# SEISMIC SHAKING AMPLIFICATION HAZARDS

## MAP 2-9

SOURCE: 2000, Seekins, U.S.C. Seeks, Inc., and Frank Tom, SA, Data and Spatial Information, San Francisco Bay Area. [http://www.usgs.gov/earthquake\\_hazards/earthquake\\_hazards.html](http://www.usgs.gov/earthquake_hazards/earthquake_hazards.html).  
 Earthquake Hazard Program Northern California, U.S. Geological Survey, 2000.

- Legend**
-  County Boundary
  -  City Boundary
  -  Highways and Major Roads
  - Water Bodies**
  -  Lakes
  -  Lagoons



- Soil Type**
-  Soil Types A and B ( $V_s > 1500$  m/sec and  $1500$  m/sec  $> V_s > 750$  m/sec, respectively). Soil types A and B do not contribute greatly to shaking amplification. Soil type A occurs infrequently in the bay areas and includes unweathered intrusive igneous rock. Soil type B includes volcanics, most Mesozoic bedrock, and some Franciscan Bedrock.
  -  Soil Type C (750 m/sec  $> V_s > 350$  m/sec). The shaking amplification for soil type C would likely be not as significant as for soil types D and E. Soil type C includes some Quaternary sands, sandstones and mudstones, some Upper Tertiary sandstones, mudstones and limestones, some Lower Tertiary mudstones and sandstones, and Franciscan melange and serpentinite.
  -  Soil Type D (350 m/sec  $> V_s > 200$  m/sec). Significant amplification of shaking by these soils is generally expected. Soil type D includes some Quaternary muds, sands, gravels, silts and muds.
  -  Soil Type E (200 m/sec  $> V_s$ ). The strongest amplification of shaking is expected for this soil type. Soil type E includes water-saturated mud and artificial fill.

\* Site amplification is the velocity at which the rock or soil transmit shear waves ( $V_s$ ). Shaking is stronger where the shear wave velocity is lower.  
 Source: (Seekins et al., 2000)

MAP 2-10  
FAULT HAZARDS

- Legend**
- County Boundary
  - City Boundary
  - Highways and Major Roads
  - Alquist-Prado Zone
  - Historic (200 yrs to today)
  - Holocene (10,000 yrs to today)
  - Late Quaternary (700,000 yrs to today)
  - Quaternary (1,000,000 yrs to today)
  - Pre-Quaternary (4.5 billion to 1,000,000 yrs ago)

- Water Bodies**
- Lakes
  - Lagoons



THIS MAP WAS DEVELOPED FOR GENERAL INFORMATION PURPOSES. THE CALIFORNIA DEPARTMENT OF CONSERVATION IS NOT RESPONSIBLE FOR ANY DAMAGE TO PERSONS OR PROPERTY FROM THE USE OF THIS INFORMATION TO INFERRED PURPOSES.




Date: September 28, 2007 File: Map 2-10.rxd



SOURCES: California Department of Conservation, Division of Mines and Geology, Digital Database of Faults from the Fault Activity Map of California, California Department of Conservation, Division of Mines and Geology, 2000.

# MAP 2-11 LIQUEFACTION SUSCEPTIBILITY HAZARDS






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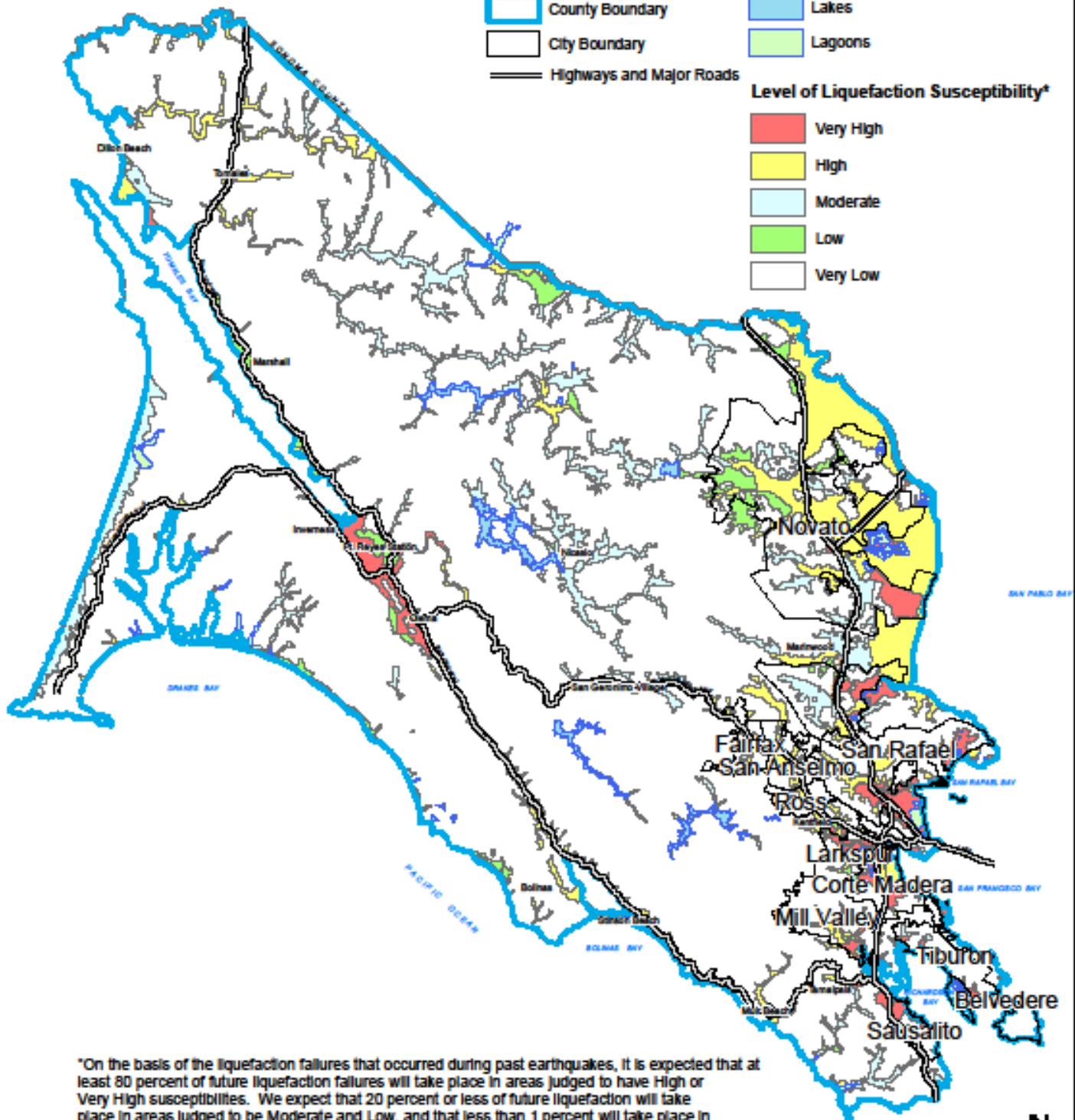
-  County Boundary
-  City Boundary
-  Highways and Major Roads

## Water Bodies

-  Lakes
-  Lagoons

## Level of Liquefaction Susceptibility\*

-  Very High
-  High
-  Moderate
-  Low
-  Very Low



\*On the basis of the liquefaction failures that occurred during past earthquakes, it is expected that at least 80 percent of future liquefaction failures will take place in areas judged to have High or Very High susceptibilities. We expect that 20 percent or less of future liquefaction will take place in areas judged to be Moderate and Low, and that less than 1 percent will take place in areas judged Very Low (Knudson et al., 2000).

0 1 2 4 6 8 Miles



SOURCE: Knudson, K. L., Sowers, J. M., Witter, R. C., Wentworth, C. M., and Helley, E. J., Preliminary Maps of Quaternary Deposits and Liquefaction Susceptibility, Nine-County San Francisco Bay Region, California: A Digital Database, Open-File Report 00-44, Online Version 1.0, U.S. Geological Survey, 2000.

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Date: September 20, 2007

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## **Flooding**

A flood occurs when there is too much water on the ground to be held within local bodies of water, drain into soils, or to be carried away by rivers or urban drainage systems, causing the water to flow into normally dry areas. Two forms of flooding primarily occur in Marin: 1) tidal flooding and 2) river or watershed flooding. All of Marin's watersheds are largely prone to flash flooding.

Many unincorporated communities in Marin contain Federal Emergency Management Agency (FEMA) Special Flood Hazard Areas (SFHA), meaning they have at least a 1% chance of flooding in a given year (see Map 2-13: Flood Hazard Areas). Dam failure from seismic activity or other forms of dam failure can result in flooding downstream of the dam is also shown on Map 2-13.

Since the middle of the twentieth century, the winter/spring storms of 1955, 1958, 1964, 1969, 1970, 1973, 1982, 1983, 1986, 1995, 1997, 1998, 2005/2006, 2006, and 2017 caused significant damage and were declared Major Federal Disasters for flooding. The Richardson Bay watersheds (e.g., Marin City, Tamalpais Valley, Almonte, and Mill Valley), the Bel Aire neighborhood, Stinson Beach, San Rafael Meadows, Santa Venetia, Ross Valley, and Inverness have a significant history of flooding. Existing development in these communities continue to be at risk of flooding. The unincorporated communities of Bel Marin Keys, Santa Venetia, Strawberry, and Inverness are located in levee-protection zones and may become inundated in the event of levee failure (see Map 2-13: Flood Hazard Areas). Flood hazard areas are shown in MarinMap ([MarinMap](#)) and can be mapped along with key infrastructure and land use designations.

Development in flood hazard areas in the County is not restricted, but rather municipal code requirements and other regulations consider existing and projected flood zones and extents when reviewing the design and adaptation measures of proposed development.

The Marin County Flood Control & Water Conservation District conducts the County's Flood Control Program, which seeks to reduce the risk of flooding and protect life and property while utilizing sustainable practices.

# Map 2-13 Flood Hazard Areas



## **Wildfire**

A wildfire is any uncontrolled fire occurring in an area of combustible vegetation that requires fire suppression. Wildfires can occur naturally, such as those ignited by lightning, and are important to many ecosystem processes; however, most are started by human activity such as smoking, campfires, powerlines, equipment use, and arson.

A regional approach to wildfire planning and response is addressed in the Marin County Multi-Jurisdictional Local Hazard Mitigation Plan and the Marin Community Wildfire Protection Plan (CWPP). The Marin Wildfire Protection Authority (MWPA), established in 2020, coordinates and funds 17 local member agencies to create more fire adapted communities based on the priorities outlined in the CWPP. Additional information detailing wildfire hazard in the County and detailed descriptions of the CWPP and the MWPA are provided in a technical memo supporting this Safety Element.

Approximately 60,000 acres or 18 percent of the County's land area falls within the Wildland Urban Interface (WUI) where residences and other structures are adjacent to or intermixed with open space and wildland vegetation (see Map 2-14: Wildland Urban Interface). The term WUI is not a designation of potential wildfire severity, but rather a somewhat loosely defined description of an area where urban development meets undeveloped lands at risk of wildfires. The size and location of the WUI will change over time with development patterns.

Fire hazard severity zones (FHSZ) are CAL FIRE-designated areas of significant fire hazard that influence how people construct buildings and protect property to reduce risk associated with wildland fires. A CAL FIRE countywide assessment of wildland fire threat revealed that approximately 82 percent of the total land area of the County is ranked as having moderate to very high fire hazard severity zone ratings (see Map 2-15: Fire Hazard Severity Zones).

Historical records show that many large wildfires (greater than 500 acres) have occurred in Marin since 1850. CAL FIRE incident information identifies eight wildfires in the County since 2008. The most recent fire in Marin was the Woodward Fire which started on August 17, 2020 by lightning from a rare dry lightning weather event.

Fire protection in Marin is the responsibility of either the federal, state, or local government (see Map 2-16): Wildfire Responsibility Areas). On federally owned land, or federal responsibility areas (FRA), fire protection is provided by the federal government, often in partnership with local grants and contracts. In state responsibility areas (SRA), which are defined according to land ownership, population density, and land use, CAL FIRE has a legal responsibility to provide fire protection. Local responsibility areas (LRA) include incorporated cities and cultivated agriculture lands. In LRAs, fire protection is provided by city fire departments, fire protection districts, or counties, or by CAL FIRE under contract to local government.

CAL FIRE contracts with the Marin County Fire Department (MCFD), the primary agency that handles wildfires, to provide wildland fire protection and associated fire prevention activities for SRAs. MCFD also provides similar protection services to FRA in the Golden Gate National Recreation Area (GGNRA), Muir Woods National Monument, and Point Reyes National Seashore. In addition to MCFD, there are twelve fire service agencies and one volunteer



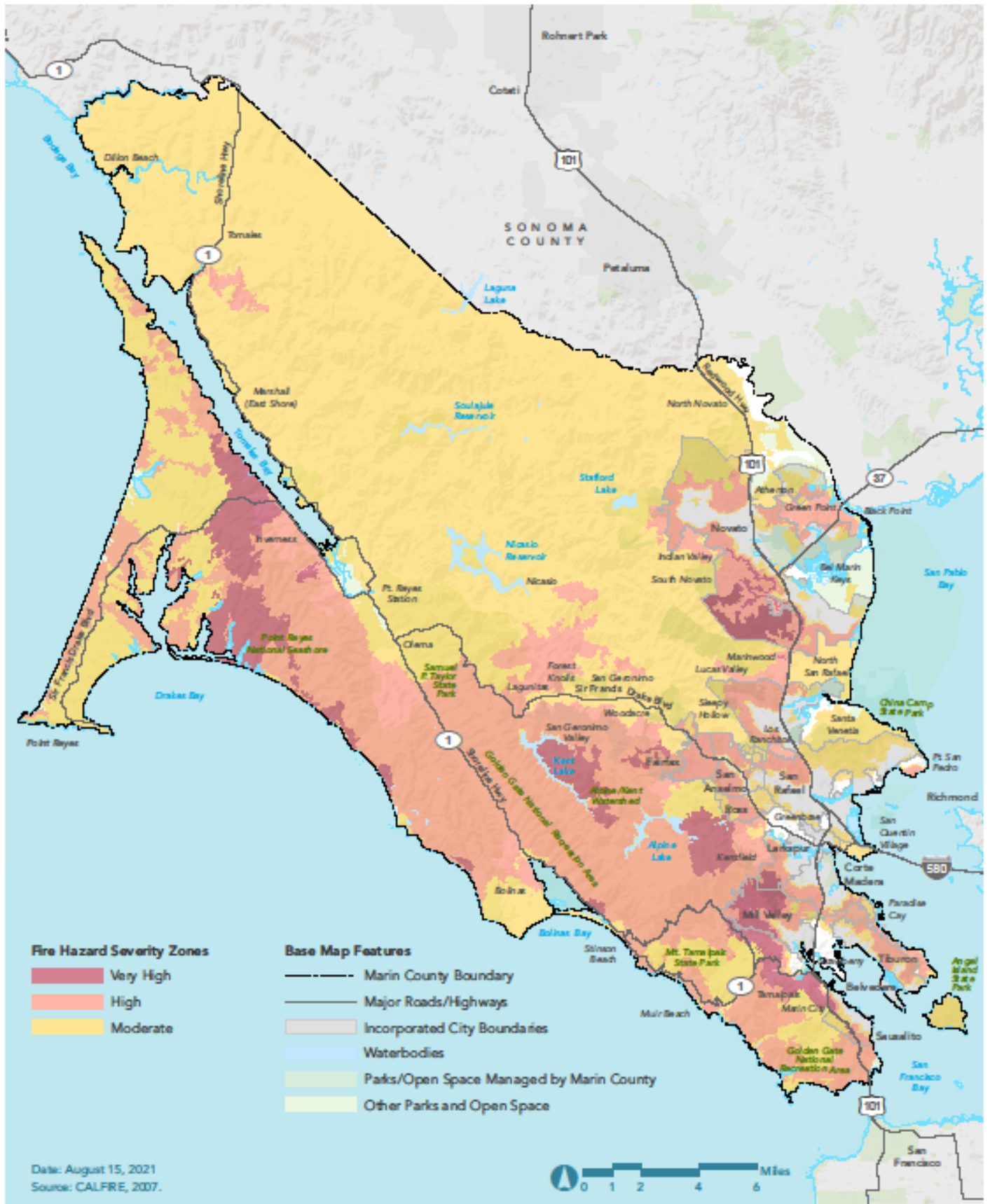
department—Tomales Volunteer Fire Company (TVFC)—that provide fire services in Marin County.

CAL FIRE has the responsibility for managing a list of communities in the County that are at high risk of damage from wildfire. These communities include: Bolinas, Inverness, Inverness Park, Kentfield, Lagunitas-Forest Knolls, Lucas Valley-Marino, Marin City, Olema, Point Reyes, Ross, San Anselmo, Santa Venetia, and Stinson Beach.

Maps for wildfire severity zones, the WUI, existing and proposed land uses, and infrastructure can be viewed on interactive maps on MarinMap (<https://www.marinmap.org/dnn/default.aspx>). From the MarinMap home page, select Marin Map Viewer, acknowledge the disclaimer, and use the left-hand menu to select the filter layers shown on the maps. The wildfire hazard severity maps are under the filter layer “Hazards and Geology”. General Plan and zoning designations are found in the filter layer “Land Use Designations” and are organized by the different cities and communities in Marin County.



# Map 2-15 Fire Hazard Severity Zones



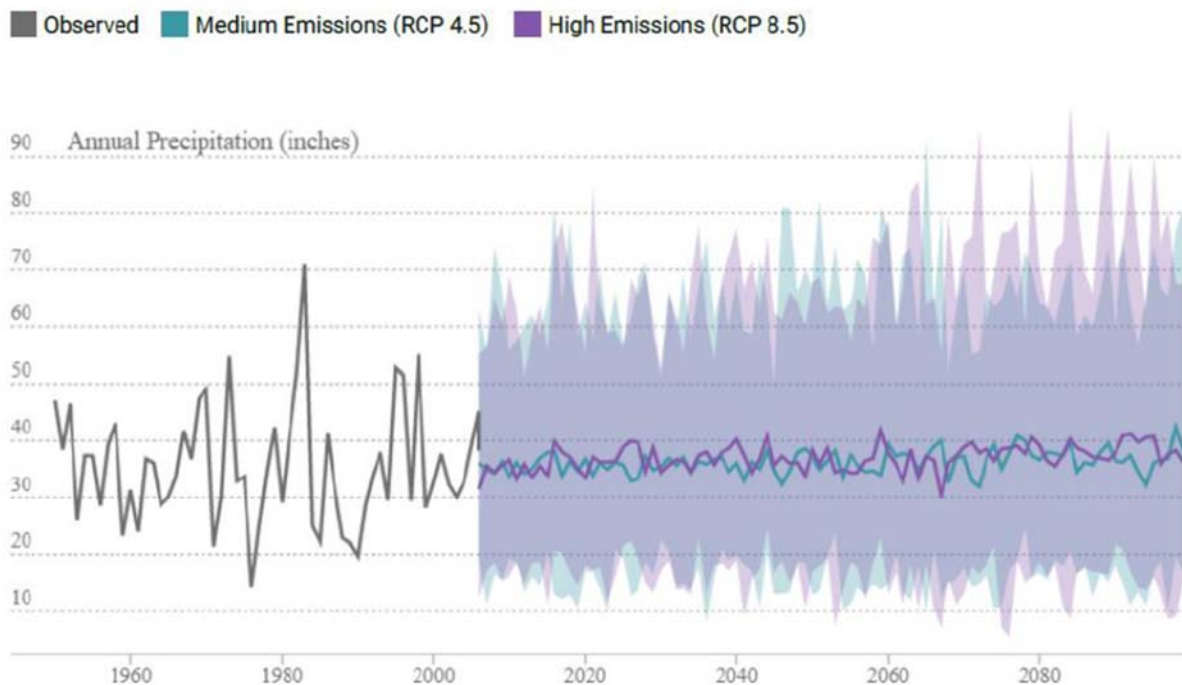


**Climate Change and Resiliency Planning**

All hazards will be examined for the purpose of reducing vulnerability to Climate Change related hazards. Climate change is a long-term change in the average meteorological conditions in an area. Currently, the global climate is changing due to natural causes and primarily a human-induced increase in greenhouse gas (GHG) emissions that trap heat near the Earth’s surface. Four climate scenarios, also called Representative Concentration Pathways (RCPs), are used by climate scientists to project future climate conditions. The four RCPs (RCP 2.6, 4.5, 6, and 8.5) represent various global GHG emissions scenarios through the end of the twenty-first century. In the County, climate change is expected to intensify existing hazards, such as sea level rise, wildfire, and drought, and create new hazards, such as severe weather events and extreme heat events.

**Changes in precipitation and weather.** The effects of climate change include changes in precipitation patterns. Precipitation levels in the County are expected to remain similar or increase (see Figure 2-17: Projected Annual Precipitation in Marin County), but there will be more years with extreme levels of precipitation, both high and low, and more frequent and more intense droughts.

**Figure 2-17 Projected Annual Precipitation in Marin County**

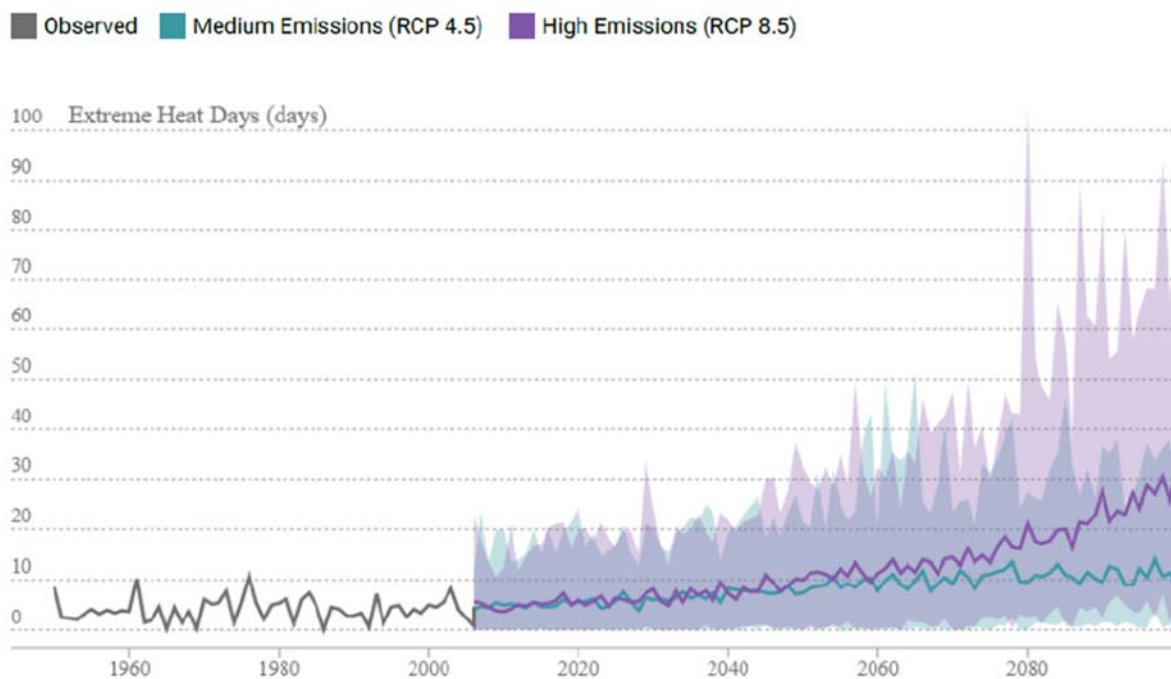


Source: Cal Adapt, Local Climate Change Snapshot for Marin County (2021)

Severe weather includes strong winds, hail, precipitation, and lightning. Climate change will likely increase the frequency, intensity, and duration of storm events in the County, which in turn would increase the potential for hazards related to severe weather.

**Rising temperatures.** Extreme heat is any time period when the air temperature is well above usual levels. Under a scenario in which GHG emissions peak around 2040, then decline, the average annual number of extreme heat days and warm nights in Marin County could increase to 19 and 27 by 2050, and 18 and 28 by 2099 (see Figure 2-18: Projected Extreme Heat Days in Marin County).

**Figure 2-18: Projected Extreme Heat Days in Marin County**

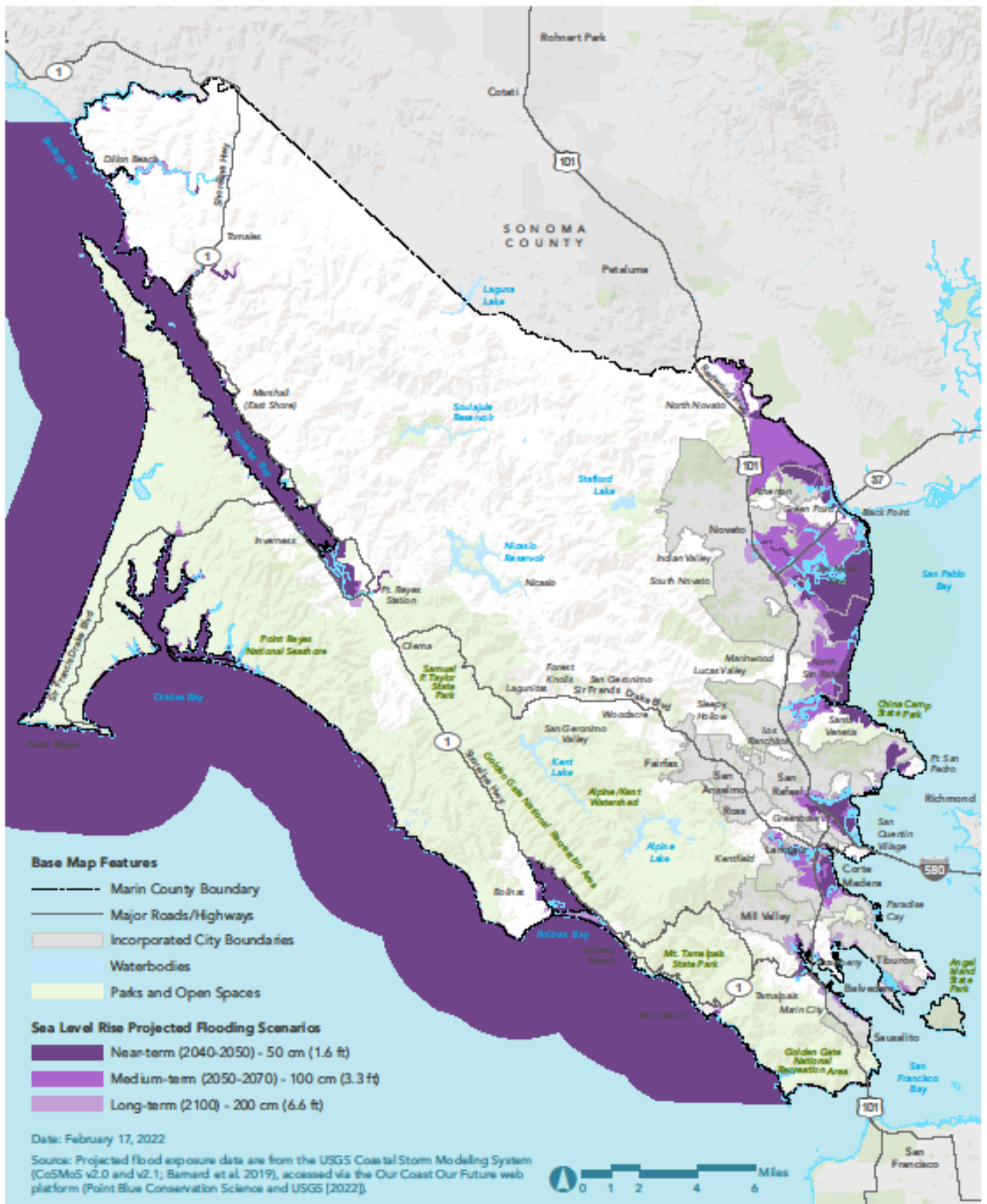


Source: Cal-Adapt, Local Climate Change Snapshot for Marin County (2021)

**Changes in Sea Level Rise.** Rising sea levels are considered a secondary effect of climate change due to warming ocean temperatures and melting glacial ice sheets into the ocean. The California coast has already seen a rise in sea level of four to eight inches over the 20th century due to climate change. By 2100 around 7,000 acres, 9,000 parcels, 10,000 buildings and 120 miles of roads throughout Marin County will be exposed to sea level rise and 100-year storm events (see Figure 2-19: Sea Level Rise). Given the uncertainty in the magnitude and timing of future sea level rise, planning documents use a scenario-based approach to assess a range of potential sea level rise impacts derived from the U.S. Geologic Survey (USGS) Coastal Storm Modeling System (CoSMoS) which identifies various sea level rise scenarios based on global and regional climate and wave models to produce local hazard projections. Generally consistent with the State Agency Sea-Level Rise Action Plan for California which uses CoSMoS projections, published in 2022 by the Ocean Protection Council, Marin County has chosen to plan for the following Sea Level Rise scenarios, which go beyond the minimums set out by the state:

- 1.6 feet of Sea Level Rise Near-term (2040-2050)
- 3.3 feet of Sea Level Rise Medium-term (2050-2070)
- 6.6 feet of Sea Level Rise Long-term (2100)

# Map 2-19 Sea Level Rise





**Disaster *Mitigation, Preparedness, Response, and Recovery***

Marin's ~~The Sheriff's~~ Office of Emergency Services (OES) ~~operates consistent with the state's Standardized Emergency Management System.~~ OES provides emergency management services for the entire County, including coordinating emergency operations activities among all the various local jurisdictions ~~within the Marin Operational Area as well as coordinating mutual aid from other operational areas, the region, state, and federal agencies.~~ ~~and developing~~ OES develops written guidelines for emergency preparedness, response, recovery, and mitigation to natural/man-made disasters, and technological disasters. OES maintains the Marin Operational Area Emergency Operations Plan (EOP), which establishes the emergency management organization required to mitigate any significant emergency or disaster affecting Marin, and establishes the overall operational concepts associated with Marin County's Emergency Operations Center (EOC) activities.

The Marin County Sheriff's Office, the MWPA, and all Marin municipalities ~~are launching~~ ZoneHaven, a community evacuation interface that allows the public access to real-time status updates and instructions for their evacuation zone and provides County municipalities and fire responders with an evacuation planning application. Agencies in Marin ~~will be~~ are able to use ZoneHaven to send evacuation warnings to evacuation zones in Novato, San Rafael, Ross Valley, Southern Marin, and West Marin. Fire Safe Marin and Marin fire agencies, cities and towns, and other partners ~~are working together to~~ developed improved wildfire evacuation maps and messaging for residents of Marin's WUI communities. These FireClear maps show both evacuation zones and evacuation routes by community and are found on the MWPA website: [Fire Safe Marin Evacuation Maps](#).

The MWPA is conducting an Evacuation Ingress-Egress Risk Assessment to create a rating system of roads, presenting a visual risk assessment of the County's roadways at various levels of aggregation (geographic areas, evacuation zones, or other). In addition to the software platform, a report will also present an initial list of risk factors for improvement by area, by risk category, and by responsible agency.

The County curates on its main website a collection of links to sources containing disaster preparedness materials. Ready Marin, a County emergency preparedness website, contains emergency planning checklists, a collection of links to disaster preparedness resources, and registration links for the Marin Community Emergency Response Team (CERT), a community disaster training program, and Get Ready, a one-hour recurring disaster training program facilitated by community volunteers. The Marin County Sheriff's Office provides disaster preparedness materials for families, functional needs populations, organizations, schools, County employees, and pet owners on its Preparedness & Recovery web portal. The Marin County Public Emergency Portal provides information on critical alerts systems, including AlertMarin and Nixle, severe weather alerts and weather radios, disaster preparedness social media feeds, and emergency and evacuation preparedness.



## **Key Trends and Issues**

[Note to Reader: This section is all new text and is not shown with underline.]

*Are the rules related to hazards changing?*

### **Changing Regulatory Environment and Approach to Climate Planning**

Since California's First Climate Change Assessment in 2005, the state has released several documents and tools to support adaptation planning including the 2020 Adaptation Planning Guide, 2021 California Climate Adaptation Strategy, 2021 Wildfire and Forest Resilience Action Plan, Strategic Plan to Protect California's Coast and Ocean, and Cal-Adapt Tool.

Marin County has incorporated climate adaptation and resilience considerations into the Safety Element as directed by California Government Code § 65302(g) (SB 379). In Marin County, focused steps have been taken to identify threats from, prepare for, and address impacts from hazards, particularly wildfire and sea level rise. While Marin County has made forward progress in planning for climate hazards, continued planning for adaptation and climate change resiliency will require the County to provide appropriate staffing with the necessary skill sets.

Many issues straddle the built environment and natural and managed resources, such as drinking water and flood management infrastructure, and require increased partnership between public and private organizations. Collaboration between outside governments, agencies, and other organizations is essential. Additionally, a new focus has included identifying who and what is affected by climate-related disruptions to determine the vulnerability and adaptive capacity of the people, places, and resources affected. This step is critical in reducing risks from climate impacts, strengthening protections and increasing the resilience of communities and people to respond, recover, and adjust. Already certain parts of the County experience damage and loss on a repetitive basis for hazards such as flooding, storm surges and king tides, and landslides. These hazards will likely occur more frequently in the future. In order to effectively plan for climate hazards and adaptation planning, Marin County should continue collecting, organizing, sharing, and maintaining climate change data for the regular Safety Element updates. Marin County may want to consider a program to consistently map and document repetitive damage from environmental and climate change hazards to inform the public and as a basis for future planning efforts.

*How are hazards addressed in a changing climate?*

## **Resiliency Planning**

Resilience is the capacity of an individual, community, organization, or natural system to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience. Increasingly, Marin County is viewing land use policies and tools through the lens of climate resilience in order to protect public health and safety.

Achieving a resilient community demands proactive planning. This approach requires systemic solutions involving local and regional agencies and stakeholders, bridging the practice gaps between social justice, urban planning and design, sustainability, disaster recovery, and other areas.

Increasing climate resilience has two important components: planning and investment to address changing climate conditions and building adaptability and flexibility into systems and infrastructure to withstand increasing environmental hazards. Planning, investment, and implementation actions must not only reflect climate resilience as a core goal, but should also result in greater adaptive capacity for the people, communities, economic conditions, and natural systems affected – all of which work together to build resilience.

Resiliency planning differs from disaster recovery by creating a foundation to withstand or prevent loss of life, buildings and infrastructure, or services, while disaster recovery focuses on the restoration of operations after a hazard event. To understand the performance of plans and projects, it is important to develop a set of metrics linked to the management objectives of a plan or investment under current and changing climate conditions. These resilience metrics should align with management objectives for a given plan or project, as well as the overall resilience of that plan or project.

Two examples of planning for resilient communities are the County’s desire to establish resiliency hubs and investigating whether the use of microgrids will help communities maintain electricity during Public Safety Power Shutoffs (PSPS).

### **Community Resilience Hubs**

Resilience hubs are community-serving facilities augmented to support residents and coordinate information and resource distribution and services before, during, or after a natural hazard event. They provide the physical space and social safety net for a community in the event of a hazard and its secondary impacts, such as heat waves, wildfire smoke, floods, and earthquakes. Resilience hubs can be designed to operate independent of the electrical grid by relying on solar power and battery storage as a backup source of electricity. These alternative sources of power allow the hubs to provide support to residents who are impacted by the hazards. Resilience hubs can also be used as a space to promote meaningful engagement and programming that empower communities to build resilience to climate hazards, especially for frontline communities that are directly impacted by climate hazards and/or their secondary impacts. Resilience hubs leverage established, trusted, and community-managed facilities that are used year-round as neighborhood centers for community-building activities. Recognized as one tool for neighborhoods and residents, in 2021 the California

state legislature approved millions in funding for community resilience hubs and different agencies and organizations can provide other funding sources.

If set up in this manner, hubs can also help residents respond to extreme weather events through material assistance. For instance, Hubs can provide phone charging during a power outage, provide air conditioning during a heatwave, organize welfare checks on vulnerable neighbors, or deliver other services.

As climate change makes extreme weather worse and less predictable, emergency services are increasingly overstretched. Resilience Hubs are an opportunity to partner with communities from the very beginning to design a space that meets their needs and addresses their priorities.

### **Microgrids**

Microgrids are smaller distributed energy sources that have localized grids that can disconnect from the traditional grid to operate autonomously. Microgrids can become a more flexible and efficient electric grid by integrating renewable energy resources, such as solar. Microgrids can strengthen grid resilience and help mitigate grid disturbances during Public Safety Power Shutoffs (PSPS) due to dangerous wind conditions that may exacerbate wildland fire ignition potential. A microgrid can provide life-saving reprieve in the event of a hazard, especially for sensitive populations that are dependent on electricity for survival.

*Are threats from environmental hazards increasing?*

## **Climate Change in Marin**

In Marin County, climate change is expected to result in increased temperatures and changes in precipitation patterns. These factors, either individually or in combination, could contribute to an increase in the frequency and intensity of secondary climate effects such as extreme heat events, extreme precipitation and flooding, landslides, wildfires, and sea-level rise. The level of impact from these climate change-related events will vary across the unincorporated county due to physical, social, and economic characteristics.

Climate hazards will also impact Marin's physical assets. Many infrastructure networks (roads, water systems, wastewater systems, electricity grid) in Marin County are vulnerable to climate change hazards, and require expensive and complex improvements to reduce exposure to hazards, and often lack alternative solutions. Key infrastructure, including roads, electrical lines, and communication facilities, traverse areas at risk for hazards, increasing the chance of disruption or impact. Few feasible alternatives exist to adapt key services to climate hazards due to their complexity and the coordination and cost necessary to redesign or relocate the infrastructure. Structures can be retrofitted, upgraded, or elevated to prevent damage from climate hazards, but these solutions can be expensive or infeasible for property owners to complete. Marin's natural and managed resources face threats from extreme heat, drought, sea level rise, and wildfire. The intersection of these hazards, such as heightened fire risk combined with drought, exacerbate the impacts and Marin natural and managed resources have little adaptive capacity to become resilient to heightened impacts from hazards.

## **Sea Level Rise**

Climate change is expected to continue to exacerbate sea level rise in Marin County and across the California coastline. One consequence of rising sea levels is the increased extent, depth, and frequency of coastal flooding as increased base sea levels lessen the distance between sea level and land elevations. Map 2-19 shows the State of California's current sea level rise projections, with which Marin County strives to be consistent: 1.6 feet for the near-term (2040-2050); 3.3 feet for the medium-term (2050-2070); and up to 6.6 feet for the long-term (2100).

Jurisdictions across California have developed local sea level rise projections based on a variety of models and assumptions. In 2022 the Ocean Protection Council published the "State Agency Sea-Level Rise Action Plan for California", which establishes the sea level projections all state agencies will use in their planning and permitting. This document is intended to bring consistency across state agencies for sea level planning and permitting and provide the public with one set of sea level rise projections to incorporate into project plans. Marin County's adopted sea level rise projections are generally consistent with those published by the Ocean Protection Council.

In addition to contributing to increased overland flooding, sea level rise can lead to the intrusion of salt water into groundwater aquifers, causing shallow groundwater tables to rise. This phenomenon can in turn cause ponding of water or flooding in low lying areas with little to no past flooding occurrences; infiltrate underground water, sanitary sewer, water, and storm drain pipelines; increase soil liquefaction risk during seismic events; and remobilize old soil contaminants. This effect of sea level rise has been studied less in coastal communities compared to increased overland flooding.

Marin County has already prepared several reports and plans focusing on coastal and Bayshore line sea level rise and has received grant funding to carry out small, localized sea level rise mitigation projects. An example of these planning efforts is the "Marin Ocean Coast Sea Level Rise Adaptation Report" which presents potential actions to accommodate, protect against, or retreat from the threats of sea level rise and coastal hazards. The objective of this report is to present options for increasing resiliency in existing natural and built assets and systems in the face of increased sea level rise and coastal storms. The County has also prepared the "Adaptation Land Use Planning Guide for Marin County and Local Governments" which explores appropriate adaptation land use planning for Marin County's bay shoreline and identifies plans, policies, and projects for adapting to new situations brought on by climate change.

Building on these efforts, Marin County can play a lead role in organizing a county-wide approach to sea level rise planning and identification and funding of projects to protect infrastructure and property from the effects of rising sea levels. Future sea level rise projections show significant disruptions to key infrastructure such as Highways 101, 37, and 1, all owned and operated by Caltrans. Other essential roads will be impacted, along with utility infrastructure, cell phone towers, and many developed communities. Marin County must look toward regional solutions for sea level rise impacts and will likely need to coordinate with other jurisdictions and agencies to establish a regional coalition of stakeholders that can work jointly on solving sea level rise impacts. Some new form of regional governance may need to be established and sources of funding for large mitigation

project must be secured. Long-term regional solutions will require working closely with regional and state agencies and enlisting the assistance of state level elected officials.

*How can hazards be avoided?*

## **Wildfire Risk and Regulations**

Wildfires across the state have been expanding and become more destructive since 2017, reaching further into suburban and urban areas. The 2020 fire season broke numerous records: five of California's six largest fires in modern history burned at the same time, destroying thousands of buildings, forcing hundreds of thousands of people to flee their homes, and exposing millions of residents to dangerously unhealthy air.

Fire protection responsibilities in Marin County are split across multiple agencies and levels of government, requiring coordination and consistency in management and prevention to achieve wildfire resiliency. The Marin County Fire Department provides structural fire protection to most unincorporated areas of the County, while some rural and all urbanized areas are served by local fire protection districts, volunteer protection, and fire departments. State and local fire protection is provided to wildland areas.

The absence of large fires in Marin in recent history has resulted in open space lands and undeveloped private property with high fuel loading. To compound the issue, national fire suppression policies and practices have contributed to the continuous growth (and overgrowth) of vegetation resulting in dangerous fuel loads. Marin's unincorporated rural communities are primarily situated within or adjacent to the wildland urban interface, with moderate to dense concentrations of structures. Response times in these communities can present significant challenges to firefighting as emergency fire access and evacuation egress is sometimes limited by narrow, winding roads lined with dense vegetation.

In March 2020, the voters authorized Marin County to levy and assess a special parcel tax for fire protection and prevention services for 10 years. Marin County joined 16 agencies to form the new joint powers authority, the Marin Wildfire Prevention Authority (MWPA). The formation of the MWPA allowed for the expansion of policies and programs identified in the Marin County Multi-Jurisdictional Local Hazard Mitigation Plan and Marin Community Wildfire Protection Plan and considers the Integrated Climate Adaptation and Resilience Program (ICAP), designed to develop a cohesive and coordinated response to the impacts of climate change across the state.

Changing state legislation and regulations, the increasing number and intensity of California wildfires, and new emerging management practices are shaping Marin County's approach to wildfire prevention planning. New focus areas for wildfire safety include:

- Supporting steps communities can take to reduce and manage risk to become better fire-adapted including reducing vegetation around homes and on properties, using fire-resistant materials in building construction, and coordinating alerts, evacuation, and recovery efforts with neighbors.

- Considering equity in wildfire planning, including what communities are most at risk, who needs evacuation assistance, and what resources are available to help communities before, during, and after a wildfire.
- Incorporating climate change tools and adaptations, recognizing that warming temperatures and drought, combined with the expansion of the wildland-urban interface are projected to increase risk.
- Continuing the work to understand the importance of land use patterns relative to changes in climate given that local human development is under direct control and may be the most effective tool for managing future fire risk to human life and infrastructure.
- Increasing safety and resiliency for nonconforming developments that may not meet state and local standards for emergency access, water supply, fire flow, signage, or vegetation clearance.
- Establishing proper evacuation plans, taking into consideration fire and traffic modeling, communications capabilities, and safety of evacuation routes to ensure communities are able to mobilize.
- Updating building code requirements in the WUI and in high and very high fire hazard severity zones to reflect the most current state requirements, including Cal Fire's Fire Safe Regulations for development in the very high hazard severity zones.
- Ensuring post-fire recovery planning is not left out in the development of wildland fire management approaches or planning.

Addressing wildland fire hazard in Marin County is a multi-agency effort that requires community participation and collaboration to ensure Marin's people, structures, and natural resources can be resilient in the face of wildfire.

*Are all communities afforded protection from environmental hazards?*

## **Equitable Community Safety Planning and Vulnerable Populations**

All residents of Marin County will be impacted by climate change, but the intensity of effects will vary depending on the individual's physical location or proximity to the hazard, available financial resources, and mobility, health, or dependency on other individuals or services. Differences in exposure, sensitivity, and/or adaptive capacity affect an individual's or community's vulnerability to climate change. Common factors that contribute to vulnerability of people and communities include existing inequities, exclusion, or institutionalized racism; poor environmental conditions, lack of access to services, or poor living conditions; individual or surrounding physical states or conditions that increase vulnerability; and lack of investment opportunities. Resilience requires community capacity to plan for, respond to, and recover from stressors and shocks.

Many populations in Marin County are vulnerable to one or more climate change impacts. A Vulnerability Assessment was prepared to support the development of the Safety Element which identifies vulnerable populations in Marin and details how climate change impacts will increase their vulnerability. A scoring system was used to provide a relative indication of each vulnerable

population's degree of impact from a particular climate change hazard and an adaptive capacity score to identify the most at risk populations. The Vulnerability Assessment described that extreme heat, flooding, and wildfire can severely endanger exposed populations, especially those with less capacity to adapt. People who have limited financial resources or who do not own their home are more limited in their emergency response capacity and therefore vulnerable to climate hazards. Language barriers and lower levels of social capital, or the network of relationships an individual or population has, can increase vulnerability. Some communities in Marin may be unable to receive emergency notifications, may not be able to evacuate because of local road conditions, or not able to evacuate quickly due to financial, social, or infrastructure limitations. People with disabilities, seniors, and others who may have mobility challenges face obstacles in preparing for an event and evacuating and thus are considered highly vulnerable to climate hazards. Marin's outdoor workers and houseless populations are highly vulnerable to many different climate hazards due to the extent of their outdoor exposure and lack of alternative options that would reduce exposure to climate hazards.

A resilient community is one where all members community are able to effectively prepare for and recover from acute and chronic climate impacts. Ideally, all community members are equally resilient regardless of income, health, identity, education, or other socioeconomic factors.

Removing all disparities is an aspirational goal and may be beyond what a community can achieve, but a resilient community should work together to advocate for the resources they need to prepare for and recover from climate change impacts. This will require sustained relationships with local governments and agencies involved in disaster planning.

New partnerships and on-going cooperation are necessary to support vulnerable communities' resilience to climate impacts. Equitable community safety planning requires increased coordination between jurisdictions, state agencies, and local community groups. It also requires consideration of historic and current inequities and barriers that prevent communities from addressing community resilience and building local capacity to deal with climate change impacts. From avoiding unintended negative impacts from adaptation actions to acknowledging systemic barriers to local capacity, a comprehensive approach to climate justice will require coordinating and sharing best practices across policy areas, jurisdictions, state agencies, and with local community groups. Building a resilient Marin requires increasing the capacity of communities and people to be able to withstand and recover from climate-related disruptions and learning to adapt in the face of this change.

*How else can Marin County respond to hazards?*

## **Hazard Recovery Planning**

Climate change projections suggest that environmental hazards like drought, extreme heat and weather, and wildfire will likely become more frequent and stronger in Marin County and the broader region. In light of these trends, local jurisdictions want to learn from recent wildfire disaster recovery efforts in Northern California to improve disaster recovery and adopt a framework to support efficient short-term, and sensible long-term recovery after a hazard event.



Emergency planning includes the key areas involved in addressing any threat or hazard: prevention, protection, response, recovery, and mitigation. Integrating the key areas as part of the overall planning effort allows jurisdictions to produce an effective plan and advance overall preparedness. Marin County has several plans addressing the threat of individual hazards including, a local hazard mitigation plan, an emergency operations plan, Municipal Code Chapter 22.124 - Post Disaster Response and Recovery, and a Post Disaster Housing Annex Plan, In the event of a major disaster, the Marin Operational Area would form a Recovery Committee to direct the long-term recovery efforts in accordance with the Marin Operational Area Emergency Operations Plan. A Post-Disaster Housing Task Force would be formed to work in support of the Recovery Committee on all housing issues.

To supplement Marin’s existing disaster recovery planning, a comprehensive disaster recovery plan reflecting the most current approaches to recovery planning could provide an overarching, coordinated approach to disaster response planning. Additionally, Chapter 22.124 Post Disaster Response and Recovery of the Municipal code could be updated with prewritten emergency ordinances that facilitate recovery operations, such as those dealing with receipt and dispersal of disaster recovery funds, road closures, debris removal, assistance in securing damaged properties, and plans to work with utility and service providers to reestablish services as quickly as possible, and expedited permitting as well as strategies for including civic leaders and the public in the recovery decision-making process.

Long-term recovery planning should include developing a framework for permitting redevelopment in hazard or sensitive environmental areas, permitting redevelopment of what was existing non-conforming uses, requiring redevelopment to meet all current building and fire code standards, construction of facilities and infrastructure including the systems and services necessary for restoration of all operations functions, and documentation of eligible disaster related costs for reimbursement through aid programs. The recovery plan should recognize that incidents start at the local level and can likely exceed resources and capabilities, federal, state, tribal, regional, and private sector programs and assistance should be identified and integrated into a hazard response.

## What Are the Desired Outcomes?

### GOAL EHS- I: Equitable Community Safety Planning

Equitable Community Safety Planning. Create equitable processes for executing climate resilience and community safety policies, where justice is central to policy design and implementation.

#### Policies

**EHS-1.1** Safety Planning for Everyone. Prioritize involvement of the vulnerable communities identified in the Marin County Climate Change Vulnerability Assessment in community safety planning. Reduce the exposure to, increase preparedness for, and reduce recovery times from natural and human-caused safety risks for vulnerable communities as well as all populations and communities in Marin County.

**EHS-1.2** Community-Led Safety Programs. Put community organizations and civic leaders at the forefront of the community safety planning process.

#### *Why is this important?*

**Environment:** Equity and environmental protection go hand-in-hand. Making environments healthier for people often involves preserving and restoring native habitat and ecosystem elements.

**Economy:** Community-led safety planning can reach a greater number of residents and help small business owners prepare for and recover quickly after disasters, creating resilient local economies.

**Equity:** Structuring community safety programs around a social equity and environmental justice framework ensures the most vulnerable communities in Marin are leaders in their own disaster planning and recovery.

#### *How will results be achieved?*

### Implementing Programs

**EHS-1.1.a** Develop a Vulnerable Communities Database. Using the County Climate Change Vulnerability Assessment as a starting point, develop a database of the County's vulnerable communities including their **aggregate** economic, gender, age, linguistic, ethnic, and racial characteristics; geographic locations; hazard impact; and adaptive capacity. The vulnerable communities database should include a mapping component. Reference the database when planning and developing resiliency outreach materials, financial assistance programs, and long-range planning initiatives. Update the database periodically and share with emergency response providers.

**EHS-1.1.b** Develop an Outreach Program for Vulnerable Populations. Develop a climate change preparedness outreach program focused on vulnerable populations that provides information on staying healthy and safe before, during, and after hazardous events. Programming can include educational events, workshops for

school aged children, and providing emergency kits to community members. To ensure success, the County should do the following: (1) account for all of the different factors that can deter people from being included in planning processes, and use approaches appropriate for each community; (2) partner with local community organizations to reach all populations and reduce health inequities; (3) provide materials in multiple languages; (4) provide staff fluent or proficient in the communities' predominant language(s); (5) address lack of access to technology that may prevent or delay emergency notifications; (6) make community engagement and participation easy and available to all residents through multiple media, such as social media, virtual meeting platforms, and in-person events; and (7) make public notices and other important document available in print at local libraries, community centers, or other gathering places. (See also EH-2.1.b)

**EHS-1.1.c** **Prevent Displacement of Vulnerable People.** Work with community-based organizations to develop and support temporary housing solutions for lower-income people, older adults, and other vulnerable groups during and after an emergency. Provide priority access to housing developed for community residents and those who have been displaced following disasters.

**EHS-1.1.d** **Provide Financial Assistance.** Establish and fund an ongoing disaster preparedness and recovery financial aid program to ease the financial burden of response and recovery on vulnerable communities. Explore regional, state, and federal funding mechanisms to support the financial aid program.

**EHS-1.1.e** **Assist with Physical Evacuation.** Improve notification and tracking systems to ensure all known individuals who have difficulty physically evacuating are accounted for during and following disasters.

**EHS-1.2.a** **Partner with Local Leaders.** Identify, initiate, and formalize partnerships with community organizations and leaders in vulnerable communities to ensure that local residents can make significant contributions to planning processes. Build relationships with community-based organizations to improve trust and communication between local agencies and vulnerable communities, which may experience distrust of government authorities.

## Program Implementation

The following table summarizes responsibilities, potential funding priorities, and estimated time frames for proposed implementation programs. Program implementation within the estimated time frame<sup>1</sup> will be dependent upon the availability of adequate funding and staff resources.

[Note to Reader: Program Implementation Tables were moved from the end of Section 2.6 Environmental Hazards in the CWP to be included at the end of each goal. Table text is all new and is not shown with underline.]

**Figure 2-20: Goal EHS-1. Equitable Community Safety Planning, Program Implementation Table**

Program	Responsibility	Potential Funding	Priority	Time Frame
EHS-1.1.a Develop a Vulnerable Communities Database	CDA	Existing Budget	High	Short-term
EHS-1.1.b Develop an Outreach Program for Vulnerable Populations.	CDA, OES, Fire Agencies	Existing Budget	High	Ongoing
EHS-1.1.c Prevent Displacement of Vulnerable People	County partnerships	Existing Budget & Grants	High	Ongoing
EHS-1.1.d Provide Financial Assistance	County Partnerships	Grants	Medium	Ongoing
EHS-1.1.e Assist with Physical Evacuation	OES, Fire Agencies	Existing Budget & Grants	Medium	Ongoing
EHS-1.2.a Partner with Local Leaders	CDA, OES, Fire Agencies	Existing Budget	High	Ongoing

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<sup>1</sup> Time frames include: Immediate (0-1 years); Short term (1-4 years); Med. term (4-7 years); Long term (over 7 years); and Ongoing (existing programs already in progress whose implementation is expected to continue into the foreseeable future).

## ~~Goal EHS-1: Hazard Awareness~~

### What Are the Desired Outcomes?

## **GOAL EHS-2: Disaster Mitigation, Preparedness, Response, and Recovery**

[Note to Reader: This Goal incorporates Goal 1: Hazard Awareness from the existing CWP Section 2.6 Environmental Hazards. New hazard awareness policies and language are shown in underline while the existing Hazard Awareness policies in the CWP moved here are not.]

Disaster Preparedness, Response, and Recovery. Support continuing public awareness of hazards, including avoidance, disaster preparedness, and emergency response procedures. Ensure readiness in and after emergency situations and create an effective evacuation route network.

### **Policies**

- EHS 2.1      Enhance Public Awareness. Make hazard studies, data, maps, services, and related information more accessible to residents and include more robust and targeted outreach in vulnerable communities.
- EHS 2.2      Improve Information Base. Support scientific studies and other technical planning efforts that increase and refine the body of knowledge regarding hazardous conditions in Marin County.
- EHS 2.3      Disaster Readiness. Maintain a level of preparedness to respond to emergency situations that will save lives, protect property, and facilitate recovery with minimal disruption.
- EHS 2.4      Effective Emergency Access and Evacuation. Ensure that first responders have adequate emergency access routes and that County residents, businesses, workers, and visitors can effectively evacuate during or after a disaster.
- EHS 2.5      Adequate Services. Improve existing and increase future capacity of critical services and infrastructure.

#### *Why is this important?*

**Environment:** Expanded knowledge about hazards can protect the local environment ~~and can improve~~ improving the way in which environmental resources are managed as climate change stressors exacerbate hazards and damage environmental resources and require a greater allocation of resources for conservation activities. Considering environmental ramifications in the disaster preparedness and evacuation planning process contributes to ecologically sound practices that are compliant with relevant environmental regulations.

**Economy:** Effective disaster preparedness and recovery planning helps institutions, communities, and local economies “bounce back” from disaster events. Clearly understanding hazard risks,

projected impacts, and potential mitigating steps is necessary for community members to adapt their businesses, investments, and policy decisions.

**Equity:** Hazard events have disproportionate effects on vulnerable individuals and communities. Community members, especially those within a vulnerable population group, may be unaware of the climate-related effects that may be harmful to their community, or how to stay safe during hazardous events. Community and civic leaders should have leading roles in disaster preparedness and recovery planning and programs to ensure vulnerable populations are not left behind during or after disasters.

*How will results be achieved?*

## **Implementing Programs**

- EHS-2.1.a** **Distribute Make Hazard Maps Available.** ~~Prepare~~ Update regularly and make available to the public maps depicting evacuation routes and areas prone to environmental hazards.
- EHS-2.1.b** **Develop an Inclusive Public Outreach and Engagement Strategy.** Collaborate with local, regional, state, and federal partners to develop a community-wide outreach program to educate a diverse community on how to prepare and recover from climate change effects Sponsor and support education programs pertaining to emergency/disaster preparedness and response protocols and procedures. Work to fill gaps in local information to ensure information is useful and able to be implemented. Materials should be developed in multiple languages and in several formats to reach all residents. Distribute information about emergency preparedness to residents, community groups, schools, religious institutions, transient occupancy establishments, and business associations. Include instruction on ZoneHaven and evacuation zones in educational materials. (See also EH-1.1b)
- EHS-2.1.c** **Promote Awareness of Risks to Historic Resources.** Educate community members about the climate risks to historic, cultural, and tribal cultural resources, and the need to safeguard these cultural resources in partnership with tribal nations and community-based organizations.
- EHS-2.2.a** **Improve Hazard Information.** Continue to improve available hazard information and knowledge base. Track changing hazard risk and impacts and identify gaps in hazard information and mapping. Support scientific study of hazard potential in Marin, including by providing investigators with access to public land and facilitating access to other areas.
- EHS-2.2.b** **Document Areas Experiencing Repeated Damage from Hazards** For all types of environmental and climate change hazards, consistently map and track areas experiencing repeated damage from hazard events as a basis of informing the public and for future planning efforts
- EHS 2.3.a** **Update the Emergency Recovery Plan.** Update the County’s emergency recovery plan, which addresses the steps that will be taken when an emergency situation

occurs and during the immediate aftermath. Incorporate a framework for short-term immediate assistance for residents who have lost housing and access to resources and long-term housing re-construction plans, re-construction of facilities and infrastructure, including those essential for critical medical services and utility services, and aid-based reimbursement for eligible disaster-related costs. Identify federal, state, tribal, regional, and private sector programs and assistance to supplement local disaster response efforts. Integrate the MCM LHMP mitigation actions and EOP, where relevant, into the Emergency Recovery Plan.

**EHS-2.3.b** **Plan for Recovery Permitting.** Plan for a recovery permit center that will be established following a large-scale disaster. The plan or framework will identify which department and/or staff will lead the recovery permitting process, what types of permit applications would be streamlined, and anticipated staffing levels (including contracted services), funds, and time frames for review. Identify zones, overlays, and specific or community plan areas where rebuilding could be subject to restrictive or subjective requirements and identify preliminary strategies for evaluating applications.

**EHS-2.3.c** **Support Post-Disaster Housing Affordability.** Develop a community planning process to support rebuilding of affordable housing after a disaster, adopt policies to support the replacement of affordable housing units that have been damaged or demolished, and prioritize the deployment of interim housing in vulnerable communities. Work to develop several funding sources to support implementation of the process.

**EHS-2.3.d** **Support Community-Led Response and Neighborhood Preparedness.** Improve strategies to identify and include civic leaders and the public in the disaster recovery decision-making process and implementation of post-disaster recovery programs. Identify a county designee to collaborate with the community and assist in developing the community preparedness and response strategies. Support community and neighborhood efforts in developing localized emergency response and preparedness plans by providing guidance and hazard data.

**EHS-2.3.e** **Provide and Support Emergency Preparedness Training.** Support the activities of Local Disaster Councils and fire departments in offering community emergency response training courses. Provide and support on-going disaster preparedness and hazard awareness training to all County employees, other responding agencies, and Local Disaster Councils. Ensure training occurs regularly, such as every three years, and includes emergency response approaches to vulnerable populations that cannot respond to a disaster without assistance.

**EHS-2.3.f** **Encourage Road Improvements.** Reduce regulatory impediments to road construction, widening, and other improvements by amending relevant sections of Marin County Code Titles 22, 23, and 24 to eliminate discretionary permit requirements and replace them with ministerial review to ensure that both public and private roads comply with codified engineering standards.

- EHS-2.4.a** **Maintain and Improve Disaster and Emergency Response Notification System.** Continue to maintain and refine the existing Alert Marin system and [the County's Public Emergency Portal](#) for disaster and emergency response notifications. Work to identify and close gaps in the ability of all residents to receive disaster and emergency response notifications and information, such as those without telecommunication devices or internet access.
- EHS-2.4.b** **Adopt Proactive Preparedness.** Update disaster preparedness and response plans, regulations, and programs periodically to respond to new hazard data and changing hazard conditions.
- EHS-2.4.c** **Identify and Improve Deficient Evacuation Routes.** Implement findings of the Marin Wildfire Protection Authority Evacuation Ingress-Egress Risk Assessment. Use the visual risk assessment and risk factors to identify and prioritize existing deficient evacuation routes. Improve evacuation routes based on the prioritization ranking [and in areas identified as having deficient evacuation routes affected by new development](#), but also in consideration of improvements required for a transportation network which is resilient to flooding and inundation from sea level rise.
- EHS-2.4.d** **Create New Evacuation Routes.** Identify and construct additional local evacuation routes in areas of high hazard concern or limited mobility.
- EHS-2.4.e** **Ensure Access to New Development.** Require new development to include adequate roadway ingress/egress for emergency access and evacuation routes.
- EHS-2.5.a** **Assess Critical Services Capacity.** Conduct an assessment of existing critical services for adequate capacity considering the projected scale of new development and climate change-induced increases in the severity of hazards. Use the service capacity assessment to create or update minimum standards for existing and future development to meet current and future anticipated demands for infrastructure (e.g., water, sewer, roads), privately provided services (e.g., telecommunications, gas, electricity), and County provided services (e.g., police, fire). Purchase permanent and/or portable generators for critical facilities, infrastructure, and services that lack adequate backup power.
- EHS-2.5.b** **Explore Creation of New Evacuation Centers.** Assess the potential for existing community facilities, including but not limited to libraries, churches/places of worship, schools, community and recreation centers, nonprofits, and local businesses, to serve as evacuation centers. Evacuation centers should be outfitted to provide material assistance, phone charging during a power outage, air conditioning during a heatwave, organize welfare checks on vulnerable neighbors, or deliver other services. Consider leveraging potential community resiliency hubs to provide evacuation center services and equipment when standalone evacuation centers are infeasible.



## Program Implementation

The following table summarizes responsibilities, potential funding priorities, and estimated time frames for proposed implementation programs. Program implementation within the estimated time frame<sup>2</sup> will be dependent upon the availability of adequate funding and staff resources.

[Note to Reader: Program Implementation Tables were moved from the end of Section 2.6 Environmental Hazards in the CWP to be included at the end of each goal. Table text is all new and is not shown with underline.]

**Figure 2-21: Goal EHS-2. Disaster Mitigation, Preparedness, Response, & Recovery Program Implementation Table**

Program	Responsibility	Potential Funding	Priority	Time Frame
EHS-2.1.a <del>Distribute</del> Make Hazard Maps Available	Fire Agencies, IST, OES, CDA	Existing budget	Medium	Ongoing
EHS-2.1.b Develop an Inclusive Public Outreach and Engagement Strategy	CDA, OES, Fire Agencies	Existing budget plus additional funding	High	Ongoing
EHS-2.1.c Promote Awareness of Risks to Historic Resources	CDA	Existing	Low	Long-term
EHS-2.2.a Improve Hazard Information	CDA	Existing	Med	Ongoing
EHS-2.2.b Document Areas Experiencing Repeated Damage from Hazards	CDA, DPW, OES	Will require additional funding	Med	Ongoing
EHS-2.3.a Update the Emergency Recovery Plan	OES	Will require additional funding	High	Short-term
EHS-2.3.b Plan for Recovery Permitting	CDA, DPW	Existing and may require additional funding	Med	Med-term
EHS-2.3.c Support Post-Disaster Housing Affordability	CDA, OES, HHS	Will require additional funding	High	Med-Term
EHS-2.3.d Support Community-Led Response and Neighborhood Preparedness	Fire Agencies, OES	Existing	High	Ongoing

<sup>2</sup> Time frames include: Immediate (0-1 years); Short term (1-4 years); Med. term (4-7 years); Long term (over 7 years); and Ongoing (existing programs already in progress whose implementation is expected to continue into the foreseeable future).

<b>Program</b>	<b>Responsibility</b>	<b>Potential Funding</b>	<b>Priority</b>	<b>Time Frame</b>
EHS 2.3.e Provide and Support Emergency Preparedness Training	OES	Existing	High	Ongoing
EHS-2.3.f Encourage Road Improvements	CDA, DPW, Fire Agencies	Existing budget and additional funding	High	Short-Term
EHS-2.4.a Maintain and Improve Disaster and Emergency Response Notifications System(s)	OES, Utilities	Existing budget and additional funding	High	Med-Term
EHS-2.4.b Identify and Improve Deficient Evacuation Routes	Fire Agencies, DPW	Requires additional funding	High	Long-Term
EHS-2.4.c Create New Evacuation Routes	Fire Agencies, DPW	Requires additional funding	High	Long-Term
EHS-2.4.d Ensure Access to New Development	CDA, DPW	Existing	High	Ongoing
EHS-2.5.a Assess Critical Services Capacity	OES, Fire Agencies	Existing and may require additional funding	Med	Long-Term
EHS-2.5.b Explore Creation of New Evacuation Centers	OES, Fire Agencies, DPW	Existing	Med	Med-Term

## What Are the Desired Outcomes?

### Goal EHS-23: Safety from Geologic and Seismic Hazards

[Note to Reader: This section largely remains the same from the current CWP with minor modifications. The Implementing Programs have been reorganized to correspond better to the organization of the Policies.]

**Safety from Seismic and Geologic Hazards.** ~~Protect people and property from risks associated with seismic activity and geologic conditions. Minimize the loss of life, injury, and property damage due to seismic and related geological hazards.~~

#### Policies

- EH-23.1**     **Avoid Geologic Hazards Areas.** Require development to avoid or minimize potential geologic hazards from earthquakes and unstable ground conditions.
- EH-23.2**     **Comply with the Alquist-Priolo Act.** Continue to implement and enforce the Alquist-Priolo Earthquake Fault Zoning Act.
- EH-23.3**     **Ensure Seismic Safety of New and Existing Structures.** Design and construct all new buildings and substantial remodeling projects to be earthquake resistant. The minimum level of design necessary would be in accordance with seismic provisions and criteria contained in the most recent version of the State and County Codes. Construction would require effective oversight and enforcement to ensure adherence to the earthquake design criteria.
- EH-23.4**     **Protect Coastal Areas from Tsunamis.** Refer to tsunami wave run-up and inundation maps when reviewing proposed development along coastal areas of Marin County.

#### *Why is this important?*

~~Lives can be saved and property protected when buildings are located safely.~~

**Environment:** Well-planned development protects the environment and minimizes impacts to natural systems when structures or facilities designed to protect against the anticipated hazard.

**Economy:** Careful planning in the placement and construction of buildings development can help ensure safety during a hazardous event and provide for a faster recovery. This lessens the severity and duration of the economic impact caused by a seismic event and/or unpredictable geologic conditions.

**Equity:** The future health and resiliency prosperity of the community depend on our ability to cope with a major hazardous event. Ensuring that all community members reside in buildings resistant to seismic and geologic hazards is of the utmost importance. ~~Earthquakes on the San Andreas and Hayward-Rodgers Creek fault systems could significantly affect Marin.~~

*How will results be achieved?*

**Implementing Programs**

- EHS-23.1.a** **Map Geologic Hazard Areas.** Update Geologic Hazard Area maps as updated information becomes available. These maps should be used to determine the need for geologic and geotechnical reports for proposed development or redevelopment.
- EHS-23.1.b** **Require Geotechnical Reports.** Continue to require any applicant for land division, master plan, development approval, grading, or new construction in a geologic hazard area to submit a geotechnical report prepared by a State-certified Engineering Geologist or a Registered Geotechnical Engineer that: evaluates soil, slope, and other geologic hazard conditions; commits to appropriate and comprehensive mitigation measures sufficient to reduce risks to acceptable levels, including post-construction site monitoring, if applicable; addresses the impact of the project on adjacent lands, and potential impacts of offsite conditions; and meets the requirements of other agency regulations with jurisdiction in the hazard area, such as BCDC requirements for the safety of fills consistent with the Bay Plan.
- EHS-23.2.a** **Prohibit Structures in Active Fault Traces.** Prohibit placement of specified types of structures intended for human occupancy within 50 feet of an active fault trace in compliance with the Alquist-Priolo Earthquake Fault Zoning Act.
- EHS-23.2.b** **Limit Building Sites in Alquist-Priolo Zones.** Prohibit new building sites in any Alquist-Priolo Earthquake Fault Zone, unless a geotechnical report prepared by a professional geologist establishes that the development will comply with all applicable State and County earthquake standards and regulations.
- EHS-23.3.a** **Avoid Known Landslides Areas.** Continue to prohibit development in landslide areas and on landslide-prone deposits on steep slopes, except where the required geotechnical report indicates that appropriate mitigation measures can stabilize the site for construction.
- EH-23.3.b** **Protect Development from Increased Geologic Hazards.** Plan for and protect development from increased risk of landslide, debris flows, post-fire debris flows, and subsidence resulting from climate change impacts by implementing Stability Report requirements and subsidence evaluation guidelines.
- ~~EHS-1e3.3.c~~** **Improve Soils Information.** Compile and make available drilling log data from geotechnical reports that helps define the hazard potential due to specific soil conditions, such as areas with expansive soils, artificial fill, or bay mud. **[Moved from Hazard Awareness, is an existing policy in CWP]**
- EHS-23.3.d** **Explore New Guidelines for Rising Groundwater Levels.** Based on sea level rise mapping, explore creating new guidelines requiring geotechnical evaluations for new development within areas subject to sea level rise, to assess and anticipate rising groundwater levels.

- EHS-23.3.e Identify Compressible Soil Potential.** Require that geotechnical reports for projects on land underlain by compressible materials (such as fill, bay mud, and marsh or slough areas) delineate locations where settlement will be greatest and subsidence may occur, and recommend site preparation and construction techniques necessary to reduce risk and public liability to an acceptable level.
- EHS-23.3.f Require Construction Observation and Certification.** Require any work or construction undertaken to correct slope instability or mitigate other geologic hazard conditions to be supervised and certified by a geotechnical engineer and/or an engineering geologist.
- EHS-23.3.g Reliability of Lifelines and Access (Evacuation) Routes.** In cooperation with utility system providers, emergency management agencies, and others, assist in the development of strategies to reduce adverse effects of geologic hazards, especially fault surface rupture and landslides to critical public lifelines, and access (i.e., evacuation) routes in an emergency.
- EHS-23.3.h Retrofit County Buildings and Critical Facilities.** Identify and remedy any County-owned structures and critical facilities in need of seismic retrofit or other geotechnical/structural improvement, including eliminating any potentially hazardous features, and/or relocating services if necessary.
- EHS-23.3.i Post-Earthquake Damage Assessment.** Undertake immediate damage assessment of essential service buildings and facilities and then other buildings as part of the emergency response planning in response to a damaging earthquake.
- EHS-23.4.a Address Tsunami Potential.** Review tsunami wave run-up and inundation maps, ~~when available,~~ along with other applicable information to be considered in coastal planning and development.
- EHS-23.4.b ~~Make~~ Keep Marin County Tsunami-Ready. ~~Become a~~ Continue to maintain Marin's status as a National Weather Service TsunamiReady community** in order to promote public awareness and community preparedness and facilitate quick recovery in the event of a tsunami.

## Program Implementation

The following table summarizes responsibilities, potential funding priorities, and estimated time frames for proposed implementation programs. Program implementation within the estimated time frame<sup>3</sup> will be dependent upon the availability of adequate funding and staff resources.

[Note to Reader: Program Implementation Tables were moved from the end of Section 2.6 Environmental Hazards in the CWP to be included at the end of each goal. Table text is all new and is not shown with underline.]

**Figure 2-22: Goal EHS-3. Safety from Geologic and Seismic Hazards, Program Implementation Table**

Program	Responsibility	Potential Funding	Priority	Time Frame
EHS-3.1.a Map Geologic Hazard Areas	CDA	Existing	High	Ongoing
EHS-3.1.b Require Geotechnical Reports	CDA	Existing	High	Ongoing
EHS-3.2.a Prohibit Structures in Active Fault Traces	CDA	Existing	High	Ongoing
EHS-3.2.b Limit Building Sites in Alquist-Priolo Zones	CDA	Existing	High	Ongoing
EHS-3.3.a Avoid Known Landslides Areas	CDA	Existing	High	Ongoing
EHS-3.3.b Protect Development from Increased Geologic Hazards	CDA	Existing	Med	Long-Term
EHS-3.3.c Improve Soils Information	CDA, USGS <sup>4</sup>	Existing & may require additional grants and revenue	Med	Med-Term
EHS-3.3.d Explore New Guidelines for Rising Groundwater Levels	CDA, USGS	Existing & may require additional grants and revenue	Med	Med-Term
EHS-3.3.e Identify Compressible Soil Potential	CDA / USGS	Existing	Med	Long-Term
EHS-3.3.f Require Construction Observation and Certification	CDA	Existing	High	Ongoing
EHS-3.3.g Reliability of Lifelines and Access (Evacuation) Routes.	Fire Agencies & OES	Will require additional funding	High	Ongoing
EHS-3.3.h Retrofit County Buildings and Critical Facilities.	DPW	Will require additional funding	Med	Ongoing
EHS-3.3.i Post-Earthquake Damage Assessment	OES	Will require additional funding	Low	Long-Term

<sup>3</sup> Time frames include: Immediate (0-1 years); Short term (1-4 years); Med. term (4-7 years); Long term (over 7 years); and Ongoing (existing programs already in progress whose implementation is expected to continue into the foreseeable future).

<sup>4</sup> United States Geologic Survey (USGS)

EHS-3.4.a Address Tsunami Potential	CDA / CNRA <sup>5</sup> / USGS	Existing	Med	Long-Term
EHS-3.4.b Keep Marin County TsunamiReady	OES	Existing	Med	Ongoing

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<sup>5</sup> California Natural Resources Agency (CNRA)



## What Are the Desired Outcomes?

### Goal EHS-34 Safety from Flooding and Inundation

**Safety from Flooding.** Protect people, and property from risks associated with flooding. (Also see the Public Facilities and Water Resources sections.) Minimize the loss of life, injury, and property damage due to flooding hazards.

#### Policies

- EHS-34.1**     **Follow a Regulatory Approach.** Utilize regulations instead of flood ~~control~~ infrastructure projects whenever possible to minimize losses in areas where flooding is inevitable.
- EHS-34.2**     **Retain Natural Conditions.** Ensure that flow capacity is maintained in stream channels and flood plains, and achieve flood ~~control~~ management using flood plain restoration and biotechnical techniques instead of storm drains, culverts, riprap, and other forms of structural stabilization.
- EHS-34.3**     **Monitor Environmental Change.** Consider cumulative impacts to hydrological conditions, including alterations in drainage patterns and the potential for a rise in sea level, when processing development applications in watersheds with flooding or inundation potential.
- EHS-34.4**     **Consider Flooding from Dam Failure Inundation.** Consider flood inundation resulting from upstream dam failures when assessing flood hazards for environmental review and implementing associated programs within the County.
- EHS-4.5**     **Encourage Modifications or Relocation of Existing Development.** Support and encourage private property owners to either modify, elevate, reinforce, or relocate development in flood-prone areas to account for increased flood extents and depths.
- EHS-4.6**     **Protect Public Facilities.** Minimize potential damage to essential public facilities due to flooding.

#### *Why is this important?*

With increases in sea level due to global warming, flooding is predicted to increase in the future. Locating development in flood-prone areas can expose structures to damage and create risks for inhabitants in the immediate and surrounding areas.

**Environment:** ~~Prohibiting~~ Approving adaptive, environmentally sensitive development in the floodplain helps preserve valuable habitat, vital groundwater recharge capacity, and other natural systems. Using nature-based flood management solutions restores valuable habitat and protects communities at the same time.

**Economy:** Significant flooding with associated economic impacts has occurred in portions of Corte Madera, Larkspur, Greenbrae, Ross, San Anselmo, San Rafael, and Novato over the last 50 years.



Flooding has also occurred in Mill Valley, Fairfax, Stinson Beach, Inverness, and Muir Beach. Extensive property damage could be expected in inundated valleys, especially those downstream from major dam/reservoir complexes. Protecting property from future flooding risks contributes to economic stability.

**Equity:** Limiting development in floodplain and coastal areas contributes to the protection of residents and their property. Ensuring vulnerable communities receive financial assistance to strengthen homes and properties against flood damage is important in an equitable approach to flood risk reduction.

*How will results be achieved?*

### Implementing Programs

- EHS-34.1.a** **Regulate Development in Flood and Inundation Areas.** Continue to require all improvements in Bayfront, Floodplain, Tidelands, and Coastal High Hazard Zones to be designed to be more resistant to damage from flooding, tsunamis, seiches, and related water-borne debris, and to be located so that buildings and features such as docks, decking, floats, and vessels would be more resistant to damage.
  
- EHS-34.1.b** **Update Maps.** ~~Annually~~ Periodically review those areas covered by the Countywide Plan that are subject to flooding, identified by floodplain mapping prepared by the Federal Emergency Management Agency (FEMA) or Department of Water Resources, and update Figure 2-13 and other General Plan maps accordingly. Map the combined effects of the FEMA 100-year storm event with sea level rise projections. Periodically review and overlay County zoning maps to show flood, tsunami, and inundation hazard areas along the San Francisco Bay, San Pablo Bay, Tomales Bay, and the Pacific Ocean, the Bayfront Conservation Zone, and the Coastal Zone.
  
- EHS-34.1.c** **Revise Regulations.** Consider expanding the F-1 and F-2 Floodway Districts to include areas of the unincorporated county that lie within primary and secondary floodways, and/or establishing an ordinance that will ensure that land use activities in flood hazard areas will be allowed only in compliance with federal standards.
  
- EHS-34.1.d** ~~Maintain Flood Controls~~ **Maintain Flood Management Measures.** Continue to implement adopted flood ~~control~~ management programs within designated flood zones, including limitations on land use activities in flood hazard areas and through the funding for repair and maintenance of necessary flood ~~control~~ management structures in partnership with local flood zones.
  
- EHS-34.1.e** ~~Restrict Design~~ **Development in Flood Prone Areas to Avoid Minimize Inundation.** Continue to regulate development in Special Flood Hazard areas by applying the County’s Floodplain Management Ordinance, Federal Emergency Management Agency regulations, and environmental review pursuant to the California Environmental Quality Act (CEQA). Rather than explicitly restrict development in tsunami and flood hazard areas, unless a site is repeatedly and



significantly affected by flooding, require through amendments to County codes, new development to be designed, elevated, sited, and/or strengthened against flood inundation. Flood adaptation measures should, at a minimum, be consistent with FEMA regulations to reduce flood risk to residential buildings. Where possible, use nature-based flood adaptation measures, such as widening natural flood plains, creating constructed dunes, protecting and expanding wetlands, and creating new and expanding existing urban green spaces.

**EHS-34.1.f** **Continue Compliance under the National Flood Insurance Program (NFIP).** Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:

- Enforce the flood damage prevention ordinance.
- Participate in floodplain identification and mapping updates.
- Provide public assistance/information on floodplain requirements and impacts.

**EHS-34.1.g** **Facilitate Community Coordination Around Shoreline Adaptation.** Develop a framework for incentivizing landowners to work together on shoreline protection projects and facilitating public communication and coordination around shoreline protection in a process that follows Safety Element policies and programs.

**EHS-34.2.a** **Retain Ponding Areas.** Maintain publicly controlled flood ponding areas in a natural state for flood ~~control~~ management, and continue to promote compatible uses in ponding areas, such as agriculture, open space, and recreation.

**EHS-34.3.a** **Require Hydrologic, Hydraulic, and Geomorphic Studies.** Continue to require submission of detailed hydrologic and ~~geologic~~ geomorphic studies for any proposed development that could increase sedimentation of a watercourse or alter natural drainage patterns. Amend the Development Code to include findings to continue to regulate development in flood prone areas to ensure public health and safety and to preserve the hydraulic and geomorphic integrity of the stream system and associated habitat.

**EHS-34.3.b** **Assess the Cumulative Impacts of Development in Watersheds on Flood Prone Areas.** Consider the effects of upstream development, including impervious surfaces, alteration of drainage patterns, reduction of vegetation, increased sedimentation, and others, on the potential for flooding in low-lying areas. Consider watershed studies to gather detailed information.

**EHS-34.3.c** **Develop Watershed Management and Monitoring Plans.** ~~Develop watershed-specific, integrated watershed management and monitoring plans that include development guidelines, natural flood mitigation measures, biomechanical technologies, and the enhancement of hydrological and ecological processes. The~~

~~guiding principles of the watershed plans shall equally consider habitat and species protection and monitoring as well as the protection of human life and property.~~

**EHS-34.4.a** ~~**Maintain Update Current Dam Inundation Failure Maps.**~~ **Maintain up-to-date** public inundation maps for dam/reservoir complexes where downstream valleys are inhabited and the risk of loss of life and extensive property damage is significant. Coordinate with water districts to obtain the most current information from their dam safety programs and reports submitted to the State Division of Safety of Dams.

**EHS-34.4.b** ~~**Review and Inspect Small Dams.**~~ **Review and Inspect Small Dams.** Maintain permit authority over and continue to oversee construction of dams too small to be regulated by the State or federal government.

**EHS-34.k** ~~**Anticipate Climate Change Impacts, Including Sea Level Rise.**~~ **Anticipate Climate Change Impacts, Including Sea Level Rise.** Recent predictions of sea level rise for the San Francisco Bay region by BCDC and USGS based on climate models and hydrodynamic modeling of the San Francisco Bay Estuary Institute indicate 16 inches of rise by mid-century and 55 inches by 2100. Recent guidance from the California Coastal Commission instructs local coastal resilience planners to use sea level rise targets based on the best available science and a minimum of 3.5 feet of SLR by 2050. Cooperate with the California Coastal Commission, U.S. Geological Survey, the San Francisco Bay Conservation and Development Commission, the California Landscape Cooperative's Climate Commons project and other monitoring agencies to track bay and ocean levels and share baseline topographic and resource data obtained by the County in implementing its own projects to enhance hydrodynamic and ecosystem modeling efforts and assessment of regional climate change impacts. Use official estimates for mean sea level rise and topographic data for environmental review. Environmental review for development applications and County infrastructure shall incorporate official mid-century sea level rise estimates, California Coastal Commission mid-century sea level rise projections, and require adaptive strategies for end-of-century sea level rise for any such project with expected life times beyond 2050.

**EHS-34.l** ~~**Limit Seawall Barriers.**~~ **Limit Seawall Barriers.** Limit repair, replacement, or construction of coastal sea walls and erosion barriers consistent with Local Coastal Program requirements, and as demonstrated to be necessary to protect persons and properties from rising sea level.

**EHS-34.n** ~~**Plan for Climate Change Impacts, Including Sea Level Rise.**~~ **Plan for Climate Change Impacts, Including Sea Level Rise.** Consider sea level rise in future countywide and community plan efforts. Apply for membership in the National Flood Insurance Program's (NFIP) Community Rating System (CRS), and as appropriate through revisions to the Marin County Code, obtain reductions in flood insurance rates offered by the NFIP to community residents. Cooperate with FEMA in its efforts to comply with recent congressional mandates to incorporate predictions of sea level rise in its Flood Insurance Studies and FIRM. For development of watershed management plans and flood control

~~infrastructure consider official mid-century and end-of-century sea level rise estimates in hydraulic/hydrodynamic modeling, as well as climate adaptation strategies, including: avoidance/planned retreat, enhance levees, setback levees to accommodate habitat transition zones, buffer zones and beaches, expanded tidal prisms for enhanced natural scouring of channel sediments, raising and flood proofing structure, provision for additional floodwater pumping stations, and inland detention basin to reduce riverine peak discharges. Participate in the Bay Area Climate & Energy Resilience Project and its March 2013 Proposed 12 Month Action Plan, developed by the Bay Area Joint Policy Committee of the Association of Bay Area Governments. Revise the Marin County Hydrology manual to, at a minimum, incorporate use of updated rainfall frequency data from NOAA's Atlas 14 Volume 6, Vers. 2.1 California (rev. 2012).~~

**EHS-4.5.a** **Provide Flood Reduction Information Resources.** Provide private property owners with resources and recommendations for reinforcing development against flooding. Advocate for a hierarchy of flood adaptation measures beginning with the most preferred strategies, as follows: 1. nature-based solutions; 2. measures to accommodate flooding, such as reinforced or raised ground level floors; 3. a mix of soft (i.e., nature-based) and hard engineering strategies, 4. strictly hard engineering strategies (i.e., structural stabilization).

**EHS-4.5.b** **Participate in Incentive-Based Programs.** Continue participation in incentive-based programs such as the Community Rating System, which encourages community floodplain management practices that exceed NFIP minimum requirements, and StormReady, a voluntary NOAA National Weather Service program focusing on community communication and safety skills.

**EHS-34.5.c** **Alert Property Owners.** Notify owners of property in areas with inundation or flooding potential regarding those hazards when they seek development review or other related County services.

**EHS-34.6.a** ~~**Locate Critical Facilities Safely.** Amend the Development Code to prohibit placement of public safety structures within tsunami inundation or flood-prone areas.~~ **Protect and Ensure Continued Operation of Critical Public Facilities.** Locate new essential critical facilities, including hospitals and healthcare facilities, emergency shelters, fire stations, emergency command centers, emergency communications facilities, and utility infrastructure outside tsunami and flood hazard areas. If a critical public facility must be located in a tsunami and flood hazard area, ensure the facility is designed to withstand and remain operational under anticipated future flooding conditions. Where existing critical public facilities are at risk due to flooding, require on- and off-site flood risk adaptation measures to reduce potential losses. Flood risk adaptation measures may include but are not limited to raising electrical and gas systems, installing watertight doors, installing flood shields for windows and entrances, constructing flood barriers or floodwalls,

and raising the ground floor of the facility. Consider alternate, less hazard prone locations for lost structures and facilities.

## Program Implementation

The following table summarizes responsibilities, potential funding priorities, and estimated time frames for proposed implementation programs. Program implementation within the estimated time frame<sup>6</sup> will be dependent upon the availability of adequate funding and staff resources.

[Note to Reader: Program Implementation Tables were moved from the end of Section 2.6 Environmental Hazards in the CWP to be included at the end of each goal. Table text is all new and is not shown with underline.]

**Figure 2-23: Goal EHS-4. Safety from Flooding, Program Implementation Table**

Program	Responsibility	Potential Funding	Priority	Time Frame
EHS-4.1.a Regulate Development in Flood and Inundation Areas	CDA, DPW, OES	Existing budget, Fees	High	Ongoing
EHS-4.1.b Update Maps	CDA, DPW	Existing budget	Med	Med-Term
EHS-4.1.c Revise Regulations	CDA, DPW	Existing & may require additional grants or revenue	Med	Med-Term
EHS-4.1.d Maintain Flood Management Measures	Flood Control Zones	Existing & may require additional grants or revenue	High	Ongoing
EHS-4.1.e Restrict Development in Flood Prone Areas to Minimize Inundation	CDA, DPW	Existing budget	High	Ongoing
EHS-4.1.f Continue Compliance under the National Flood Insurance Program (NFIP)	DPW	Existing budget	High	Ongoing
EHS-4.1.g Facilitate Community Coordination Around Shoreline Adaptation	CDA, DPW	Existing & may require additional grants or revenue	High	Med-Term
EHS-4.2.a Retain Ponding Areas	DPW	Will require	High	Ongoing

<sup>6</sup> Time frames include: Immediate (0-1 years); Short term (1-4 years); Med. term (4-7 years); Long term (over 7 years); and Ongoing (existing programs already in progress whose implementation is expected to continue into the foreseeable future).

<b>Program</b>	<b>Responsibility</b>	<b>Potential Funding</b>	<b>Priority</b>	<b>Time Frame</b>
		additional grants or revenue		
EHS-4.3.a Require Hydrologic, Hydraulic, and Geomorphic Studies	CDA, DPW	Existing budget	High	Ongoing
EHS-4.3.b Assess the Cumulative Impacts of Development in Watersheds on Flood Prone Areas	CDA, DPW	Will require additional grants or revenue	Med	Long-Term
EHS-4.4.a Maintain Current Dam Failure Maps	CDA, OES	Existing budget	Med	Med-Term
EHS-4.4.b Review and Inspect Small Dams	CDA, DPW	Existing budget	Low	Ongoing
EHS-4.5.a Provide Flood Reduction Information Resources	CDA, DPW	Existing budget	Med	Ongoing
EHS-4.5.b Participate in Incentive-Based Programs	DPW, OES	Existing budget	Med	Ongoing
EHS-4.5.c Alert Property Owners	CDA	Existing budget & may require additional grants or revenue	High	Ongoing
EHS-4.6.a Protect and Ensure Continued Operation of Critical Public Facilities	DPW	Existing budget & may require additional grants or revenue	High	Short-Term

## What Are the Desired Outcomes?

### Goal EHS-5: Safety from Wildfire

Safety from ~~Fires~~ Wildfire. Protect people and property from hazards associated with wildland and structure fires.

#### Policies

- ~~EH-5.3-1~~ Adopt and Implement a **Regional Fire Management Plan with Marin Fire Agencies: the Marin Wildfire Prevention Authority, County Fire, and FireSAFE Marin**. Develop a collaborative, proactive approach to manage wildfire losses by identifying hazard risks and enacting effective mitigation strategies.
- ~~EH-5.2~~ Ensure Adequate Fire Protection. Ensure that adequate fire protection, including adequate evacuation routes, is provided in new development and when modifications are made to existing development.
- ~~EH-5.53~~ Regulate Land Uses to Protect from Wildland Fires. Use land use regulations, including but not limited to subdivision approvals and denials and permits for remodeling existing structures, as means of protecting people and property from hazards associated with wildland fires.
- ~~EH-5.14~~ Limit Risks to Structures. Ensure that adequate fire ~~protection~~ protective features are in place in new development and when modifications are made to existing structures.
- ~~EH-5.25~~ Remove Hazardous Vegetation. Abate the buildup of vegetation around existing structures or on vacant properties that could help fuel fires. (See also Natural Systems and Agriculture Element, BIO-1.4, Support Vegetation and Wildlife Disease Management Programs).
- ~~EH 4.4~~ Ensure Adequate Emergency Response. Ensure that there is an adequate number of trained and certified emergency medical technicians to address the increase in ~~medical demand~~.

#### *Why is this important?*

Fire plays a critical role in California's diverse ecology and protecting people and property from fires will be a continuing challenge.

**Environment:** Wildfires and especially those that involve structures produce vast amounts of greenhouse gases, and release toxic chemicals to the atmosphere, soils, and waterways. Record-breaking fires in recent years have altered California's landscape: destroying vegetation, displacing wildlife, destroying thousands of buildings, forcing hundreds of thousands of people to flee their homes, and exposing millions of residents to dangerously unhealthy air. Controlling wildfires will protect the environment from these harmful effects. Using measures such as controlled burning to

~~remove vegetation that has built up because of historic fire suppression efforts improves firefighting effectiveness and can help restore environmental balance in the county.~~

**Economy:** Wildfires have been expanding and are more destructive; reaching further into suburban and urban areas. In Northern California, wildfires have damaged thousands of homes, businesses, and utility infrastructure regionally in the past five years and burned thousands of acres of agricultural and open space lands reducing economic vitality and tax revenue generation of the affected communities and causing loss of tax revenue to the County. Fire costs can soar to millions of dollars a day from suppression costs, destruction of homes, loss of home-based businesses, damage to utilities, and impacts on recreation areas. Minimizing flammable vegetation can reduce potential economic impact and help speed recovery.

**Equity:** Safety from wildfire is especially important for vulnerable populations as the ability to cope with the impacts of evacuation and displacement, and subsequent building repairs or reconstruction is disproportionately low. Marin County has numerous structures located within the wildland-urban interface. Homes with wood siding, wood decks, and wood shingled roofs are at extreme risk from a wildland fire. Designing structures to be fire resistant protects all occupants as well as neighboring areas by limiting fuel available to a spreading fire.

*How will results be achieved?*

## **Implementing Programs**

**EHS-5.1.a** Collaborate with Marin Fire Agencies on Implementing the Community Wildfire Protection Plan. Continue to collaborate with Marin Wildfire Prevention Authority and local fire agencies on implementing the Marin Community Wildfire Protection Plan programs and encourage Marin cities and towns to also support its recommendations.

**EHS-4.1 5.1.b** ~~Continue FIRESafe Marin Program~~ Wildfire Education. Continue the various education efforts and safety projects sponsored by FIRESafe Marin Marin Fire Agencies and implemented through each neighborhood. Education and outreach efforts should include all vulnerable populations, be specific to each community, and focus on community led safety programs. Encourage community participation in programs such as Firewise USA that can help neighbors get organized, find direction, and take action to increase preparedness and reduce ignition risk of homes and structures.

**EHS-4.a 5.1.c** Provide Information About Fire Hazards. Work with Marin Fire Agencies, FIRESafe Marin, the Marin County Fire Department, and other local, regional, and State agencies to make maps of areas subject to wildland fire hazard, ~~publicly available, and to provide~~ public information and provide publicly available and accessible educational programs regarding fire hazards, and techniques for reducing susceptibility to fire damage and identifying areas of low water pressure.

**EHS-5.1.d** Identify Areas with Insufficient Evacuation Opportunities. Continue to collaborate with Marin Fire Agencies in the identification and mapping of areas with only one



point of ingress or egress and roads that do not meet current emergency access and evacuation standards and the preparation of a program that prioritizes corrective actions.

**EHS-5.1.e** **Commit Funding for Evacuation Safety.** Commit funding for projects identified by the Marin Fire Agencies and **the Department of Public Works**, that enhance evacuation safety, spanning road improvement, signage, and notification systems. **Ensure identified improvements can be funded in areas identified as having deficient evacuation routes as new development occurs.**

**EHS-5.1.f** **Monitoring State Requirements for Evacuation Routes.** Track development of minimum standards for roads and evacuation routes and seek to adopt the standard. Apply any state standards for evacuation routes to new development.

**EHS-4.m 5.1.g** **Continue to Use Technology to Promote Fire Safety.** Continue to apply computer technology, such as Geographic Information Systems, vegetation inventory, evacuation planning and air movement modeling programs, to identify, analyze, and plan for potential fire hazards, including mapping and data analysis for conformance with evolving State standards. Notify affected parties of any relevant findings and make the information available to the public.

**EHS-5.2.a** **Assess and Project Future Fire Protection Needs.** Conduct an assessment of current fire protection capabilities and project the future needs for fire protection, considering future changes in housing, vegetation, access, and water supply, **including fire suppression needs.** Ensure all communities in unincorporated Marin have adequate fire protection, emergency vehicle access, and adequate water supply for peak fire flow requirements.

**EHS-5.2.b** **Consider Development Impacts to Fire Service.** Consider additional impact or mitigation fees, or a benefit assessment, to offset the impact of new development on fire services.

**EHS-5.2.c** **Describe Training Needs for Emergency Services.** Work with the Office of Emergency Services, Marin County Fire Department, Marin County Sherriff, and other organizations to identify and describe goals and standards for emergency service training.

**EHS-5.2.d** **Continue to Improve Street Addressing.** Continue to implement the program to improve and standardize the County street addressing system in order to reduce emergency service response times. Where applicable, coordinate the program with the cities.

**EHS-5.3.a** **Continue to Revise Adopted Standards.** Continue to adopt revisions to the International Fire and Building Codes, as amended by the State of California, and other standards which address fire safety adopted by the State of California. Review, revise, and/or adopt existing or new local codes, ordinances, and Fire Safe Standards to reflect contemporary fire safe practices.

~~EHS-4.n~~ **5.3.b Evaluate Regularly Update Development Standards.** Request Fire Department review of County requirements for peak-load water supply and roadways (especially on hillsides) to determine whether those provisions need modification to meet evolving State standards, such as limiting narrow roads or one-way road use, grade/slope limits, minimum turning radius, and turnaround widths, to ensure adequate fire protection and suppression.

**EHS-5.3.c** **Require Rebuilding After a Disaster to Meet Current Standards.** Develop requirements for rebuilding after a disaster so redevelopment meets all current state and local building wildfire protection building code requirements relevant to the particular fire hazard severity zone of the project.

~~EH-4.b~~ **5.3.d Restrict Land Divisions.** Prohibit land divisions in very high and high fire hazard areas unless the availability of adequate and reliable water for fire suppression is ~~demonstrated and guaranteed~~ provided; access for firefighting vehicles and equipment, as well as evacuation for residents, is provided from more than one point; necessary fire trails and fuel breaks are provided; structures are built consistent with the most current building code and fire code requirements for high fire hazard areas ~~fire-resistant materials are used exclusively in construction~~; and adequate clearances from structures and use of fire-resistant plants in any landscaping is required.

~~EHS-4.i~~ **5.3.e Conduct Life Safety Assessments.** Conduct a life safety assessment that considers the costs of fire safety maintenance prior to the County purchase of new land and facilities. Where feasible locate new essential public facilities outside of high fire risk areas, including hospitals and health care facilities, emergency shelters, emergency command centers and emergency communication facilities.

~~EHS-4.k~~ **5.4.a Amended Urban Wildlands Urban Interface (WUI) Regulations.** Work with Marin Fire Agencies ~~Marin fire departments~~ to prepare and adopt WUI regulations for new development and substantial remodels ~~in order~~ to reduce fire hazards in high and extreme fire hazard areas. Track and update standards as the areas of high and extreme fire hazards are re-defined.

~~EHS-4.d~~ **5.4.b Review Applications for Fire Safety.** Ensure new development meets all current building code and fire safety standards, including but not limited to ensuring the provision of an adequate water supply for fire suppression and fire flow requirements, providing sufficient road width for emergency vehicles and equipment, as well as evacuation for residents provided from more than one point. ~~Require applicants to identify~~ identification and maintenance of defensible space around structures, and that structures are built consistent with the most current build code and Cal Fire requirements for high fire hazard areas. ~~and compliance with fire safety standards, and~~ Continue to work with local and State fire agencies to ensure that the California Fire Code (with local amendments), County Development Code, and State and local standards for construction are applied uniformly countywide.

- EHS-4e-5.4.c** **Require Compliance with Fire Department Conditions.** Continue to refer land development and building permit applications to the County Fire Department or local fire district for review, and incorporate their recommendations as conditions of approval as necessary to ensure public safety. Continue to require compliance with all provisions of the most recently adopted version of the California Fire Code (with local amendments).
- EHS-4.e 5.4.d** **Require Sprinkler Systems.** Continue to require installation of automatic fire sprinkler systems in all new structures and existing structures undergoing substantial remodeling, and provide incentives for sprinkler installation in all other habitable structures, especially those in high fire hazard areas.
- EHS-4.f 5.4.e** **Require Fire-Resistant Roofing and Building Materials.** Continue to require and provide incentives for Class A fire-resistant roofing for any new roof or replacement of more than 50% of an existing roof. Work with Marin County fire departments to prepare and adopt an ordinance requiring fire-resistant building materials in ~~extreme~~ and high fire hazard areas.
- EHS-5.4.f** **Reduce Risk for Non-Conforming Development.** For existing non-conforming development, the County should work with property owners to improve or mitigate access, water supply and fire flow, signing, and vegetation clearance to meet current State and/or locally adopted fire safety standards.
- EHS-4.h 5.5.a** **Require Adequate Clearance-Vegetation Removal.** Require standards for clearance of vegetation on vacant lots, and around structures, and landscaped areas to ensure timely and adequate removal of potential fire fuel on both public and private property according to State requirements (Public Resource Code 4291) and local ordinances. ~~Require Adequate Clearance. Require standards for clearance of vegetation on vacant lots, and around structures, and landscaped areas to ensure timely and adequate removal of potential fire fuel on both public and private property.~~
- EHS-4.i 5.5.b** ~~Use Varied~~ **Implement Ecologically Sound Methods of Vegetation Management to Provide Fuel Breaks and Fire Suppression.** Collaborate with the Marin Wildfire Prevention Authority Ecologically Sound Practices Partnership which focuses on developing best management practices for fuel reduction projects in wildlands, provides subject matter expertise for project development, and environmental regulatory compliance. Use the best fuel reduction methods (depending on the time of year, fuel types, reduction prescriptions, presence of sensitive biological resources, and cost to implement the Marin County Community Wildfire Protection Plan and Marin Wildfire Prevention Authority projects. This may include using California Department of Forestry inmate crews, the Tamalpais Fuel Crew, the Marin Conservation Corps, animal grazing, or fuel reduction contractors.
- EHS-4.g 5.5.c** **Develop and Maintain Fuel Breaks and Vegetation on Access Routes.** Work with the Marin Fire Agencies, other public agencies, utility districts, and private

landowners to construct and maintain ecologically sound fuel breaks and manage vegetation along emergency access routes to facilitate effective fire suppression and evacuation.

**EHS-5.5.d** **Require Fuel Reduction and Management Plans for New Developments.** The County should require all new development projects with land classified as state responsibility areas (Public Resources Code Section 4102), land classified as high or very high fire hazard severity zones (HFHSZ or VHFHSZs; Section 51177), or within areas defined by local fire agencies as a “wildland urban interface” (WUI), to prepare a long-term comprehensive ecologically sensitive fuel reduction and management program, including provisions for multiple points of ingress and egress to improve evacuation and emergency response access and adequate water infrastructure for water supply and fire flow, and fire equipment access. (See Gov. Code, Section 66474.02.). The ecologically sensitive fuel reduction program should be consistent with MWPA’s ecological sensitive vegetation management guidelines, as well as federal, state, and County environmental and biological resource protection regulations. Where environmental sensitive resources or habitats could be impacted by vegetation removal, the property owner shall observe all regulations for the protection of habitat values.

~~**EHS 5.o** **Support a Fire Management Plan.** Adopt a resolution supporting a Fire Management Plan (including a fuel break plan) and encourage Marin cities and towns to also support its recommendation.~~ **[Now a part of 4.3a since there is a CWPP]**

## Program Implementation

The following table summarizes responsibilities, potential funding priorities, and estimated time frames for proposed implementation programs. Program implementation within the estimated time frame<sup>7</sup> will be dependent upon the availability of adequate funding and staff resources.

**[Note to Reader: Program Implementation Tables were moved from the end of Section 2.6 Environmental Hazards in the CWP to be included at the end of each goal. Table text is all new and is not shown with underline.]**

**Figure 2-24 Goal EHS-5. Safety from Wildfire, Program Implementation Table**

Program	Responsibility	Potential Funding	Priority	Time Frame
EHS-5.1a Collaborate with Marin Fire Agencies on Implementing the Community Wildfire Protection Plan.	Fire Agencies / CDA	Existing budget & may	High	Ongoing

<sup>7</sup> Time frames include: Immediate (0-1 years); Short term (1-4 years); Med. term (4-7 years); Long term (over 7 years); and Ongoing (existing programs already in progress whose implementation is expected to continue into the foreseeable future).

Program	Responsibility	Potential Funding	Priority	Time Frame
		require grant funding		
EHS-5.1b Continue FIRESafe Marin Program	Fire Agencies	Existing budget	Med	Ongoing
EHS-5.1.c Provide Information About Fire Hazards	Fire Agencies,	Existing budget	Med	Ongoing
EHS-5.1.d Identify Areas with Insufficient Evacuation Opportunities	Fire Agencies, CDA	Existing budget	High	Short-Term
EHS-5.1.e Commit Funding for Evacuation Safety	Fire Agencies	Existing budget & may require grant funding or additional revenue	High	Short-Term
EHS-5.1.f Monitor State Requirements for Evacuation Routes	Fire Agencies, CDA, DPW	Existing budget	Med	Ongoing
EHS-5.1.g Continue to Use Technology to Promote Fire Safety	Fire Agencies	Existing budget & may require grant funding or additional revenue	Med	Ongoing
EHS-5.2.a Assess and Project Future Fire Protection Needs	Fire Agencies	Existing budget	Med	Med-Term
EHS-5.2.b Consider Development Impacts to Fire Service	Fire Agencies, CDA, DPW	Existing budget	High	Ongoing
EHS-5.2.c Describe Training Needs for Emergency Services	Fire Agencies	Existing budget	Med	Short-Term
EHS-5.2.d Continue to Improve Street Addressing	Fire Agencies	Existing budget	Med	Ongoing
EHS-5.3.a Continue to Revise Adopted Standards	Fire Agencies, CDA	Existing budget	Med	Ongoing
EHS-5.3.b Regularly Update Development Standards	Fire Agencies, CDA	Existing budget	Med	Ongoing
EHS-5.3.c Require Rebuilding After a Disaster to Meet Current Standards	CDA, Fire Agencies	Existing budget	High	Short-Term
EHS-5.3.d Restrict Land Divisions	CDA, Fire Agencies	Existing budget	Med	Ongoing
EHS-5.3.e Conduct Life Safety Assessments	Fire Agencies	Existing budget & may	Med	Ongoing



<b>Program</b>	<b>Responsibility</b>	<b>Potential Funding</b>	<b>Priority</b>	<b>Time Frame</b>
		require grant funds or additional revenue		
EHS-5.4.a Amend Urban Wildlands Interface Regulations	CDA, Fire Agencies	Existing budget	Med	Short-Term
EHS-5.4.b Review Applications for Fire Safety	CDA, DPW, Fire Agencies	Existing budget	High	Ongoing
EHS-5.4.c Require Compliance with Fire Department Conditions	CDA, DPW, Fire Agencies	Existing budget	High	Ongoing
EHS-5.4.d Require Sprinkler Systems	CDA, DPW, Fire Agencies	Existing budget	High	Ongoing
EHS-5.4.e Require Fire Resistant Roofing and Building Materials	CDA, DPW, Fire Agencies	Existing budget	High	Ongoing
EHS-5.4.f Reduce Risk for Non-Conforming Development	CDA, DPW, Fire Agencies	Existing budget	High	Ongoing
EHS-5.5.a Require Adequate Vegetation Removal	Fire Agencies	Existing budget	High	Ongoing
EHS-5.5.b Implement Ecologically Sound Methods of Vegetation Management	Fire Agencies	Existing budget	Med	Short-Term
EHS-5.5.c Develop and Maintain Fuel Breaks and Vegetation on Access Routes	Fire Agencies	Existing budget	High	Ongoing
EHS-5.5.d Require Fuel Reduction and Management Plans for New Development	Fire Agencies, CDA, DPW	Existing budget & may require additional revenue	High	Short-Term

## What Are the Desired Outcomes?

### **Goal EHS-6: Resilience to Climate Change**

Resilience to Climate Change. Manage the threat of climate risks to the current and future Marin community.

#### **Policies**

- EHS-6.1** **Increase Community Resilience.** Increase community resilience to climate change and protection of vulnerable populations. Engage in community education and community-driven planning that leads to identification of community priorities that increase resilience.
- EHS-6.2** **Increase Infrastructure, Building, and Services Resilience.** Increase the resilience of Marin County infrastructure, buildings, and services with an initial focus on nature-based solutions.
- EHS-6.3** **Adapt to Sea Level Rise.** Safeguard the Marin shoreline, coastline, natural resources, recreational resources, and urban uses from flooding due to rising sea levels.
- EHS-6.4** **Plan for Extreme Heat and Weather Events.** Create a community that can continue to function and thrive with an increase in average temperatures, extreme heat days, and severe weather events.
- EHS-6.5** **Adapt Water Supply.** Prepare for a reduced, long-term water supply resulting from more frequent and/or severe drought events.

#### *Why is this important?*

**Environment:** Increased climate hazards create vulnerabilities in both natural and human-made systems that depend on stable and healthy ecosystems.

**Economy:** While resilience is often viewed through the lenses of social equity and environmental quality, business continuity and reducing operational costs and risks is just as vital for Marin's climate resiliency and livability.

**Equity:** Climate hazards will disproportionately affect Marin's vulnerable residents. Increasing the capacity of vulnerable communities to respond and cope with environmental hazards ensures a strong community.

#### *How will results be achieved?*

### **Implementing Programs**

- EHS-6.1.a** **Regular Review of Adaptation and Resiliency Strategies.** Periodically review the County's climate adaptation and resiliency strategies and update them as needed to ensure compliance with state laws and community needs. Use best practices to

review and amend at regular intervals all relevant public codes to incorporate the most current technical knowledge.

**EHS-6.1.b** **Develop Adaptation Plans.** Develop adaptation plans that lead to community resilience. Adaptation plans can be hazard specific or cover multiple hazards, they can cover the entire county or individual communities, but all adaptation plans should recognize the interactions among climate change impacts and should accomplish the following: be consistent with the goals, policies, and programs in this Safety Element; integrate and prioritize equity and social justice; lead to County actions that improve resilience; be phased over time, for example, by including adaptation pathways with identified triggers; incorporate nature-based measures; consider both public and private roles; include identified funding mechanisms for construction, operations and maintenance; include metrics for monitoring; be developed in coordination with relevant jurisdictions, agencies, organizations, and other stakeholders; include measures for continued coordination; and identify a lead jurisdiction, agency or organization. **Where retreat from a hazard area is a potential long-term outcome, plan for it early to identify the best possible means of managing an equitable and safe retreat.**

**EHS-6.1.c** **Integrate Adaptation in Plan Documents.** Integrate climate adaptation into other plans, ordinances, and programs that dictate land use decisions in the community, such as the Countywide Plan, the Marin County Climate Action Plan, County Local Coastal Program, Marin County Multijurisdictional Local Hazard Mitigation Plan, community and area plans, and the Marin County Development Code.

**EHS-6.1.d** **Implement Climate Action Plan.** Implement the adaptation measures as contained in the Marin County Climate Action Plan necessary to increase unincorporated communities' resiliency.

**EHS-6.1.e** **Identify Funding and Support.** Identify funding programs and other support services for local agencies to pursue that could help provide resources for County and community adaptation efforts.

**EHS-6.1.f** **Disclose Current and Future Hazards.** Develop a resale inspection permit program that provides disclosure of hazard risk information to prospective buyers prior to the sale of property. The program should include detailed hazard information, such as very high and high hazard wildfire severity zones, flood zones, tsunami and future sea level rise inundation areas, and Alquist-Priolo zones.

**EHS-6.1.g** **Develop a Property Rating System.** Based on the information in the resale inspection permit program, develop a property rating system available to the public for the purpose of evaluating risks from current and future hazards. Evaluation of hazards may be one function of a larger rating system or the sole function. The primary purpose of including hazards information is to inform prospective buyers and renters of the risks associated with a property prior to the commencement of any property sale, rental, or lease. Upon completion of the Property Rating System,



make the information available to potential renters prior to completing a rental or lease agreement.

**EHS-6.1.h** **Use Environmentally Sensitive Adaptation Strategies.** Where feasible the County should encourage the use of existing natural features and ecosystem processes, or the restoration thereof, in adaptation projects and measures. This includes systems and practices that use or mimic natural processes, such as permeable pavements, bioswales, and other engineered systems, such as levees that are combined with restored natural systems, to provide clean water, conserve ecosystem values and functions, and provide a wide array of benefits to people and wildlife. Proposals addressing adaptation must analyze the feasibility of natural features and ecosystem process before proposing alternative measures.

**EHS-6.1.i** **Establish and Leverage Partnerships.** Explore regional compacts or less formal partnerships with regional entities (both public and private) that can assist communities with technical assistance and potential funding. Collaborate with local and regional partners to support business resiliency through preparedness education, trainings, and resources. Align adaptation goals and strategies with local community groups and private sector entities to increase effectiveness.

**EHS-6.1.j** **Assess the Feasibility of Redevelopment.** Encourage private property owners to evaluate redevelopment of sites subject to loss from destructive flooding or wave action. Consider actions the County could take to facilitate the relocation of development out of flood hazard areas and Very High Wildfire Severity Hazard Zones. Consider an acquisition and buyout program which includes acquiring land from the landowner(s) and restricting future development on the land. Engage communities on the topic of managed retreat and provide assistance to establish a supporting funding mechanism such as a community land trust or repetitive loss program or Geologic Hazard Abatement Districts. Consider use of sites repeatedly struck by climate hazards for flood-adapted restoration or recreational areas.

**Implementing Programs for EHS-6.2 Increase Infrastructure, Building, and Services Resilience.**

**EHS-6.2.a** **Minimize Utility Service Interruptions.** Work with utility companies to ensure that power lines serving the unincorporated areas are maintained to avoid power shutoffs, minimize damage during extreme events, and reduce the risk of wildfires.

**EHS-6.2.b** **Assess Risk in County-Owned Buildings and Facilities.** Support capital planning to incorporate a climate risk evaluation of County-owned buildings and facilities that identifies risks from climate hazards, identifies measures to minimize risk, and provides a plan(s) for making improvements.

**EHS-6.2.c** **Broaden Communication Service and Minimize Communication Service Interruptions.** Prepare an analysis of gaps in communication services within the County and identify measures for broadening coverage, especially where communication facilities are needed to provide essential services. The analysis should include recommendations for new facilities locations, whether

facilities can serve multiple functions, prioritization of facility locations that considers both the communication services and the environmental impacts and administrative burdens of such facilities. (Also see Implementing Program EHS-1.1b under Goal EHS-1).

**EHS-6.2.d** **Support Resiliency for Financially Constrained Households.** Identify funding opportunities, including grant assistance programs, to support structural strengthening, renewable energy generation systems, and weatherizing and other energy efficiency activities, for low-income renters and property owners. (Also see Implementing Programs EHS1.1.b under Policy EHS-1.1 and Program 1.4.a under Policy EHS-1.4.)

**EHS-6.2.e** **Integrate Natural Infrastructure.** During the development review process, when developing alternatives and addressing adaptation in proposed projects, the County should require applicants to identify natural infrastructure that may be used through the conservation, preservation, or sustainable management of open space to reduce climate change hazards. Proposals addressing adaptation must analyze the feasibility of integrating natural infrastructure before proposing alternative measures.

### **Implementing Programs for EHS-6.3 Adapt to Sea Level Rise**

**EHS-6.3.a** **Employ Sea Level Rise Scenarios in Planning.** Recent predictions of sea level rise for the San Francisco Bay region by BCDC and USGS based on climate models and hydrodynamic modeling of the San Francisco Bay Estuary Institute indicate 16 inches of rise by mid-century and 55 inches by 2100. The State periodically recommends and updates a range of sea level rise scenarios for planning purposes. The guidance is developed using the best available science and the modeling is based on internationally accepted greenhouse gas scenarios used by the United Nations Intergovernmental Panel on Climate Change. The County should cooperate with state, federal, and other monitoring agencies to track bay and ocean levels and share baseline topographic and resource data obtained by the County in implementing its own projects to enhance hydrodynamic and ecosystem modeling efforts and assessment of regional climate change impacts. Use official estimates for mean sea level rise and topographic data for environmental review. Project design and environmental review for development applications and County sponsored projects infrastructure should incorporate official mid-century sea level rise estimates, the most current State of California recommendations for sea level rise scenarios as appropriate for the risk tolerance and expected life of the project, and require adaptive strategies for end-of-century sea level rise for any such project with expected life times beyond 2050.

**EHS-6.3.b** **Amend the Bayfront Conservation Combining District (BFC).** Amend the Bayfront Conservation Combining District, Marin County Code Title 22, to incorporate sea level rise adaptation measures that promote public safety consistent with the goals of the BFC.

- EHS-6.3.c** **Explore Future Bayland Corridor Amendment.** Explore expanding and aligning the Baylands Corridor and BFC area to align both the geographic extent and the policy direction. The geographic extent should include areas subject to future flooding and related policies and programs should include standards to protect from or adapt to rising sea level.
- EHS-6.3.d** **Advocate with State and Federal Agencies.** Advocate with state and federal resource agencies for new policies making living shoreline projects more easily permitted by recognizing the long-term habitat and biodiversity benefits.
- EHS-6.3.e** **Update Other Elements of the Countywide Plan.** Update other Elements of the Countywide Plan to reflect the County’s approach to Sea Level Rise planning, where nature-based alternatives are evaluated and implemented whenever they will achieve project objectives.
- EHS-6.3.f** **Take a Leadership Role in Multijurisdictional Sea Level Rise Planning.** Identify funding and resources for a multijurisdictional approach to sea level rise adaptation planning. Include representation from each jurisdiction and identify countywide priorities for adapting to sea level rise. (Also see Develop Adaptation Plans EH-6.1.b.)
- EHS-6.3.g** **Plan for Climate Change Impacts, Including Sea Level Rise. Consider Sea Level Rise in Flood Control Planning and Projects.** Consider sea level rise in future countywide and community plan flood control efforts. Apply for membership in the National Flood Insurance Program’s (NFIP) Community Rating System (CRS), and as appropriate through revisions to the Marin County Code, obtain reductions in flood insurance rates offered by the NFIP to community residents. official mid-century and end-of-century sea level rise estimates in Participate in the Bay Area Climate & Energy Resilience Project and its March 2013 Proposed 12 Month Action Plan, developed by the Bay Area Joint Policy Committee of the Association of Bay Area Governments. Cooperate with FEMA in its efforts to comply with recent congressional mandates to incorporate predictions of sea level rise in its Flood Insurance Studies and FIRM. Periodically revise the Marin County Hydrology Manual to, at a minimum, incorporate use of the most recent updated rainfall frequency data from NOAA’s Atlas 14 Volume 6, Vers. 2.1 California (rev. 2012).
- EHS-6.3.h** **Partner to Protect Key Infrastructure Owned and Operated by Others.** The County is dependent on key infrastructure such as water supply systems, waste water treatment systems, roads and bridges, electricity grid, and telecommunications that are owned and maintained by numerous agencies and private companies. Marin County should develop a systematic approach to collaborating and working cooperatively with these entities to ensure the long-term, continued functioning of key infrastructure within Marin County.

**EHS-6.3.i** **Limit Seawall Barriers.** Limit repair, replacement, or construction of coastal sea walls and erosion barriers in order to avoid offsite impacts consistent with Local Coastal Program requirements and San Francisco Bay Conservation and Development Commission standards, and as demonstrated to be necessary to protect persons and properties from rising sea level.

**EHS-6.3.j** **Strengthen Sea Level Rise Education and Outreach Programs.** Sea level rise adaptation planning can only be successful when communities understand the interrelated impacts of future sea level rise and the range of options to address those impacts through time. The County should develop more robust sea level rise education and outreach to help communities have informed discussions around adaptation options, adaptation pathways, costs, and where responsibilities for protecting assets lie.

**EHS-6.3.k** **Study Impacts of Rising Groundwater Levels from Sea Level Rise.** Conduct studies on the effects of rising groundwater on the community and the built environment including the potential transport of toxic or hazardous chemicals in the soil at contamination sites and the effects on septic systems. In areas where rising groundwater levels could adversely impact the functioning of existing or future septic systems, the County will undertake a study to identify the hazards and identify solutions.

**Implementing Programs for EHS-6.4 Plan for Extreme Heat and Weather Events.**

**EHS-6.4.a** **Develop Resilience Hubs.** Work with vulnerable populations to develop and implement a plan that identifies priority resilience hub locations and outlines necessary steps to build hubs that serve multiple purposes, including community centers in non-emergency and emergency situations, operations and aide distribution centers in emergencies, and recovery centers post emergencies. The plan should include siting criteria that prioritizes serving the needs of vulnerable populations and using that criteria to identify potential sites in the county. For each priority site, the plan should identify potential hub functions, needed improvements to existing facilities, development and operation costs (including any avoided costs as a result of building the hubs), feasibility of installing microgrids to sustain power in emergencies, and potential funding and financing mechanisms.

**EHS-6.4.b** **Ensure Access to **Cooling Extreme Weather Centers.**** Identify areas in Marin County where cooling centers **and warming centers** are needed and where they can be located within resilience hubs. **At a minimum, use the Severe Weather Services Model for public notification and posting information about extreme weather centers.** Identify ways for individuals with restricted mobility to reach **cooling extreme weather** centers.

**EHS-6.4.c** **Support Heat Risk Awareness.** Provide guidance to employers, residents, and workers to ensure that outdoor workers are aware of the harm posed by climate-

related heat effects and how to reduce them. Partner with private sector and community-based organizations to increase information spread.

**Implementing Programs for EHS-6.5 Adapt Water Supply.**

**EHS-6.5.a Plan for Drought.** Prepare for a reduced, long-term water supply resulting from more frequent and severe drought events, including working with regional water providers to implement extensive water conservation measures and ensure sustainable water supplies including increasing recycled water infrastructure and capacity.

**EHS-6.5.b Partner with Water Providers to Improve Water Storage and Efficiency.** Improve water storage and efficiency by partnering with the following water managers: water agencies and irrigation districts to explore ways to improve and increase storage capacity and generation efficiency; utility providers to upgrade water systems to accommodate projected changes in water quality and availability; and local water providers in the county to increase participation in water conservation programs to reduce water use throughout Marin County.

**EHS-6.5.c Maintain Adequate Agricultural Water Supply.** The County should encourage policies that preserve and protect adequate and affordable agricultural irrigation water supplies for commercial farmers and ranchers to maximize potential wildland fire mitigation, habitat benefits, carbon sequestration, and economic activity. (See Goal AG-1 in the Agriculture and Food Section, PFS-2 in the Public Facilities and Services Section, and WR-3 in the Water Resources Section.)

**Program Implementation**

The following table summarizes responsibilities, potential funding priorities, and estimated time frames for proposed implementation programs. Program implementation within the estimated time frame<sup>8</sup> will be dependent upon the availability of adequate funding and staff resources.

[Note to Reader: Program Implementation Tables were moved from the end of Section 2.6 Environmental Hazards in the CWP to be included at the end of each goal. Table text is all new and is not shown with underline.]

**Figure 2-25: Goal EHS-6. Resilience to Climate Change, Program Implementation Table**

<b>Program</b>	<b>Responsibility</b>	<b>Potential Funding</b>	<b>Priority</b>	<b>Time Frame</b>
EHS-6.1. a Regular Review of Adaptation and Resiliency Strategies	CDA, DPW, County Parks,	Existing budget & new grant	Med	Long-Term & Ongoing

<sup>8</sup> Time frames include: Immediate (0-1 years); Short term (1-4 years); Med. term (4-7 years); Long term (over 7 years); and Ongoing (existing programs already in progress whose implementation is expected to continue into the foreseeable future).



<b>Program</b>	<b>Responsibility</b>	<b>Potential Funding</b>	<b>Priority</b>	<b>Time Frame</b>
	Fire Agencies, OES, HHS	funds or revenue		
EHS-6.1.b Develop Adaptation Plans	CDA, DPW	Will require new grant funds or revenue	Med	Short-Term
EHS-6.1.c Integrate Adaptation in Plan Documents	CDA, DPW	Existing budget	Med	Long-Term
EHS-6.1.d Implement Climate Action Plan	CDA, DPW	Existing budget	High	Long-Term & Ongoing
EHS-6.1.e Identify Funding and Support	CDA, DPW	Existing budget	High	Short-Term
EHS-6.1.f Disclose Current and Future Hazards	CDA	Existing budget & may require additional revenue	High	Short-Term
EHS-6.1.g Develop a Property Rating System	CDA	Existing budget & may require additional revenue	High	Short-Term
EHS-6.1.h Use Environmentally Sensitive Adaptation Strategies	CDA, DPW, County Parks	Existing budget	Med	Short-Term and Ongoing
EHS-6.1.i Establish and Leverage Partnerships	Countywide	Existing budget	High	Ongoing
EHS-6.1.j Assess the Feasibility of Redevelopment	CDA	Existing budget & may require additional resources		
EHS-6.2.a Minimize Utility Service Interruptions	Private & Public Utilities, DPW, OES	Existing budget and may require additional funds	High	Short-Term
EHS-6.2.b Assess Risk in County-Owned Building and Facilities	DPW, OES	Requires additional funding	High	Med-Term



<b>Program</b>	<b>Responsibility</b>	<b>Potential Funding</b>	<b>Priority</b>	<b>Time Frame</b>
EHS-6.2.c Broaden Communication Service and Minimize Communication Service Interruptions	Private Communication Companies, OES, Fire Agencies, CDA, County Parks	Existing budget	High	Med-Term
EHS-6.2.d Support Resiliency for Financially Constrained Households	CDA, OES, Fire Agencies,	Will require additional revenue	High	Long-Term
EHS-6.2.e Integrate Natural Infrastructure	CDA, DPW, state & federal resource agencies	Existing budget	Med	Long-Term
EHS-6.3.a Employ Sea Level Rise Scenarios in Planning	CDA, DPW, County Parks	Existing budget	Med	Short-Term & Ongoing
EHS-6.3.b Amend the Bayfront Conservation Combining District	CDA	Existing budget	High	Short-Term
EHS-6.3.c Explore Future Bayland Corridor Amendment	CDA	Existing budget	Med	Med-Term
EHS-6.3.d Advocate with State and Federal Agencies	Countywide	Existing budget	Med	Short-Term
EHS-6.3.e Update Other Elements of the Countywide Plan	CDA	Existing budget	Med	Long-Term
EHS-6.3.f Take a Leadership Role in Multijurisdictional Sea Level Rise Planning	DPW, CDA, County Parks, Countywide	Existing budget & may require additional funding	High	Short-Term
EHS-6.3.g Consider Sea Level Rise in Flood Control Planning and Projects	DPW	Existing budget	High	Ongoing
EHS-6.3.h Partner to Protect Key Infrastructure Owned and Operated by Others	Countywide, CDA, DPW	Existing budget	Med	Med-Term
EHS-6.3.i Limit Seawall Barriers	CDA	Existing budget	Low	Ongoing
EHS-6.3.j Strengthen Sea Level Rise Education and Outreach Programs	DPW, CDA, County Parks	Existing budget & may need additional resources	High	Short-Term
EHS-6.3.k Study Impacts of Rising Groundwater Levels from Sea Level Rise	CDA	Existing budget & will require additional	Med	Med-Term



<b>Program</b>	<b>Responsibility</b>	<b>Potential Funding</b>	<b>Priority</b>	<b>Time Frame</b>
		grant funding		
EHS-6.4.a Develop Resilience Hubs	CDA	Existing budget & will require additional grant funding	High	Med-Term
EHS-6.4.b Ensure Access to Cooling Centers	CDA, OES, Fire Agencies	Existing budget & may require additional resources	Med	Long-Term
EHS-6.4.c Support Heat Risk Awareness	CDA	Existing budget	Med	Long-Term
EHS-6.5.a Plan for Drought	Countywide, Water Districts	Existing budget	High	Long-Term
EHS-6.5.b Partner with Water Providers to Improve Water Storage and Efficiency	Countywide, Water Districts	Existing budget	High	Long-Term
EHS-6.5.c Maintain Adequate Agricultural Water Supply	Countywide, Water Districts	Existing budget	Med	Long-Term



## Program Implementation and Monitoring

### Relationship of Goals to Guiding Principles

Figure 2-26: Relationship of Goals to Guiding Principles Table

This figure illustrates the relationship of each goal in this Section to the Guiding Principles.

Goals	Link equity, economy, and the environment locally, regionally, and globally.	Minimize the use of finite resources, and use all resources efficiently and effectively.	Reduce the use and minimize the release of hazardous materials.	Reduce greenhouse gas emissions that contribute to global warming.	Preserve our natural assets.	Protect our agricultural assets.	Provide efficient and effective transportation.	Supply housing affordable to the full range of our members of the workforce and diverse community.	Foster businesses that create economic, environmental, and social benefits.	Educate and prepare our workforce and residents.	Cultivate ethnic, cultural, and socioeconomic diversity.	Support public health, safety, and social justice.
EHS-1 Equitable Community Safety Planning	•									•		•
EHS-2 Disaster Preparedness, Response, and Evacuation	•									•		•
EHS-3 Safety from Seismic and Geologic Hazards	•									•		•
EHS-4 Safety from Flooding	•									•		•
EHS-5 Safety from Wildfire	•				•					•		•
EHS-6 Resilience to Climate Change	•				•			•	•	•		•

## How Will Success Be Measured

### Indicator Monitoring

Nonbinding indicators, benchmarks, and targets will help to measure and evaluate progress.<sup>9</sup> This process will also provide a context in which to consider the need for new or revised implementation measures.

**Figure 2-27 Indicator Monitoring Table**

<b>Indicator</b>	<b>Benchmark</b>	<b>Target</b>
Number of Marin residents trained in GetReady, CERT, and Voluntary Disaster Service Workers.	Pending	2.5% of county population trained by 2025 and 3% trained by 2030.
Number of county employees trained as disaster service workers to federal standards as documented by County Human Resources.	Pending	100% of County emergency first responders, Emergency Operations Center staff, and other County employees with designated disaster response roles by 2025 and maintain indefinitely. 100% of trained employees to repeat at least one disaster response training class once every two years.
Regularly updated climate change modeling information and mapping.		Triannual review and revisions, if needed, to the County’s climate change modeling projections and hazard mapping.
Number of retrofitted or relocated County buildings and critical facilities.		25% of identified at-risk County-owned structures and critical facilities retrofitted or relocated by 2030, and 50% retrofitted or relocated by 2050.
Number of retrofitted or relocated miles of County roads.		25% of identified at-risk County-maintained road miles retrofitted or relocated by 2040, and 50% retrofitted or relocated by 2050.

<sup>9</sup> Many factors beyond Marin County government control, including adequate funding and staff resources, may affect the estimated time frame for achieving targets and program implementation.

Reviewed and updated climate adaptation and resiliency strategies.		Annual review of climate adaptation and resiliency strategies, and updated strategies as needed, in perpetuity.
Percentage of upgraded County-maintained utilities facilities and infrastructure.		25% of identified at-risk County-maintained utilities facilities and infrastructure upgraded by 2030, 50% upgraded by 2035.
Regularly updated vulnerable communities database and mapping.		Following database development, biannual updates of vulnerable communities data and mapping, in perpetuity.

### **Program Implementation**

~~The Program Implementation Tables summarizing responsibilities, potential funding priorities, and estimated time frames for proposed implementation programs appear below the programs for each goal. Program implementation within the estimated time frame will be dependent upon the availability of adequate funding and staff resources.~~

[Note to Reader: Program Implementation Tables were moved to the end of each Goal section]



**Safety Element Staff Report  
for  
Board of Supervisors and Planning Commission  
Workshop**

**Attachment 2**

**Development Code Amendments**

# ARTICLE II

## Zoning Districts and Allowable Land Uses

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**22.14.060 – Bayfront Conservation (-BFC) Combining District**

- A. Purpose.** The Bayfront Conservation (-BFC) combining district is intended to regulate land and water uses, to:
1. Prevent destruction or deterioration of habitat and environmental quality;
  2. Prevent further loss of public access to and enjoyment of the bayfront;
  3. Preserve or establish view corridors to the bayfront;
  4. Ensure that potential hazards associated with development do not endanger public health and safety; and
  5. Maintain options for further restoration of former tidal marshlands.
- B. Application of combining district.** The -BFC district may only be combined with the following zoning districts established by Section 22.06.020 (Zoning Districts Established):
1. A (Agriculture and Conservation);
  2. ARP (Agricultural, Residential Planned);
  3. RSP (Residential, Single-Family Planned);
  4. RMP (Residential, Multiple Planned);
  5. RX (Residential, Mobile Home Park);
  6. RF (Residential, Floating Home Marina);
  7. RMPC (Residential/Commercial Multiple Planned);
  8. CP (Planned Commercial);
  9. OP (Planned Office);
  10. RCR (Resort and Commercial Recreation); and
  11. IP (Industrial, Planned).
- C. Environmental assessment.** Before the filing of a development application for undeveloped, agricultural or redevelopment lands within the -BFC combining district, an environmental assessment shall be prepared in consultation with the County to determine the development capability and physical and policy constraints of land and water areas. A composite definition of the appropriate subzone(s) and map delineation for the parcel proposed for development shall be based upon the findings, conclusions and recommendations of the environmental assessment. Thus, a range of appropriate permitted and/or conditional uses and specific regulations for siting and design of development on the site can be identified.

The use of an environmental assessment is intended to provide the highest degree of environmental protection while permitting reasonable development of sensitive land and water areas consistent with the goals, objectives and policies contained within the Marin Countywide Plan.

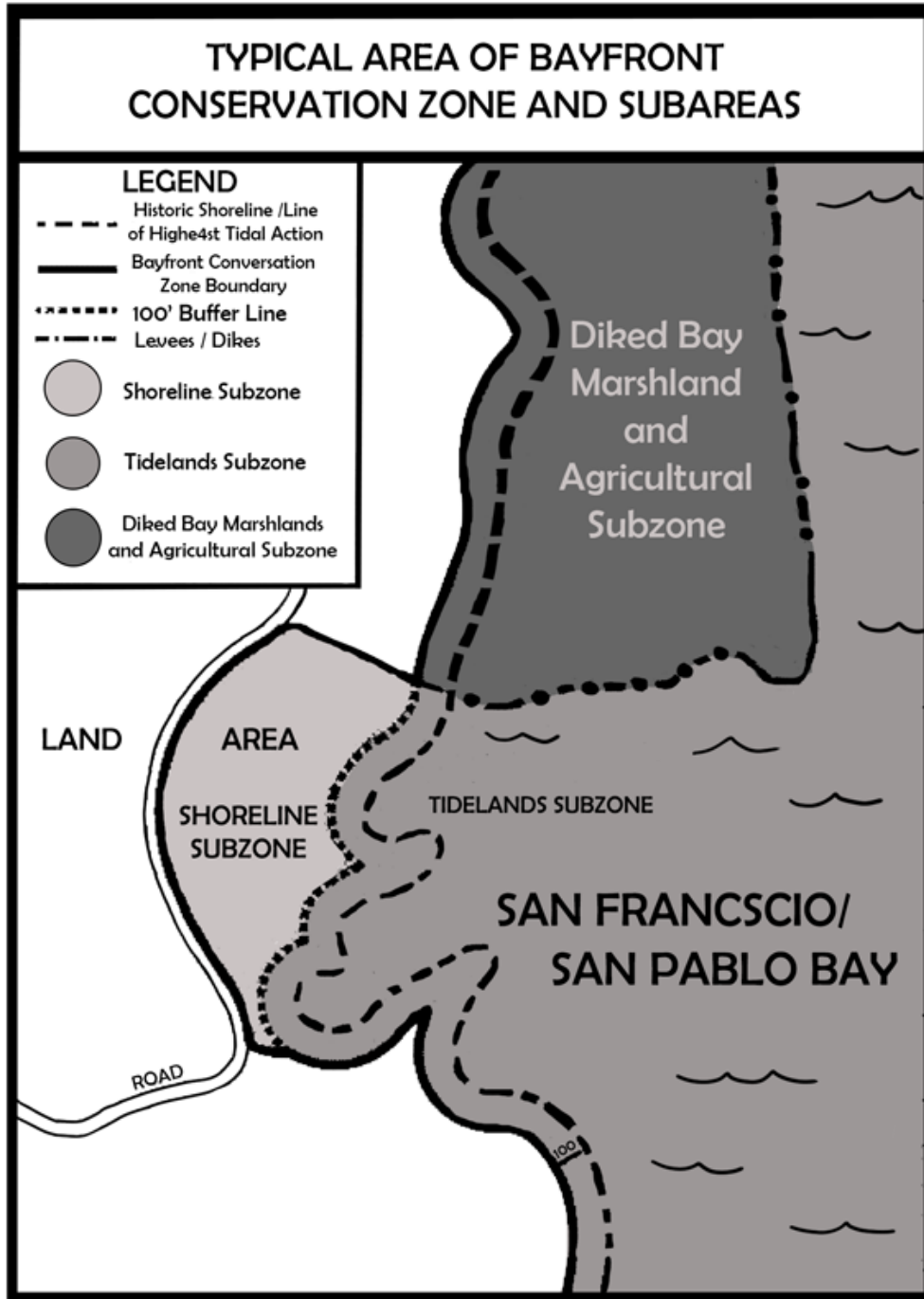
- D. Waiver of environmental assessment.** The requirements for an environmental assessment may be waived in conjunction with the proposed development of one single-family dwelling or other minor projects, or when a project is subject to environmental review. The Director may grant this waiver upon finding that the project conforms to the purpose of the Bayfront Conservation District and that sufficient evidence has been submitted to demonstrate the project's compliance with the design standards contained in this Section.
- E. Combining district subzones.** The Bayfront Conservation Combining District consists of the following three subzones (See Figure 2-1):
- 1. Tidelands Subzone.** The tidelands subzone includes all areas subject to tidal action including salt marshes, beaches, rocky shorelines, and mudflats, and all open water areas.

This subzone also includes all the contiguous and adjacent land up to ~~the line of highest tidal action~~ Mean High Tide Line or five feet above Mean Sea Level where tidal marsh is present (as applied by the Bay Conservation and Development Commission (BCDC) in compliance with the McAteer-Petris Act); or the landward dike which circumscribes tidal inflow; or the nearest publicly-maintained road; whichever bounds the largest area of tidal marsh and channels.

This subzone further includes a 100-foot wide band landward on undeveloped land, as measured from the ~~line of highest tidal action~~ the Mean High Tide Line or five feet above Mean Sea Level where marsh is present, within which a flexible buffer could be delineated on a case-by-case basis. The purpose of this subzone is to define areas that should be left in their natural state because of their biological importance to the estuarine ecosystem.



**FIGURE 2-1  
BAYFRONT CONSERVATION COMBINING DISTRICT SUBZONES**



- Diked Bay Marshland and Agricultural Subzone.** (Mapped as "modified wetland.") The diked bay marshlands and agricultural subzone includes all historic bay marshlands (as determined by Nicholas and Wright (1971)). These former marshlands have been diked off from tidal action, and in many cases, filled or partially filled and/or converted to agricultural uses, airports, urban development, and in a few instances lagoons with residences.

This subzone defines areas with similar subsurface or surface conditions; areas which are close to and functionally related to tidal lands; areas in which it is possible to foster the continuation of agriculture; or, if that ceases, to consider the feasibility of returning undeveloped, unfilled former marshes to a more productive wildlife habitat by restoration [or leaving as open space for inland marsh migration with sea level rise](#). This subzone includes a 100-foot wide band landward on undeveloped lands, within which a flexible buffer can be delineated on a case-by-case basis.

3. **Shoreline Subzone.** The shoreline subzone includes a few shoreline areas where main public thoroughfares (Highway 101, Paradise Drive, San Pedro Road, etc.) follow the coastline and promote visual access to the bay. The subzone extends from the bayside of the roadway to the tidelands subzone. This subzone defines a viewshed and promotes conservation of coastal habitats such as bluff vegetation and wildlife nesting/resting areas.

## F. Design guidelines.

### 1. Habitats:

- a. Development should not encroach into wetlands and sensitive wildlife habitats, limit normal range areas, create barriers which cut off access to food, water or shelter, or cause damage to fisheries or fish habitats. Buffer zones between development and identified or potential wetland areas should be provided. Access to environmentally sensitive marshland and adjacent habitat should be restricted, especially during spawning and nesting seasons.
- b. Buffers between wetland habitat and developed uses should be 100 feet minimum width, determined by: biological (habitat) significance; sensitivity of habitats or particular species; presence of threatened or endangered species; susceptibility of adjacent site to erosion [and flooding from sea level rise](#); topography and configuration of wetland areas; [space required for marsh migration with sea level rise](#); and type and scale of development proposed. Existing man-made features (e.g., roads and dikes) are useful buffers.
- c. Proposed development should be designed to minimize removal of vegetation, which is important for soil stabilization, increasing recharge, and providing wildlife habitat. Areas which must be cleared of vegetation should be restored with plantings of native and other non-competing species, where revegetation is determined to be environmentally desirable. Exotic species which are considered invasive and which displace native species should be removed. Evaluation of vegetation to be removed and restored will be done on a case-by-case basis.
- d. Freshwater habitats in the Bayfront Conservation Combining District should be preserved and/or expanded so that the circulation, distribution, and flow of the fresh water supply is facilitated. These habitats are found along freshwater streams and small former marshes.

### 2. Access and recreation:

- a. Public access should be sited and designed to facilitate public use and enjoyment of the bayfront lands. Public areas should be clearly marked, and continuous 10-foot wide pedestrian easements from the nearest roads to the shoreline and along the

shoreline should be provided. Public access areas should be designed to minimize possible conflicts between public and private uses on the properties. Walkways should generally be set back at least 10 feet from any proposed structure.

- b. Within the Bayfront Conservation Zone, provisions should be made for recreational development and access to the shoreline marshes for such uses as fishing, boating, hunting, picnicking, hiking and nature study. There should be provisions for both separated wildlife preserve and more intensively used recreational uses along the bayfront.
3. **Buildings:**
  - a. Design and spacing of structures should permit visual access to shoreline areas. Buildings should be clustered to allow bay views from streets and, where appropriate, to allow for animal movement corridors from uplands to marshes. Building design should be low profile.
  - b. Public activity centers where outdoor human activity is expected should be set back at least 100 feet from the marsh edge (i.e., from the edge of either a defined wetland (diked bay marshland subzone), or in the adjacent tidelands subzone). This includes theaters, restaurants, schools, commercial uses, office uses and similar uses.
  - c. Buildings or structures that are constructed in designated flood zones shall comply with the minimum development standards for identified flood plain areas as established in Title 23, Section 23.09 of the County Code.
4. **Utilities.** All new utility distribution lines shall be placed underground.
5. **Environmental quality:**
  - a. The County may, upon consultation with Regional, State, and Federal Agencies, require off-site as well as on-site mitigation measures in order to eliminate or reduce adverse environmental impacts as a result of any proposed development.
  - b. Development shall occur in a manner which minimizes the impact of earth disturbance, erosion, water pollution, and disruption of wildlife habitat.
  - c. The development of jetties, piers and outfalls should not alter the movement patterns of the bay's tides and currents such that significant adverse impacts would result.
6. **Diking, filling and dredging.** The County shall prohibit diking, filling or dredging in areas subject to tidal action (Tidelands subzone) unless the area is already developed and currently being dredged. Current dredging operations for maintenance purposes may continue subject to environmental review, if necessary. In some cases, exceptions to the prohibition of diking, filling, and dredging may be made for areas that are isolated, ~~or~~ limited in productivity, [or where filling is necessary to sustain marsh habitat or use natural approaches for shoreline protection against rising sea level](#). In tidal areas, only land uses which are water-dependent shall be permitted, consistent with Regional, State, and Federal policy. These include ports, water-related industry and utilities, essential water conveyance, wildlife refuge, and water-oriented recreation.

Exceptions to the prohibition of diking, filling, and dredging may be granted for emergency or precautionary measures in the public interest (e.g., protection from flood or other natural hazards). Removal of vegetation shall be discouraged. Alteration of hydrology should only be allowed when it can be demonstrated that the impact will be beneficial or non-existent.

**7. Aesthetic and scenic quality:**

- a. The County shall ensure protection of visual access to the bayfront and scenic vistas of water and distinct shorelines through appropriate siting and design of development.
- b. In particular, waterfront development should be sited and designed to permit open views in optimal locations for public enjoyment of bayfront lands.

**8. Protection from geologic, flooding and other hazards:**

- a. Any development proposed for lands within the -BFC combining district shall be consistent with policies of the Environmental Hazards Element of the Countywide Plan. Proposed development should not occur in areas which pose hazards, including differential settlement, slope instability, liquefaction, ground shaking and rupture, tsunami, flooding, or other ground failures.
- b. Areas underlain by deposits of "young muds" should be reserved for water-related recreational uses, habitat, and open space. Limited development may be allowed subject to the approval of the U.S. Army Corps of Engineers and other trustee agencies.
- c. Development proposed on bayfront lands with soil conditions that are unsuitable for construction, or experience seismic activity, should be designed to minimize earth disturbance, erosion, flooding, water pollution, and other hazards to public safety, or flooding.

**9. Agricultural uses:**

- a. Agricultural activities should minimize removal of natural vegetation where possible.
- b. Use of pesticides, insecticides, etc. should comply with existing State and Federal standards.
- c. Development shall be sited and designed to preserve and protect existing agricultural lands in the Bayfront Conservation Zone.

**10. Sea Level Rise:**

- a. The following provisions apply to development in the BFC district where the development would be located in areas up to the 3.3-foot sea level rise inundation area depicted in Countywide Plan, Safety Element Map 2-19:

- i. New buildings shall be located in suitable upland areas less susceptible to the effects of sea level rise.
- ii. The lowest habitable floor area of new buildings shall be elevated at least three feet above the Base Flood Elevation, unless there are other site-specific factors that make this elevation infeasible.
- iii. Hard shoreline protection improvements are only allowed when nature-based shoreline protection improvements and hybrid (i.e. nature-based with hard shoreline protection) improvements have been demonstrated to be infeasible.
- iv. Prior to development in this area, the property owner shall record a deed restriction against the subject property in which the property owner acknowledges and agrees, on behalf of themselves and successors and assigns that:
  - 1) The site is subject to sea level rise hazards, including but not limited to flooding, bluff and shoreline erosion;
  - 2) Property owner acknowledges and assumes sole responsibility for all risks of potential damage caused by sea level rise; and explicitly waives, and releases the County from any claim of any kind against the County for any such damage, including any claim for personal injury, property damage, and/or inverse condemnation;
  - 3) Property owner acknowledges that sea level rise may also potentially damage public infrastructure that provides benefits to members of the public, including the property owner, and that it may not be in the public interest for the County to repair and/or replace such infrastructure in the future. The property owner further acknowledges that such damage, and/or the County's decision not to repair and/or replace such infrastructure following such damage, may render the property uninhabitable;
  - 4) Housing Code provisions prohibit the occupancy of structures where sewage disposal or water systems are rendered inoperable; and
  - 5) The property owner and assigns bear all responsibility for demolishing and removing structures damaged by the effects of sea level rise and deemed by the Marin County Building Official as substandard and/or unsafe pursuant to the Marin County Building Code.

# ARTICLE VIII

## Development Code Definitions

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<b>22.130.030 – Definitions of Specialized Terms and Phrases .....</b>	<b>VIII-3</b>

**B. Definitions, "B."**

**Banks and Financial Services (land use).** This land use consists of financial institutions including:

- banks and trust companies
- credit agencies
- holding (but not primarily operating) companies
- lending and thrift institutions
- other investment companies
- securities/commodity contract brokers and dealers
- security and commodity exchanges
- vehicle finance (equity) leasing agencies

See also, "Automatic Teller Machine," above.

**Bars and Drinking Places (land use).** This land use consists of the sale of alcoholic beverages for on-site consumption, not as part of a larger restaurant. Includes bars, taverns, pubs, and similar establishments where any food service is subordinate to the sale of alcoholic beverages. May include entertainment (e.g., live music and/or dancing). May also include beer brewing as part of a microbrewery, and other beverage tasting facilities.

**Base Flood Elevation (BFE).** The elevation of the 100-year flood level as determined by statistical analysis for each local area and as designated on the Federal Emergency Management Agency's Flood Insurance Rate Maps (FIRMs). This elevation is the basis of the insurance and floodplain management requirements of the National Flood Insurance Program.

**Basement.** A story which is partly or completely below grade.

**Bay Window.** A windowed enclosure that projects from an exterior wall and is at least 18 inches above the adjoining finished floor as measured to the lowest horizontal plane of the projection. To be considered a bay window for the purposes of allowed exemptions and floor area, the windowed enclosure shall not occupy an area greater than 25 percent of any individual wall element of a building for each story or extend more than 30 inches from the exterior wall.

**Bed and Breakfast Inns (land use).** This land use consists of providing up to five guest bedrooms for overnight lodging, where the use is clearly secondary and incidental to the use of the property as a single-family residence. County requirements applicable to Bed and Breakfast Inns are in Section 22.32.040 (Bed and Breakfast Inns), and applicable Health Department regulations. A Bed and Breakfast Inn with more than five guest rooms is considered a hotel or motel, and is not permitted in a residential zoning district. Refer to the definition of "Room Rental" to distinguish between a Bed and Breakfast Inn and room rental in a "boarding house" situation.

**Below Market Rate.** Housing that is sold or rented at a price which is below the prevailing rate for equivalent housing units within the same community.

**Beverage Production (land use).** This land use consists of manufacturing facilities including bottling plants, breweries, coffee roasting, soft drink production, and wineries. Does not include milk processing; see "Food Products." May include tasting and accessory retail sales of beverages produced on site. A tasting facility separate from the manufacturing facility is included under the definition of "Bars and Drinking Places" if alcoholic beverages are tasted, and under "Restaurant" if beverages are non-alcoholic.

**Block.** A group of lots surrounded by streets or roads, or streets or roads and railroad right-of-way, mean high tide line or unsubdivided acreage.

**Blue Line Stream.** A watercourse shown as a blue line (perennial or intermittent) on the most recent applicable USGS topographic quadrangle map.

**Board, Board of Supervisors.** The Board of Supervisors of the County of Marin, State of California.

**H. Definitions, "H."**

**Habitat Island.** A habitat island refers to an isolated area of land generally surrounded by water that provides valuable foraging and roosting habitat for resident and migratory birds and wildlife, particularly during winter and early spring months.

**Handcraft Industries, Small-Scale Manufacturing (land use).** This land use consists of the manufacture of products not classified in another major manufacturing group, including: jewelry; musical instruments; toys; sporting and athletic goods; pens, pencils, and other office and artists' materials; buttons, costume novelties, miscellaneous notions; brooms and brushes; and other miscellaneous manufacturing industries.

**Harbors (land use).** This land use consists of facilities providing a full range of services related to: commercial and recreational fishing; fisheries and hatcheries; seafood processing; ship and boat building and repair; marine hardware sales and service; petroleum storage and handling; boat storage and miscellaneous storage activities. Facilities primarily oriented toward recreational activities are included under the definition of "Marinas."

**Hard Shoreline Protection.** Also referred to as grey infrastructure, hard shoreline protection improvements are physical features engineered, designed and constructed to provide shoreline protection with hard materials such as concrete, rock, and steel, and without relying on biological components for their primary functions.

**Hazardous Waste Facility.** A State-licensed facility for the temporary storage and/or processing of hazardous waste.

**Health/Fitness Facilities (land use).** This land use consists of fitness centers, gymnasiums, health and athletic clubs including sauna, spa or hot tub facilities; tennis, handball, racquetball, archery and shooting ranges and other sports activities.

**Health Officer.** The Marin County Health Officer.

**Height, Structure.** The vertical distance from grade to the highest point of a structure. The maximum height of buildings located in areas subject to tidal action shall be measured from Mean Sea Level. Section 22.20.060 (Height Measurement and Height Limit Exceptions) explains how this Development Code requires structure height to be measured.

**Heritage Tree.** See "Protected Tree and Heritage Tree."

**Highway.** State Route 1, State Route 101, Panoramic Highway, and State Route 131.

**Historic Area.** Areas mapped and described as historic areas in the Local Coastal Program, including those within Bolinas, Inverness, Marshall, Olema, Point Reyes Station, Stinson Beach, and Tomales.

**Historic Lot.** A unit of real property that was formerly a legal lot of record.

**Historic Structure.** As determined by the Local Coastal Plan, any building constructed prior to 1930, including any accessory structures on a site.

**Holiday Product Sales.** See "Outdoor Retail Sales, Temporary."

**Home Occupation (land use).** This land use consists of the conduct of a business within a dwelling, or within an accessory building located on the same site as the dwelling, employing the occupant of the dwelling, with the business activity being subordinate to the residential use of the property. See Section 22.32.100 (Home Occupations).



**N. Definitions, "N."**

**Native Tree.** Any tree in the list “Trees Native to Marin County,” maintained and provided by the Department.

**Native Tree Removal.** Generally means the destruction of any protected tree or the alteration of any protected tree which may adversely affect the health and survival of the tree. Includes “removal of a tree.” Routine trimming and pruning is not considered tree removal for the purpose of this Chapter.

**Natural Disaster.** Any situation in which the force or forces which destroyed a structure were beyond the control of the owner, including fire, flood, storm, explosion, landslide, earthquake, or other similar conditions.

**Nature-Based Shoreline Protection.** Nature-based shoreline protection improvements, also called living shorelines, are physical landscape features that are created and evolve over time through the actions of environmental processes, or features that mimic characteristics of natural features but are created by engineering and construction (in concert with natural processes) to provide shoreline protection and other ecosystem services. Nature-based protection includes tidal marsh restoration and enhancement, off-shore island preservation and enhancement, ecotone levees, beach enhancement, and other methods of slowing water movement and increasing filtration.

**Nature Preserves (land use).** This land use consists of sites with environmental resources intended to be preserved in their natural state.

**NAVD** (North American Vertical Datum). A vertical elevation control datum used in height measurements.

**Negative Declaration.** A written statement describing the reasons that a proposed project that is not otherwise exempt from the California Environmental Quality Act (CEQA) will not have a significant adverse effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). Please refer to CEQA Guidelines Section 15369.5 for a complete definition of a Negative Declaration.

**Net Lot Area.** The baseline area of a lot used for calculating maximum subdivision potential, and calculated by taking the area of the whole lot and subtracting the following:

1. Any areas seaward of mean high tide.
2. Any areas within a Stream Conservation Area or Wetland Conservation Area.

The resulting area is the net lot area.

**Nonconforming Lot.** A lot of record that was legally created, but does not conform with this Development Code because the lot is of a size, shape, or configuration no longer allowed in the zoning district that applies to the site, as a result of the adoption of, or amendments to this Development Code.

**Nonconforming Structure.** A structure that was legally constructed, but does not conform with this Development Code because amendments to this Development Code or the previous Marin County Zoning Ordinance made the structure nonconforming in its size, location on its site, separation from other structures, number of parking spaces provided, or other features.

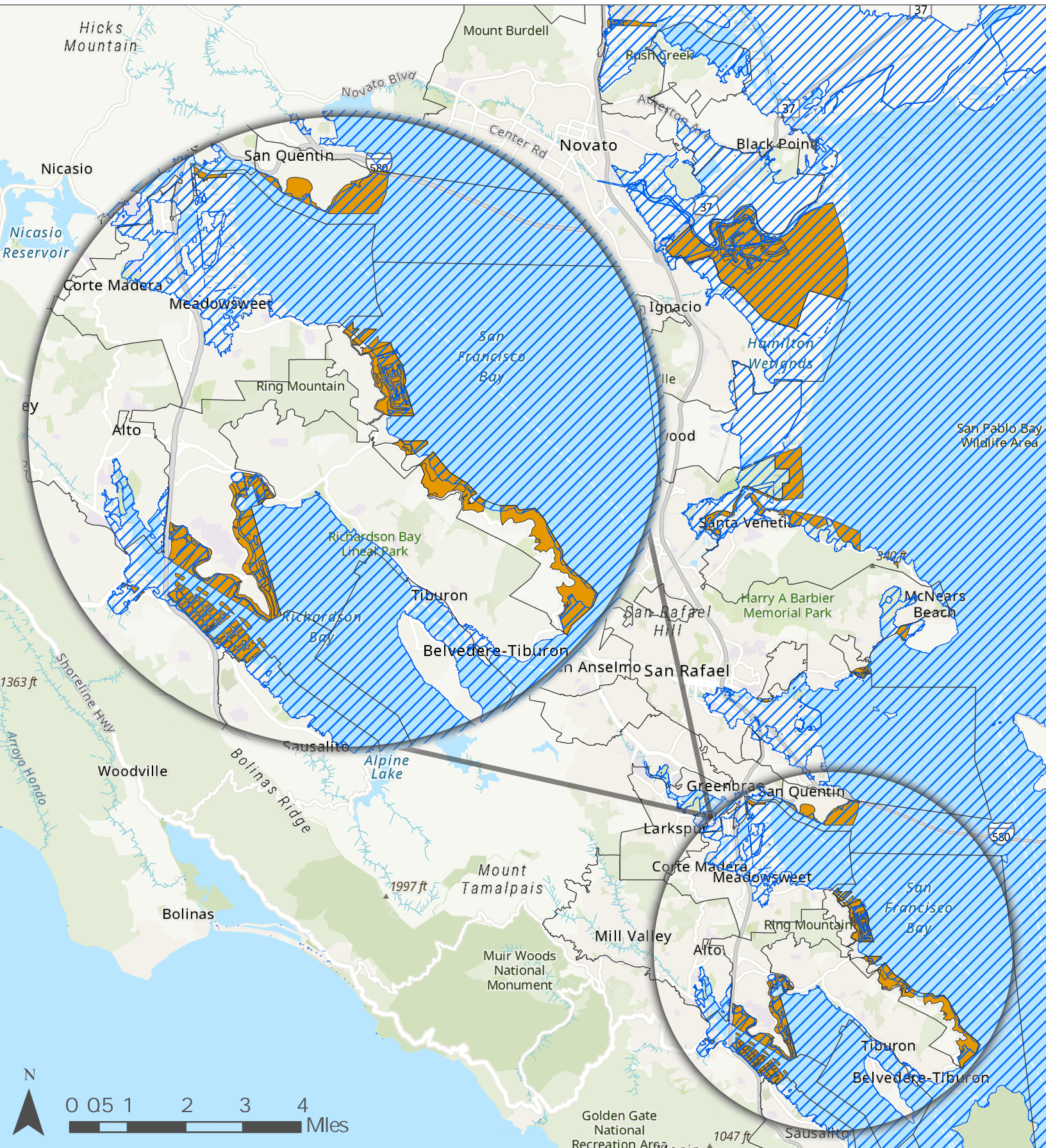
**Nonconforming Use.** A use of land, and/or within a structure, that was legally established, but does not conform with this Development Code because the use is no longer allowed in the zoning district that applies to the site, as a result of amendments to this Development Code or the previous Marin County Zoning Ordinance.




**Safety Element Staff Report  
for  
Board of Supervisors and Planning Commission  
Workshop**

**Attachment 3**

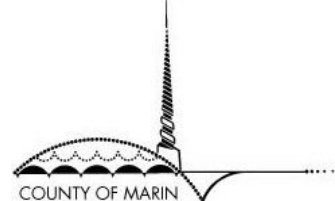
**Bayfront Conservation District and  
Sea Level Rise Map**

# Bayfront Conservation (BFC) District & Sea Level Rise



-  BFC District
-  3.3ft Sea Level Rise
-  City Boundary

Date: October 11th, 2022  
Data Source: Marin County and Our Coast, Our Future.  
MAP IS REPRESENTATIONAL ONLY.  
DATA ARE NOT SURVEY ACCURATE.



**Safety Element Staff Report  
for  
Board of Supervisors and Planning Commission  
Workshop**

**Attachment 4**

**Third, Final Board of Forestry Review**

# General Plan Safety Element Assessment

## Board of Forestry and Fire Protection



Marin County Final

# Contents

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## Purpose and Background

Upon the next revision of the housing element on or after January 1, 2014, the safety element is required to be reviewed and updated as necessary to address the risk of fire for land classified as state responsibility areas and land classified as very high fire hazard severity zones. (Gov. Code, § 65302, subd. (g)(3).)

The safety element is required to include:

- Fire hazard severity zone maps available from the Department of Forestry and Fire Protection.
- Any historical data on wildfires available from local agencies or a reference to where the data can be found.
- Information about wildfire hazard areas that may be available from the United States Geological Survey.
- The general location and distribution of existing and planned uses of land in very high fire hazard severity zones (VHFHSZs) and in state responsibility areas (SRAs), including structures, roads, utilities, and essential public facilities. The location and distribution of planned uses of land shall not require defensible space compliance measures required by state law or local ordinance to occur on publicly owned lands or open space designations of homeowner associations.
- The local, state, and federal agencies with responsibility for fire protection, including special districts and local offices of emergency services. (Gov. Code, § 65302, subd. (g)(3)(A).)

Based on that information, the safety element shall include goals, policies, and objectives that protect the community from the unreasonable risk of wildfire. (Gov. Code, § 65302, subd. (g)(3)(B).) To carry out those goals, policies, and objectives, feasible implementation measures shall be included in the safety element, which include but are not limited to:

- Avoiding or minimizing the wildfire hazards associated with new uses of land.
- Locating, when feasible, new essential public facilities outside of high fire risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identifying construction methods or other methods to minimize damage if these facilities are located in the SRA or VHFHSZ.
- Designing adequate infrastructure if a new development is located in the SRA or VHFHSZ, including safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression.
- Working cooperatively with public agencies with responsibility for fire protection. (Gov. Code, § 65302, subd. (g)(3)(C).)

The safety element shall also attach or reference any fire safety plans or other documents adopted by the city or county that fulfill the goals and objectives or contains the information required above. (Gov. Code, § 65302, subd. (g)(3)(D).) This might include Local Hazard Mitigation Plans, Unit Fire Plans, Community Wildfire Protection Plans, or other plans.

There are several reference documents developed by state agencies to assist local jurisdictions in updating their safety elements to include wildfire safety. The Fire Hazard Planning, General Plan Technical Advice Series from the Governor's Office of Planning and Research (OPR), referenced in Government Code section 65302, subdivision (g)(3) and available at

1400 Tenth Street  
Sacramento, CA 95814  
Phone: (916) 322-2318

The Technical Advice Series is also available from the OPR website ([Technical Advice Series link](#)).<sup>\*</sup> The Technical Advice Series provides policy guidance, information resources, and fire hazard planning examples from around California that shall be considered by local jurisdictions when reviewing the safety element of its general plan.

The Board of Forestry and Fire Protection (Board) utilizes this Safety Element Assessment in the Board's review of safety elements under Government Code section 65302.5. At least 90 days prior to the adoption or amendment of their safety element, counties that contain SRAs and cities or counties that contain VHFHSZs shall submit their safety element to the Board. (Gov. Code, § 65302.5, subd. (b).) The Board shall review the safety element and respond to the city or county with its findings regarding the uses of land and policies in SRAs or VHFHSZs that will protect life, property, and natural resources from

unreasonable risks associated with wildfires, and the methods and strategies for wildfire risk reduction and prevention within SRAs or VHFHSZs. (Gov. Code, § 65302.5, subd. (b)(3).)

The CAL FIRE Land Use Planning team provides expert fire protection assistance to local jurisdictions statewide. Fire captains are available to work with cities and counties to revise their safety elements and enhance their strategic fire protection planning.

## **Methodology for Review and Recommendations**

Utilizing staff from the CAL FIRE Land Use Planning team, the Board has established a standardized method to review the safety element of general plans. The methodology includes

- 1) reviewing the safety element for the requirements in Government Code section 65302, subdivision (g)(3)(A),
- 2) examining the safety element for goals, policies, objectives, and implementation measures that mitigate the wildfire risk in the planning area (Gov. Code, § 65302, subd. (g)(3)(B) & (C)), and
- 3) making recommendations for methods and strategies that would reduce the risk of wildfires (Gov. Code, § 65302.5, subd. (b)(3)(B)).

The safety element will be evaluated against the attached Assessment, which contains questions to determine if a safety element meets the fire safety planning requirements outlined in Government Code, section 65302. The reviewer will answer whether or not a submitted safety element addresses the required information, and will recommend changes to the safety element that will reduce the wildfire risk in the planning area. These recommended changes may come from the list of sample goals, policies, objectives, and implementation measures that is included in this document after the Assessment, or may be based on the reviewer's knowledge of the jurisdiction in question and their specific wildfire risk. By answering the questions in the Assessment, the reviewer will determine if the jurisdiction's safety element has adequately addressed and mitigated their wildfire risk. If it hasn't, any specific recommendations from the reviewer will assist the jurisdiction in revising the safety element so that it does.

Once completed, the Assessment should provide clear guidance to a city or county regarding any areas of deficiency in the safety element as well as specific goals, policies, objectives, and implementation measures the Board recommends adopting in order to mitigate or reduce the wildfire threat in the planning area.



## General Plan Safety Element Assessment

Jurisdiction: Marin County	Notes:	CAL FIRE Unit: Marin County Fire	Date Received:
County: Marin	LUPP Reviewer: Shane Galvez	UNIT CONTACT:	Date Reviewed: Completed 3-21-22

### BACKGROUND INFORMATION SUMMARY

The safety element must contain specific background information about fire hazards in each jurisdiction.

*Instructions for this table: Indicate whether the safety element includes the specified information. If YES, indicate in the comments where that information can be found; if NO, provide recommendations to the jurisdiction regarding how best to include that information in their revised safety element.*

Required Information	Yes or No	Comments and Recommendations
Are Fire Hazard Severity Zones Identified? <i>CAL FIRE or Locally Adopted Maps</i>	Yes	Marin County Safety Element (Marin County SE) Fire hazard Severity Zones (FHSZ) Map 2-15 Page 14  Marin County Wide Plan Safety Element Wildfire Technical Memo (SE Wildfire Technical Memo) Wildfire Hazard Mapping Page 11-12  Marin Community Wildfire Protection Plan (MCWPP) County-Level Fire Hazard Assessment Chapter 6 Page 47
Is historical data on wildfires or a reference to where the data can be found, and information about wildfire hazard areas that may be available from the United States Geological Survey, included?	Yes	Marin County SE Wildfire 5 <sup>th</sup> Paragraph  SE Wildfire Technical Memo Historical Data on Wildfires Page 12  MCWPP Fire History MCWPP Section 5.4 page 42-43 MCWPP Figure 8-page 44
Has the general location and distribution of existing and planned uses of land in very high fire hazard severity zones (VHFHSZs) and in state responsibility areas	Yes	Marin County SE Marin County Hazard Page 3 and 12

Required Information	Yes or No	Comments and Recommendations
(SRAs), including structures, roads, utilities, and essential public facilities, been identified?		
Have local, state, and federal agencies with responsibility for fire protection, including special districts and local offices of emergency services, been identified?	Yes	<p>Marin County SE Wildfire 6th - 8th Paragraph Page 11 - 12</p> <p>Wildfire Responsibility Areas Map 2-16 Page 15</p> <p>SE Wildfire Technical Memo Fire Protection Reasonability Page 12-13</p> <p>(CWPP0 Fire Agencies, Capabilities, and Preparedness CWPP Section 4.2 page 14-19 Figure 3-page 15 Figure 6-page 16</p>
Are other fire protection plans, such as Community Wildfire Protection Plans, Local Hazard Mitigation Plans, CAL FIRE Unit or Contract County Fire Plans, referenced or incorporated into the Safety Element?	Yes	<p>Marin County SE Other Documents Incorporated by Reference Marin County Multijurisdictional Local Hazard Mitigation Plan Page 1 Marin Community Wildfire Protection Plan (2020) Page 2</p>
Are residential developments in hazard areas that do not have at least two emergency evacuation routes identified?	Yes	<p>Marin County SE Implementing Programs EHS-5.1.d page 51</p>
Have evacuation routes and their capacity, safety, and viability under a range of emergency scenarios been identified?	Yes	<p>Marin County SE Disaster Preparedness, Response, and Recovery. Paragraph 2 page 20 (Fire Safe Marin Evacuation Maps Link) EHS-2.1.a page 33 EHS-2.4.c page 35 EHS-2.4.d page 35 EHS-2.4.e page 35</p> <p>Safety from Geologic and Seismic Hazards EHS-23.3.g page 40</p>

Required Information	Yes or No	Comments and Recommendations
		Safety from Wildfire EHS-5.2 page 50 EHS-5.1.f page 52

Is there any other information in the Safety Element regarding fire hazards in SRAs or VHFHSZs? N/A
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### Goals, Policies, Objectives, and Feasible Implementation Measures

The safety element must contain a set of goals, policies, and objectives based on the above information to protect the community from unreasonable risk of wildfire and implementation measures to accomplish those stated goals, policies, and objectives.

*Instructions for this table: Critically examine the submitted safety element and determine if it is adequate to address the jurisdiction's unique fire hazard. Answer YES or NO appropriately for each question below. If the recommendation is irrelevant or unrelated to the jurisdiction's fire hazard, answer N/A. For NO, provide information in the Comments/Recommendations section to help the jurisdiction incorporate that change into their safety element revision. This information may utilize example recommendations from Sample Safety Element Recommendations and Fire Hazard Planning in Other Elements of the General Plan below, may indicate how high of a priority this recommendation is for a jurisdiction, or may include other jurisdiction-specific information or recommendations.*

## Section 1 Avoiding or minimizing the wildfire hazards associated with new uses of land

Questions	Yes or No	Comments and Recommendations
Does local ordinance require development standards that meet or exceed title 14, CCR, division 1.5, chapter 7, subchapter 2, articles 1-5 (commencing with section 1270) ( <b>SRA Fire Safe Regulations</b> ) and title 14, CCR, division 1.5, chapter 7, subchapter 3, article 3 (commencing with section 1299.01) ( <b>Fire Hazard Reduction Around Buildings and Structures Regulations</b> ) for SRAs and/or VHFHSZs?	Yes	Marin County SE Safety from Wildfire EHS-5.3 page 50 EHS-5.4 page 50 EHS-5.4.b page 53  Building Codes to Reduce Structural Ignitability Page 80-81
Are there goals and policies to avoid or minimize new residential development in VHFHSZs?	Yes	Marin County SE Implementing Programs EHS-5.3.c page 53 EHS-5.3.d page 53 EHS-5.4.b page 53
Has fire safe design been incorporated into future development requirements?	Yes	Marin County SE Implementing Programs EHS-5.1.f page 52 EHS-5.3.a

Questions	Yes or No	Comments and Recommendations
		EHS-5.3.b EHS-5.4.b  SE Wildfire Technical Memo Marin County Codes and regulations Page 8-9  2020 (MCWPP) Fire Safe Design pages 82 and 84.
Are new essential public facilities located outside high fire risk areas, such as VHFHSZs, when feasible?	Yes	Marin County SE Safety from Wildfire EHS-5.3.e page 53
Are there plans or actions identified to mitigate existing non-conforming development to contemporary fire safe standards, in terms of road standards and vegetative hazard?	Yes	Marin County SE Safety from Wildfire EHS-5.4.f page 54
Does the plan include policies to evaluate re-development after a large fire?	Yes	Marin County SE Implementation Programs EHS-5.3.c page 53 EHS-5.4.a page 53 EHS-5-4.c page 53-54 EHS-5.4.f page 54
Is fuel modification around homes and subdivisions required for new development in SRAs or VHFHSZs?	Yes	Marin County SE Implementation Programs EHS-5.5.a page 54 EHS-5.5.d page 55  2020 (MCWPP) Fuel modification pages 85-92.  SE Wildfire Technical Memo Marin County Codes and regulations Page 8-9
Are fire protection plans required for new development in VHFHSZs?	Yes	Marin County SE Implementing Programs EHS-5.4.b page 53 EHS-5.5.d page 55

Questions	Yes or No	Comments and Recommendations
		SE Wildfire Technical Memo Marin County Codes and Regulations Page 8 - 9
Does the plan address long term maintenance of fire hazard reduction projects, including community fire breaks and private road and public road clearance?	Yes	Marin County SE Implementing Programs EHS-5.5.a page 54 EHS-5.5.c page 54 EHS-5.5.d page 55
Is there adequate access (ingress, egress) to new development in VHFHSZs?	Yes	Marin County SE Implementing Programs EHS-5.1.d page 51 EHS-5.1.e page 52 EHS-5.1.f page 52 EHS-5.3.d page 53 EHS-5.4.b page 53
Are minimum standards for evacuation of residential areas in VHFHSZs defined?	Yes	Marin County SE Implementing Programs EHS-5.1.f page 52 EHS-5.3.d page 53 EHS-5.4,b page 53 EHS-5.5.d page 55
If areas exist with inadequate access/evacuation routes, are they identified? Are mitigation measures or improvement plans identified?	Yes.	Marin County SE Disaster Preparedness, Response, and Recovery Page 20  EHS-2.4.c page 35 EHS-2.4.d page 35 EHS-5.1.f page 52  SE Wildfire Technical Memo <u>MWPA Evacuation, Ingress, Egress, Risk Assessment</u> <u>Page 18 -19</u>

Questions	Yes or No	Comments and Recommendations
<p>Are there policies or programs promoting public outreach about defensible space or evacuation routes? Are there specific plans to reach at-risk populations?</p>	<p>Yes</p>	<p>Marin County SE Disaster Preparedness, Response, and Recovery Paragraph 2- 4 page 20</p> <p>Equitable Community Safety Planning and Vulnerable Populations Page 26 – 27 (Vulnerability Assessment)</p> <p>EHS-1.1.a page 29 EHS-1.1.b page 29 EHS-1.1.e page 30</p> <p>2020 (MCWPP) 2.1 Marin Wildfire Prevention Authority Number 5. Page 4</p> <p>Defensible space 8.4.1 page 85-89.</p> <p>Evacuations public outreach and evacuation routes. Pages 96-100.</p>
<p>Does the plan identify future water supply for fire suppression needs?</p>	<p>Yes</p>	<p>Marin County SE Implementing Programs EHS-5.2.a page 52 EHS-5.4.b page 53</p>
<p>Does new development have adequate fire protection?</p>	<p>Yes</p>	<p>Marin County SE Implementing Programs EHS-5.2.a page 52 EHS-5.4.b page 53 EHS-5.4.c page 53</p>

## Section 2 Develop adequate infrastructure if a new development is located in SRAs or VHFHSZs.

Does the plan identify adequate infrastructure for new development related to:	Yes or No	Comments and Recommendations
Water supply and fire flow?	Yes	Marin County SE Implementing Programs EHS-5.4.f page 54 EHS-5.5.d page 55
Location of anticipated water supply?	Yes	Marin County SE EHS-5.5.d page 55 EHS-6.5.a page 63 EHS-6.5.b page 64
Maintenance and long-term integrity of water supplies?	Yes	Marin County SE Plan for drought EHS-6.5.a page 63 EHS-6.5.b page 64
Evacuation and emergency vehicle access?	Yes	Marin County SE Implementing Programs EHS-5.1.d page 51 EHS-5.1.e page 52 EHS-5.1.f page 52 EHS-5.2.a page 52 EHS-5.3.d page 53 EHS-5.5.d page 55  2020 (MCWPP) Section 8.6 Evacuation Planning and Preparation Page 96 - 100
Fuel modification and defensible space?	Yes	Marin County SE Implementing Programs EHS-5.3.d page 53 EHS-5.5.a page 54 EHS-5.5.d page dd  2020 (MCWPP) Section 8.4 Defensible Space Page 85 – 92

Does the plan identify adequate infrastructure for new development related to:	Yes or No	Comments and Recommendations
		Section 8.5 Non-Residential Vegetation Management page 92 - 96
Vegetation clearance maintenance on public and private roads?	Yes	Marin County SE Implementing Programs EHS-5.5.c page 54 EHS-5.5.d page 55  2020 (MCWPP) Section 8.5.1 Roadside Vegetation Management Page 93
Visible home and street addressing and signage?	No  Marin County has existing policies are in place through the Municipal Code. MWPA also has a program for improving visibility of street addresses and signage.	Marin County SE Continue to improve Street Addressing EHS-5.2.d page 52  I was unable to locate within the MWPA code that refers to street addresses and signage?  Pending Edit
Community fire breaks? Is there a discussion of how those fire breaks will be maintained?	Yes	Marin County SE Implementing Programs EHS-5.5.c page 54 EHS-5.5.d page 55  Program implementation Table Figure 2-24 page 57

### Section 3 Working cooperatively with public agencies responsible for fire protection.

Question	Yes or No	Comments and Recommendations
Is there a map or description of existing emergency service facilities and areas lacking service, specifically noting any areas in SRAs or VHFHSZs?	Yes	Marin County SE Wildfire Responsibility Areas Map 2-16 page 15



Question	Yes or No	Comments and Recommendations
		2020 (MCWPP) Section 4.2 Fire Agencies, Capabilities and Preparedness page 14 – 19  <i>Figure 4 Marin County fire service agency jurisdictions page 16</i>
Does the plan include an assessment and projection of future emergency service needs?	Yes	Marin County SE Assess and Project Future Fire Protection Needs EHS-5.2.a page 52
Are goals or standards for emergency services training described?	Yes	Marin County SE Training needs for emergency Services EHS-5.2.c page 52
Does the plan outline inter-agency preparedness coordination and mutual aid multi-agency agreements?	Yes	Marin County SE Wildfire Risk and Regulations Page 25  MCWPP Section 4.2 Fire Agencies, Capabilities, and Preparedness page 14-19  Section 4.3 Agency Coordination page 19-20

## Sample Safety Element Recommendations

These are examples of specific policies, objectives, or implementation measures that may be used to meet the intent of Government Code sections 65302, subdivision (g)(3) and 65302.5, subdivision (b). Safety element reviewers may make recommendations that are not included here.

### A. MAPS, PLANS AND HISTORICAL INFORMATION

1. Include or reference CAL FIRE Fire Hazard Severity Zone maps or locally adopted wildfire hazard zones.
2. Include or reference the location of historical information on wildfires in the planning area.
3. Include a map or description of the location of existing and planned land uses in SRAs and VHFHSZs, particularly habitable structures, roads, utilities, and essential public facilities.
4. Identify or reference a fire plan that is relevant to the geographic scope of the general plan, including the Unit/Contract County Fire Plan, Local Hazard Mitigation Plan, and any applicable Community Wildfire Protection Plans.
5. Align the goals, policies, objectives, and implementation measures for fire hazard mitigation in the safety element with those in existing fire plans, or make plans to update fire plans to match the safety element.
6. Create a fire plan for the planning area.

### B. LAND USE

1. Develop fire safe development codes to use as standards for fire protection for new development in SRAs or VHFHSZs that meet or exceed the statewide minimums in the SRA Fire Safe Regulations.
2. Adopt and have certified by the Board of Forestry and Fire Protection local ordinances which meet or exceed the minimum statewide standards in the SRA Fire Safe Regulations.
3. Identify existing development that do not meet or exceed the SRA Fire Safe Regulations or certified local ordinances.
4. Develop mitigation measures for existing development that does not meet or exceed the SRA Fire Safe Regulations or certified local ordinances or identify a policy to do so.

### C. FUEL MODIFICATION

1. Develop a policy to communicate vegetation clearance requirements to seasonal, absent, or vacation rental owners.
2. Identify a policy for the ongoing maintenance of vegetation clearance on public and private roads.
3. Include fuel breaks in the layout/siting of subdivisions.
4. Identify a policy for the ongoing maintenance of existing or proposed fuel breaks.
5. Identify and/or map existing development that does not conform to current state and/or locally adopted fire safety standards for access, water supply and fire flow, signing, and vegetation clearance in SRAs or VHFHSZs.
6. Identify plans and actions for existing non-conforming development to be improved or mitigated to meet current state and/or locally adopted fire safety standards for access, water supply and fire flow, signing, and vegetation clearance.

## D. ACCESS

1. Develop a policy that approval of parcel maps and tentative maps in SRAs or VHFHSZs is conditional based on meeting the SRA Fire Safe Regulations and the Fire Hazard Reduction Around Buildings and Structures Regulations, particularly those regarding road standards for ingress, egress, and fire equipment access. (See Gov. Code, § 66474.02.)
2. Develop a policy that development will be prioritized in areas with an adequate road network and associated infrastructure.
3. Identify multi-family housing, group homes, or other community housing in SRAs or VHFHSZs and develop a policy to create evacuation or shelter in place plans.
4. Include a policy to develop pre-plans for fire risk areas that address civilian evacuation and to effectively communicate those plans.
5. Identify road networks in SRAs or VHFHSZs that do not meet title 14, CCR, division 1.5, chapter 7, subchapter 2, articles 2 and 3 (commencing with section 1273.00) or certified local ordinance and develop a policy to examine possible mitigations.

## E. FIRE PROTECTION

1. Develop a policy that development will be prioritized in areas with adequate water supply infrastructure.
2. Plan for the ongoing maintenance and long-term integrity of planned and existing water supply infrastructure.
3. Map existing emergency service facilities and note any areas lacking service, especially in SRAs or VHFHSZs.
4. Project future emergency service needs for the planned land uses.
5. Include information about emergency service trainings or standards and plans to meet or maintain them.
6. Include information about inter-agency preparedness coordination or mutual aid agreements.

## **Fire Hazard Planning in Other Elements of the General Plan**

When updating the General Plan, here are some ways to incorporate fire hazard planning into other elements. Wildfire safety is best accomplished by holistic, strategic fire planning that takes advantage of opportunities to align priorities and implementation measures within and across plans.

### **LAND USE ELEMENT**

Goals and policies include mitigation of fire hazard for future development or limit development in very high fire hazard severity zones.

Disclose wildland urban-interface hazards, including fire hazard severity zones, and/or other vulnerable areas as determined by CAL FIRE or local fire agency.

Design and locate new development to provide adequate infrastructure for the safe ingress of emergency response vehicles and simultaneously allow citizen egress during emergencies.

Describe or map any Firewise Communities or other fire safe communities as determined by the National Fire Protection Association, Fire Safe Council, or other organization.

### **HOUSING ELEMENT**

Incorporation of current fire safe building codes.

Identify and mitigate substandard fire safe housing and neighborhoods relative to fire hazard severity zones.

Consider diverse occupancies and their effects on wildfire protection (group housing, seasonal populations, transit-dependent, etc).

### **OPEN SPACE AND CONSERVATION ELEMENTS**

Identify critical natural resource values relative to fire hazard severity zones.

Include resource management activities to enhance protection of open space and natural resource values.

Integrate open space into fire safety planning and effectiveness.

Mitigation for unique pest, disease and other forest health issues leading to hazardous situations.

### **CIRCULATION ELEMENT**

Provide adequate access to very high fire hazard severity zones.

Develop standards for evacuation of residential areas in very high fire hazard severity zones.

Incorporate a policy that provides for a fuel reduction maintenance program along roadways.

**Safety Element Staff Report  
for  
Board of Supervisors and Planning Commission  
Workshop**

**Attachment 5**

**Public Comments**

June 22<sup>nd</sup>, 2022



Protecting Marin Since 1934

Marin County Community Development Agency  
Planning Division - Housing  
3501 Civic Center Drive  
San Rafael, CA 94903  
Attn: Leelee Thomas and Tom Lai

Via Email: [lthomas@marincounty.org](mailto:lthomas@marincounty.org); [tlai@marincounty.org](mailto:tlai@marincounty.org)

**Subject: Marin County Draft Housing & Safety Elements**

Dear Ms. Thomas and Mr. Lai:

Thank you for the opportunity to review and submit comments on the Marin County Draft Housing & Safety Elements. Marin Conservation League (MCL) acknowledges that these documents are critical and important in this pivotal time of balancing the need for housing and the growing consequences of climate change. MCL would like to thank County staff for completing and releasing these documents in tandem, as a number of the goals, policies and programs in each element have a direct or indirect linkage.

MCL has reviewed these draft elements for alignment with its adopted policy positions on, among others, housing, flooding/sea level rise, and wildfire management. Further, these draft elements have also been reviewed for alignment with MCL's longstanding mission, which is, "*To preserve, protect and enhance the natural assets of Marin in a changing environment.*" With this, MCL respectfully submits the following comments.

**Draft Housing Element**

MCL is an environmental organization, and housing is not its principal focus. Nonetheless, MCL follows its current policy position on housing, which is to: a) support a balance of commercial development and workforce employment with needed housing; b) avoid sprawl; c) correspond to the service capacity of Marin's infrastructure; and d) protect specific areas of environmental importance. As a result of the State's housing crisis, in the past five years there have been dramatic changes in mandated housing laws to promote housing development. These new laws prescribed public review processes that promote streamlining and "by-right" (ministerial) permitting processes. To fully understand these new housings laws, in January 2022, MCL hosted "After Hours Event – The Impacts of the New State Housing Laws." This event was intended to educate interested attendees on the recent State housing laws and how they affect the review and development of housing at a local level in Marin County. Consequently, with the many changes in the housing laws,

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MCL is in the process of updating its housing policy position. The following comments combine MCL's current position on housing with consideration of the recent changes in State housing law:

1. Format. MCL applauds County staff for the format and organization of the draft element, which is comprised of numerous documents covering specific topic areas. The organization of the documents makes the read easy to follow from the Needs Assessment through to the Sites Inventory (Appendix C).
2. Needs Assessment. The Needs Assessment is telling, as it confirms that the greatest housing need is for the low-, very low-, and extremely low-income households. These income levels support a high percentage of Marin's workforce that is required to travel far for affordable housing. Planning for housing opportunities to accommodate these households will promote a more sustainable balance in jobs and housing within the County, which will help address the impacts of climate change.
3. Constraints Analysis. The Constraints Analysis is comprehensive and well written. It includes and acknowledges environmental resources and challenges such as stream conservation, flooding/sea level rise, and fire hazards. It is recommended that the Appendix C- Sites Inventory table be revised to include known environmental conditions and constraints for the individual sites. Adding this information to the Sites Inventory table will assist the public and decision-makers in better understanding these conditions and challenges of certain sites.
4. Chapter 5 – Goals, Policies & Programs. MCL supports the four goals and most of the policies and programs. Specific comments are as follows:
  - a. Goal 3 – “Ensure Leadership and Institutional Capacity” is confusing and difficult to interpret. It is recommended that the text be revised or rephrase so that it better aligns with the four supportive policies. The supportive policies are very clear, but do not clearly relate to the goal.
  - b. Policy 1.4 – Development Certainty - “Promote development certainty and minimize discretionary review for affordable housing and special needs housing through amendments to the Development Code.” The intention of this policy is clear. However, how this policy is implemented through Development Code amendments is unknown and open ended. MCL reserves the opportunity to review and comment on the content of the Development Code amendments when they are available for public review.
  - c. Program 1 – Adequate Sites for RHNA and Monitoring No Net Loss. This program references and summarizes the Sites Inventory (housing opportunity sites in Appendix C). The text of this program includes reference to a “revamp” of the Housing Opportunity Sites (HOD) policy language to acknowledge allowable density; maximum and minimum number of units; site constraints; and “objective standards” (if applied).

MCL reserves the opportunity to review and comment on a “revamp” of this policy language when it is available for public review.

- d. Program 2 – By-Right Approval. This program specifies that housing projects/sites that are eligible for the “by-right” approval process are: 1) market rate projects that propose to provide 20% low income inclusionary; 2) 100% affordable housing projects; and 3) projects that include 20% units affordable to homeowners at 60% of AMI or to renters at 50% AMI. Through the “by-right” process, an eligible project would not be subject to a discretionary review, would be exempt from CEQA/environmental review, and would be subject to compliance with “objective standards.” There are a handful of opportunity sites in Appendix C that are being “carried over” from the current and past County Housing Elements. It is our understanding that the State housing laws require that sites “carried over” from the current Housing Element are automatically eligible for the “by-right” process. Is this correct for these sites? Please clarify.
  - e. Program 8 – Development Code Amendments. This program recommends that the County Development Code be amended to, among others increase allowable density and building height limits to 30 dwelling units per acre and 45 feet, respectively in the City Center and Baylands Corridor (noted in Appendix C- Sites Inventory). MCL supports this recommendation for the City Center but opposes a broad-brush application of this change to the Baylands Corridor. Much of the Baylands Corridor is undeveloped Baylands and marsh. Please clarify the boundaries of the Bayland Corridor and what areas are proposed for application of these code amendments.
5. Appendix C – Sites Inventory. The Sites Inventory is well organized and comprehensive. While MCL is pleased that changes were made to the initial inventory that was published earlier this year, we still have concerns about specific sites because they have known site constraints. One example is the Black Point Nursery in East Novato, which is identified as a market rate housing site. A majority of this site is encumbered by Simmons Slough, is adjacent to wetlands, and it does not have sewer service. Appendix C notes that site constraints and environmental conditions were factored into the housing development estimates presented for each site in the table. Citing these known constraints would provide a better understanding on how the housing unit estimates were determined. As noted above, it is recommended that the Sites Inventory be amended to include a column citing known environmental conditions and other constraints such as access to utilities and services. This information will be helpful for the public and decision-makers. Lastly, if there are further changes to the Sites Inventory as a result of its review by the State of California Department of Housing and Community Development, MCL reserves the right to review and comment on these changes prior to final review and action by the County Board of Supervisors.

One missed opportunity in the Sites Inventory is specific, federally owned sites in the West Marin area that are developed and/or suitable for housing use. West Marin, as a Gateway Community to Point Reyes, experiences an affordable housing deficit. If the National Park Service (NPS) personnel could be housed withing the park, that may take some burden off

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of the community. In addition, the West Marin workforce is in dire need for affordable housing, and pressure for housing is exacerbated by the visitor draw to areas such as the Point Reyes National Seashore. It is assumed that since the Housing Element is a State-driven process, federal lands are left to the Federal government for planning land use. Please confirm that this assumption is correct. There might be an opportunity for coordination between the Federal government (e.g., NPS), the County of Marin, and housing interests to plan for housing outside the effort of the Housing Element.

## **Draft Safety Element**

The Draft Safety Element is well-written and well organized. The draft element comprehensively covers six topic areas: a) Equitable Community Safety Planning; b) Disaster Preparedness, Response & Recovery; c) Geology & Seismicity; d) Flooding; e) Wildfire; and f) Climate Change and Resiliency Planning. MCL supports the goals, and most of the policies and programs presented in the draft element. Specific comments are as follows:

1. Sea Level Rise – Climate Change and Resiliency Planning. MCL recently adopted its Sea Level Rise Policy Position Statement. The policies and implementing programs align with the MCL policy position. MCL specifically applauds the attention to the focus on:
  - a. Adaptation planning (Program EHS-6.1b – Develop Adaptation Plans, Program EHS-6.1c – Integrate Adaptation in Plan Documents;
  - b. Promoting nature-based adaptation strategies and tools (Program EHS-6.1b – Use Environmentally Sensitive Adaptation Strategies; and
  - c. Public disclosure of risks (Program EHS-6.1f – Disclose Current and Future Hazards [through development of a resale inspection program]).
  
2. Wildfire Risk and Regulations. The draft element acknowledges and supports the Marin Wildfire Prevention Authority (MWPA). MCL is pleased to see that new focus areas for wildfire safety include: a) supporting steps communities can take to reduce risks; b) considering equity in wildfire planning; c) incorporating climate change tools and adaptations; d) continuing to work to understand the importance of land use patterns relative to changes in climate; e) increasing safety and resilience for nonconforming developments; f) establishing proper evacuation plans; g) updating building code requirements in the WUI; and g) ensuring post fire recovery planning. The draft text is up to date with MWPA priorities including home hardening, and evacuation route planning. Additional attention should be given to community-based fuel break efforts (work beyond defensible space) and fire wise community organizing under FireSafe Marin auspices.

While the intentions are good, there is potential conflict between two of the recommended programs, Program EHS-1.1c (Present Displacement of Vulnerable People) and Program EHS-5.3c (Require Rebuilding After Disaster to Meet Current Standards). Marin County has many areas that are developed with old structures that are nonconforming and predate current zoning, building and fire code standards. Full compliance with current code

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standards at the time of re-build could result in a smaller building footprint and the reduction or elimination of housing units (causing displacement).

MCL also offers strong support for the following programs related to fire safety:

- a. Program EHS-5.3d – Restrict Land Divisions. As stated in this program, land divisions should be prohibited in very high and high fire hazard areas unless there is availability of adequate water and reliable water for fire suppression access for firefighting vehicles, and adequate evacuation for residents.
- b. Programs EHS-5.5b – Implement Ecologically Sound Methods of Vegetation Management and EHS5.5d – Require Fuel Reduction and Management Plans for New Development. While MCL currently has a policy addressing vegetation management, it is being revisited to update.

### **Future Review of Draft Environmental Impact Report**

Marin Conservation League looks forward to the mid-summer release of the Draft Environmental Impact Report (DEIR) addressing CEQA/environmental review of these documents. With the changes in housing legislation that would streamline future development review, and in some cases exempt CEQA/environmental review, MCL will be reviewing the DEIR to assess the adequacy of this document.

Thank you for this opportunity to comment these critical County documents.

Yours truly,



Robert Miller  
President



Paul Jensen  
Board Member

**From:** [Lorin Schneider](#)  
**To:** [safetelement](#)  
**Subject:** Applies to housing and safety  
**Date:** Monday, June 27, 2022 11:48:49 AM

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Adding the thousands of homes that you want to add to Marin County in Tiburon, Mill Valley, Sausalito and Corte Madera is one of the biggest mistakes this county & the state could be making. You have to use whatever is available housing and is already built, not build more. Our infrastructure is horrendous in this county and getting in and out of these cities in any kind of an emergency is an impossibility! You people have to wake up and realize what you're doing and make the affordable housing with what is already here. Restructure what is already here, do not add more !!! There are ways that this can be done but adding more housing is absolutely absurd because adding thousands of more cars on these roads is going to be a hazard!!! Not quite sure who it is that we have to get this through to but that is the reality.

Lorin Schneider, Tiburon.

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**From:** BOS <BOS@marincounty.org>  
**Sent:** Monday, June 27, 2022 9:30 AM  
**To:** BOS - Aides  
**Cc:** Damazyn, Michele; Mosher, Ana Hilda  
**Subject:** FW: Draft Housing and Safety Element

Aides,

Attached is a letter relating to the draft housing element received in the June 26, 2022 BOS mailbox. Please forward as you deem appropriate.

Thank you,



**Joyce Evans**  
DEPUTY CLERK

County of Marin  
Board of Supervisors  
3501 Civic Center Drive, Suite 329  
San Rafael, CA 94903  
415 473 3768 T  
415 473 3645 F  
CRS Dial 711  
[jevans@marincounty.org](mailto:jevans@marincounty.org)

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**From:** Bobbi Loeb <bobbil@sonic.net>  
**Sent:** Sunday, June 26, 2022 5:22 PM  
**To:** BOS <BOS@marincounty.org>

**Subject:** Draft Housing and Safety Element

Dear All Marin County Board of Supervisors [general box] All Marin County Board of Supervisors [general box],

Dear County of Marin Planning Commission and Board of Supervisors,

I am writing today regarding the Draft Housing and Safety Element reports. For the last 50 years, the community has worked in partnership with the County to ensure community planning incorporates the theme of sustainable communities to protect sensitive coastal habitats; ensure resource availability; reduce greenhouse gas impacts; encourage infill and redevelopment projects to recolonize the asphalt with projects focused on underutilized development near transit and job centers. The County is currently on track to rollback the foundational elements of the award-winning 2007 Countywide Plan and conservation zoning that has safeguarded Marin from sprawl and irresponsible development projects. Please uphold the legacy of sustainable community planning and development and consider the below priorities as this plan proceeds:

1. Marin's award-winning Countywide Plan must be honored, not rolled back. The environmental corridors should not be changed to promote urban sprawl.
2. Don't roll back A-60 zoning (one house per 60 acres of agricultural lands). This is a slippery slope! Exclude the Buck Center site and other proposed A-60 sites from consideration for residential housing development.
3. Protect sensitive habitat areas and depleted water resources from irresponsible development. Development sites should be 100 feet away from a shoreline or creek, protecting riparian habitat and water quality.
4. Proposed housing locations must be near adequate water supplies and wastewater infrastructure to reduce environmental harms.
5. Exclude locations in and near low-lying wetlands. These areas will be flooded due to rising sea levels in the coming decades.
6. Protect our residential communities with programs and policies that prioritize residential housing stock for the people who live and work in our communities.
7. Honor the Sustainable Communities Strategies of Plan Bay Area 2050. The County should promote infill near commercial cores, job centers, and transit centers, as well as promoting mixed-use commercial spaces.

Thank you for consideration of my comments,

Sincerely,  
Bobbi Loeb

PO Box 673  
Point Reyes Station, CA 94956

**From:** [Brian Mccarthy](#)  
**To:** [safetylement](#)  
**Subject:** Safety  
**Date:** Tuesday, June 28, 2022 11:33:36 AM

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Many of the sites in the housing element are dangerous. Toxic substances are in the ground. These were ignored at great cost at Hamilton. Sea rise is imminent at many sites, especially near shoreline. Roads with parking restrictions for access will be blocked under the new rules. CEQA has been run over and ignored in this planning. Toxic air near bus and freeways are not good for poor or kids. Would you want to live in a place where car exhaust is omnipresent??. No but you will have houses built there. Lot subsidence during earthquakes is also ignored. Water availability in the future is exacerbated by new building and residents. This housing element is wrong and politically driven to destroy our community as we know it. WRONG AND UNSAFE!!!!.

**From:** [Terri Leker](#)  
**To:** [safetelement](#)  
**Cc:** [Terri Leker](#)  
**Subject:** Comments for the Draft Safety Element  
**Date:** Thursday, June 30, 2022 4:16:47 PM

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To the Marin County Board of Supervisors and Planning Department:

My husband and I are longtime residents of Santa Venetia in unincorporated Marin County, and members of the Santa Venetia Neighborhood Association (SVNA). We and our neighbors remain gravely concerned about the implications of the Draft Housing and Safety Elements on our ability to evacuate in the event of emergency (the likelihood of which increases with the addition of approximately one thousand new residents). We ask again that you consider the magnitude of risk that this unfettered new development places on Santa Venetia, which relies on a single road in and out and is already crippled by daily gridlock. We also wish to call out the astronomical and disproportionate number of units that our neighborhood has been asked to absorb.

It is indisputable that much of the proposed housing is sited in areas at high risk of fire, with inadequate evacuation routes; nor does it appear that these draft documents were created in partnership with our first responders or that their expert and vital opinions were considered. The Marin Community Wildfire Protection Plan (MCWP), prepared in December 2020 for the Marin County Fire Department, is an excellent and thorough report detailing the extreme challenges of fire management in WUI environments. The MCWP addressed several critical issues, including emergency egress:

An article in the Marin Independent Journal (August 23, 2019) discussed how several communities in Marin could face major traffic during a disaster. The article was based on research by StreetLight Data Inc. that was inspired, in part, by the gridlock faced by residents of Paradise, California, during the Camp Fire in 2018. Researchers looked at communities of 40,000 residents or less across the country, showing how traffic would flow during an emergency and pointing out potential bottlenecks. Of the 30,000 communities analyzed, about 800 had scores that were three or more times the national average, including 107 in California, indicating that residents in California have fewer options than average when evacuating during an emergency. Twenty-two of the towns and cities are in the Bay Area, and of these, seven are in Marin County. (4.8 Roadways and Streets, p. 28)

On this same page, MCWP cites a map from StreetLight Data Inc. which identifies Santa Venetia as one of only 675 U.S. communities with limited evacuation routes:

<https://www.streetlightdata.com/limited-emergency-evacuation-routes-map>

The maps used in the June 2022 Draft Safety Element also demonstrate great risk to Santa Venetia from liquefaction, seismic shaking amplification, historic flooding, and sea level rise. Any single one of these risk factors will severely impact emergency evacuation on North San Pedro, the sole route in and out of Santa Venetia.

The Draft Safety Element Section EHS-2.4.c: Identify and Improve Deficient Evacuation Routes, has a stated goal to:

Implement findings of the Marin Wildfire Protection Authority Evacuation Ingress-Egress Risk Assessment. Use the visual risk assessment and risk factors to identify and prioritize existing deficient evacuation routes. Improve evacuation routes based on the prioritization ranking, but also in consideration of improvements required for a transportation network which is resilient to flooding and inundation from sea level rise.

However, the corresponding Implementation Table (Figure 2-21: Goal EHS-2. Disaster Preparedness, Response, & Recovery Program) states that meeting this goal "Requires additional funding." We do not believe that *even a single new home* should be approved before funding is secured.

Finally, the Draft Safety Element states:



A regional approach to wildfire planning and response is addressed in the Marin County Multi- Jurisdictional Local Hazard Mitigation Plan and the Marin Community Wildfire Protection Plan (CWPP). The Marin Wildfire Protection Authority (MWPA), established in 2020, coordinates and funds 17 local member agencies to create more fire adapted communities based on the priorities outlined in the CWPP. Additional information detailing wildfire hazard in the County and detailed descriptions of the CWPP and the MWPA are provided in a technical memo supporting this Safety Element. (15)

We object to the use of the "supporting" in this context, as it implies that the *recommendations* of the CWPP and MWPA support the conclusions of the Draft Safety Element, when, in fact, detailed descriptions of these plans are simply provided as a supplement to the Draft Safety Element.

With regard to fire, Map 2-15 (Fire Hazard Severity Zones) is dated August 15, 2021, but cites CALFIRE 2007 as its source. We believe that some of the hazard maps in use are more current, but can you confirm that *no* 2007 FHSZ CAL FIRE maps are still in use?

We also take issue with the loss of local control over how our communities are planned and developed. Rather than defining this as a simplistic NIMBY vs YIMBY argument, we should call it what it is: a transfer of power from communities to for-profit developers. The current process, along with SBs 9 and 10 is a gross overreach to overturn local autonomy and planning decisions and is in direct opposition to the wishes of most Marin residents. The majority of mandated units would be at or above market rate, which does not ameliorate the most urgent need for truly affordable housing.

We have written before to state our concerns, none of which were lessened by the series of Zoom "workshops" where MIG representatives could not answer questions about the degree to which the Draft Housing and Safety Elements, RHNA, ABAG, and the new state bills were interdependent, how water would be supplied, or how critical infrastructure needs would be addressed. As we have noted previously, many Marin residents are still unaware that this process is underway and have yet to even formulate questions or objections.

In addition to everything that has already been stated, we want to add that it is a foregone conclusion that we will *never* reach compliance with the RHNA mandates, whether we attempt to do so or not. Our "success" is completely dependent upon multiple unstable factors, including a reliable supply chain for the innumerable building materials — lumber, concrete, metal, cinder blocks, drywall, glass, etc. — required to construct this amount of housing. Further to this, can you begin to calculate the amount of water necessary to produce the essential concrete and cinder blocks? Where will we find the enormous labor force to build thousands of new housing units? In Corte Madera alone, Nugget Markets has for weeks advertised dozens of unfilled positions, from checker to meat clerk, for which they are offering a \$1000 sign-on bonus. Now consider that all of this development will take place simultaneously throughout the state. Regardless of our efforts, we will most certainly be penalized for not meeting our quotas, which, again, is to the benefit of the developers who will then proceed without environmental review.

After reading the MCWP and related reports, we will state the obvious conclusion that should have been drawn by the Draft Safety Element: The multifold hazards to the residents of Marin County are so great and insurmountable that the Housing Element must be thoroughly reconsidered.

We will not win this battle for our communities by attempting to comply. We ask that you stand up to Sacramento and fight like our lives depend on it.

Thank you,

Terri Leker and Mark Wallace  
10 Bayhills Drive  
San Rafael, CA 94903

**From:** [lainiefisch@comcast.net](mailto:lainiefisch@comcast.net)  
**To:** [safetelement](#)  
**Subject:** COMMENT: Mill Valley homeowner feedback on the Draft Safety Element  
**Date:** Thursday, June 30, 2022 2:09:45 PM  
**Importance:** High

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To the Board of Supervisors and Planning Department,

I have been a Mill Valley condominium owner in the Shelter Ridge neighborhood for the past 20 years. I originally moved to Mill Valley in the early 1980's. In the past 40 years I have seen local traffic in Mill Valley greatly increase, and roads into and out of Mill Valley have become very congested and routinely gridlocked.

I'm very worried about fire danger, the drought, and the traffic jams that would endanger our lives if large areas of Mill Valley had to evacuate in an emergency. For these reasons, I'm very disturbed by the RHNA, the punitive laws that enforce them, and the loss of local control.

I am angry and disappointed that ABAG has utterly disregarded our safety with their disrespect of valid appeals. Their actions completely contradict *Plan Bay Area 2050* goals and assurances that one size does not fit all, and that *high risk areas would be spared development*. Even with the new state laws, these factors could have been considered with appeals and distributions.

It should be impossible to ignore both the fire hazards and the anemic evacuation routes here, yet ABAG is unswayed. As you are well aware, the numbers cannot be met without putting the lives of a great number of people, including the new residents, at risk.

Besides ignoring the realities of each separate municipality, the cumulative effects are not considered. 865 new units in Mill Valley does not just add 1,800 people to their evacuation. The mandated reckless development also blocks egress from the heavily populated unincorporated areas and their new residents, rippling all the way back to the coastal areas — including a probable large tourist population. That could be 20,000 plus people stuck in a miles long, gridlocked fire-trap towards two already-overloaded Highway 101 exits in Mill Valley, or the exits further north that run through many small towns.

A similar situation could occur in Santa Venetia. North San Pedro Road barely moves much of the day and the additional population there will join the current residents in a crawl towards the freeway. In an evacuation this leaves them totally exposed, especially if they'll be meeting a stream from the newly densified Los Ranchitos.

The list goes on. We are experiencing fires here daily now, some already requiring small scale evacuation. The state firefighting forces are staffed below 70%. We have been lucky to have

excellent first responders in the LRAs, and that there's been no wind that could turn a small fire into devastation. Just take a moment to remember the scenes of devastation in the Oakland hills fire in 1991, in which many lost their lives while attempting to evacuate.

The Marin Community Wildfire Protection Plan (CWPP) 2020 describes our situation in stark terms. It also contains very relevant risk assessment maps, unlike CAL FIRE'S, which are totally out of date, <https://www.arcgis.com/apps/MapJournal/index.html?appid=6b55c55b3f7d41fe980ef5e65ae881a6>

Besides the safety issues, the punishments that the cities and counties are being threatened with in connection with the proposed reckless development do not comport with reality.

Several lawsuits regarding evacuation safety have gotten traction. They are made up of one large development, but the case could be made that adding 800 units in chunks along an evacuation corridor will have a similar effect and should be disallowed. I don't believe any traffic studies have been done to confirm this issue in areas of Marin slated for development.

I hope that you will summon your courage to resist the forces that are pushing us in a dangerous direction. The residents of Mill Valley live in fear and anxiety, and we look to you for help and support. Our lives are on the line.

Sincerely,

Elaine Fischman  
555 Seaver Drive  
Mill Valley, CA 94941  
(415) 710-5135

**From:** [Susan Kirsch](#)  
**To:** [safetelement](#)  
**Cc:** [cityclerk@cityofmillvalley.org](#); [clerk@cityofbelvedere.org](#); [rvaughn@tcmail.org](#); [Michele Gardner](#); [afoulis@cityoflarkspur.org](#); [lmcdownall@novato.org](#); [towncouncil@townofross.org](#); [Carla Kacmar](#); [city\\_clerk@cityofsanrafael.org](#); [Heidi Scoble](#); [town@townoftiburon.org](#); [Mike McGuire](#); [Marc.Levine@asm.gov](#); [Marin IJ - Dick Spotswood](#); [Marin IJ - Richard Halstead](#)  
**Subject:** Comment: Marin 2023-2031 Safety Element  
**Date:** Thursday, June 30, 2022 1:46:15 PM

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Dear Marin County Board of Supervisors:

Thank you for your commitment to protect the safety of your constituents. State legislators have put you, along with all California counties and cities, in a difficult position.

- You're asked to fulfill unreachable RHNA goals that you had no say-so in setting.
- Your appeal to ABAG re: safety issues was denied.
- You're threatened with punishment if you don't meet housing unit quotas, even though you don't have any authority over a developer's plans to build what is permitted.
- You recognize that rezoning to meet inflated RHNA goals increases public risk for flooding and wildfire.
- The state Auditor found that HCD's RHNA methodology and process were flawed and unreliable. Yet, without correction, you're asked to comply.

Consultants, staff, and the media say, "there's nothing to do but comply." But, of course, there's more that you can and must do to protect safety, truth, and transparency.

This 4<sup>th</sup> of July weekend reminds us that freedom and independence weren't gained through compliance, but through courageous action. We need your bold action now to challenge the 6<sup>th</sup> cycle of RHNA, the false numbers, faulty assumptions, and disregard for something so basic as safety. Even with the loss of local control and autonomy, the heavy-handed state housing policies fail to meet the need for housing that is affordable to low-income wage-earners. It's a travesty.

The county, Marin cities and counties, and cities and counties throughout California have the opportunity to join lawsuits that challenge the over-reach of state legislators. Do what you must to comply and simultaneously demonstrate bold leadership that corrects the broken system.

cc:

Senator Mike McGuire

Assemblyman Marc Levine

Marin City Clerks: Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato,

Ross, San Anselmo, San Rafael, Sausalito, Tiburon

Dick Spotswood, Richard Halstead

***Susan Kirsch***

***Catalysts, Director***

**[www.catalystsca.org](http://www.catalystsca.org)**

**[www.susankirsch.com/](http://www.susankirsch.com/)**

**415-686-4375**

**From:** [Amy Kalish](#)  
**To:** [safetelement](#)  
**Cc:** [Amy Kalish](#)  
**Subject:** SAFETY ELEMENT  
**Date:** Thursday, June 30, 2022 10:49:50 AM

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To the Marin Board of Supervisors and Planning Department,

The Public Draft of the Safety Element Update begins: “Marin County places the highest priority on the well-being and safety of its community members.”

In light of that, the Safety Element should negate the Housing Element, as there are innumerable examples of the hazards in our region being compounded by geography, topography, wind patterns, building proximity, proliferation of pyrophitic landscaping, drought fueled dryness of vegetation, infrastructure that cannot safely support evacuation, etc.

The CWPP report alone indicates the Housing Element cannot be fulfilled and also protect the “safety of its community members.”

I am disturbed by the amount of angst ABAG has caused by utterly disregarding our safety with their disrespect of valid appeals. (I’ve read all of those filed in Marin, plus.) Their actions completely contradict Plan Bay Area 2050 goals and assurances that one size does not fit all, and that high risk areas would be spared development. Even with the new state laws, these factors could have been considered with appeals and redistributions.

It should be impossible to ignore both the fire hazards and the anemic evacuation routes here, yet ABAG is unswayed. As you are well aware, the numbers cannot be met without putting a great number of people, including the new residents, at risk.

In the Great Mill Valley Fire of 1929, when vegetation was largely native and sparse, and only 100 well spaced homes dotted the area, 2,500 acres burned (Marin Historical Society).

Marin’s fires reoccur in the same locations because of the predictable combination of wind and topography. The same area of the Great Mill Valley Fire, today, with a largely unimproved infrastructure and a totally overgrown topography, now holds well over 1,100 homes. This is the definition of “built-out.”

More information here:

[First Wednesday: Fire On the Mountain with Mike Swezy - YouTube](#) The history and mechanics of fire in Marin. MIKE SWEZY 23 years as Marin Municipal Watershed Manager, career in forestry and fire ecology, service with Marin

Conservation Corps the US Forest Service and FIRESafe Marin.

Besides ignoring the realities of each separate municipality, the cumulative effects of development are not considered in the RHNA. 865 new units in Mill Valley does not just add 1,800 people to their evacuation. It also blocks egress from the heavily populated unincorporated areas and our new residents, rippling all the way back to the coastal areas — including a probable large tourist population. That could be 20,000 plus people stuck in a miles long, gridlocked fire-trap towards two crummy 101 exits in Mill Valley, or the exits further north that run through many small towns.

A similar situation could occur in Santa Venetia. North San Pedro Road barely moves much of the day and the additional population there will join the current residents in a crawl towards the freeway. This scenario leaves them totally exposed, especially if they'll be meeting a stream from the newly densified Los Ranchitos.

Think about Santa Rosa, and the wide street access they had. Compare that to the wiggly lines in the evacuation maps of the unincorporated areas of Marin.

We now have a year-round fires season, and now, just in June, we are already having daily fires, some requiring small scale evacuation. As I write, another has just started in San Rafael. We have been lucky to have excellent first responders in the LRAs, and that there's been no wind that could turn a small fire into devastation. The state firefighting forces are staffed below 70%, and we have plenty of SRA in our area. We have to hope there's is only one incident at a time to deal with.

I was heartened to see that the hazard maps in the Safety Element report were largely new, and only one FHSZ CAL FIRE map from 2007 was still being used. The Marin Community Wildfire Protection Plan (CWPP) 2020 describes our situation in stark terms. It also contains very detailed and relevant risk assessment maps, and I sincerely hope every Planner and Supervisor reads both of these reports in entirety. <https://www.arcgis.com/apps/MapJournal/index.html?appid=6b55c55b3f7d41fe980ef5e65ae881a6>

I believe the takeaway from these reports, cited in the Safety Element, should have been that the area is too hazardous to support the amount of housing mandated, and the Element should have reflected that with a scaled back Housing Element regardless of the consequences.

My family is emergency conscious, with numerous alert apps set, and go bags ready alongside our CERT packs. We are FireWise and I'm an NRG block captain. I'm

dedicated to fire mitigation and preparedness, and it infuriates me that all the efforts of our first responders and volunteers will be complicated and possibly undone by the reckless development that is demanded.

I started a website in January to do my part to educate people about what's going on: [www.citizenmarin.org](http://www.citizenmarin.org) — because most people are still clueless. Besides the safety issues, the punishments that the cities and counties are being threatened with do not comport with reality.

I look around and see potential for fire everywhere. A simple chain dragging on the ground was all it took to set one in Novato last week.

Several lawsuits regarding evacuation safety have gotten traction, stopped by judges as posing unacceptable evacuation risks. These judgements have been on large developments, but the case could be made that adding 800 units in chunks along a stressed evacuation corridor will have a similar effect and should be disallowed. As far as I know, no traffic studies have been done to confirm this issue in areas of Marin slated for development.

In the face of rapidly changing climate related circumstances, there is no way to predict long range housing plans in disaster prone areas with any degree of safety. The state refuses to acknowledge this. I urge you, our elected Board of Directors, to push back.

The very idea that the HCD hasn't undertaken a review of their RHNA formula (or even consider appeals) in the face of the obvious — fast moving climate change causing drought, year-round fire season, and rising sea levels — is itself the problem. The RHNA can no longer rationally be planned in 8 year cycles.

The housing mandates amplify the threats of all of these natural disasters.

Your powers are already diminishing. I urge you to resist before the rest of our local democracy is seized by the state.

Representing us means ensuring the safety of the residents of Marin's unincorporated areas. Are the threats of punishments by the state — fines, fees, further loss of local control, and elimination of public input — worse than loss of life?

I hope to see a summoning of courage to resist the forces that are pushing us in a dangerous direction.



Sincerely,

Amy Kalish  
7 Walsh Drive, Mill Valley, CA 94941  
415-383-9115



## **Santa Venetia Neighborhood Association**

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P.O. Box 4047 · San Rafael · CA · 94913-4047

June 30, 2022

County of Marin, Community Development Agency, Planning Division  
3501 Civic Center Drive, Suite 308  
San Rafael, CA 94903-4157

Attention: County Staff: [housingelement@marincounty.org](mailto:housingelement@marincounty.org)

Attention: County Staff: [safetyelement@marincounty.org](mailto:safetyelement@marincounty.org)

Re: Marin County Housing and Safety Elements Update, 2023 – 2031

We have received multiple notifications that June 30, 2022 is the last day to submit comments for the Draft Housing Element and the Draft Safety Element, and are resubmitting our previous comments to emphasize our grave safety concerns. We do not trust that the Housing Element numbers can be met without putting a great number of people, including new residents, at risk.

We wish to add that Marin County has seen multiple fires over the past several days, thankfully in the absence of gusting wind, and July has not yet begun. As well, we would like to point out the safety and evacuation data from Streetlight Data, cited in the Marin Community Wildfire Protection Plan, which states that Santa Venetia is one of 675 U.S. communities with limited evacuation routes. (<https://www.streetlightdata.com/limited-emergency-evacuation-routes-map>)

The Santa Venetia Neighborhood Association (SVNA) is an organization representing the interests of 1,700 – 1,800 households (4,474 residents per the 2019 census figures) who live in Santa Venetia. As an organization, we are dedicated to the enhancement and preservation of the character and quality of life of the Santa Venetia neighborhood. We do our best to represent our community and have an established reputation to be a voice for proper development. And in accordance with our mission statement, we, the Board Members of the SVNA, feel compelled to comment on this issue.

As we wrote to you on April 11 and in previous letters, we want to ensure that the Marin County Board of Supervisors receives an accurate impression from our community regarding the updated Housing Element and understands our grave collective concerns about the magnitude of development proposed. All of the issues described in those letters — highly constricted road access that impedes emergency ingress/egress, our history of landslides and flooding, and the risk of catastrophic fire danger (particularly to

**SVNA@santavenetia.org ~ www.thesvna.org**

# **Santa Venetia Neighborhood Association**

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homes sited in the WUI) — are well-known to the Marin County BOS. Before rushing to build, we deserve answers about these areas of concern, perhaps none more important than how water will be supplied.

Community outreach has left much to be desired, and in our attempts to reach out to neighbors we have found that, by and large, they are unaware of the degree to which the updated Housing Element will adversely change our neighborhood and greater Marin. Many neighbors are under the impression that the housing mandates were originated by County staff rather than State officials. Also, since most do not have the time to wade through more than 300 pages of dense and complicated documents, we assure you that the number of comments you receive regarding the updated Housing and Safety Elements do not reflect the attitude of the Santa Venetia community.

As has been frequently stated in previous workshops, community members were unaware that the process was even underway until they were alerted by word of mouth (including a hand-made sign on a telephone pole). As for the workshops themselves, we do not believe that they represent a true and transparent dialogue between community partners. This is due in part to the severe limitation on comments, and the fact that the virtual workshops are held in “webinar” mode. As a result, only County staff know the number of attendees, which is critical in gauging community awareness. Also, speakers representing the County, or, by extension, MIG, have not been clearly identified by name and title on the Zoom screen.

The June 2022 Draft Safety Element and Draft Housing Element appear to conflict with one another, and it is unclear how, or if, that conflict will be resolved. Key findings of the “Preparation of the Housing Element Update” clearly state the limitations on infrastructure:

- Limited infrastructure capacity to support more housing development.
- Insufficient clean water and septic infrastructure.
- Insufficient evacuation capacity and ingress/egress for emergency vehicles.
- Insufficient infrastructure for pedestrians and bicyclists.

In response to these comments, this Housing Element introduces programs to expand and preserve the County’s affordable housing inventory, to create a diverse range of housing choices, and to mitigate infrastructure constraints. (p. 4 DHE)

These limitations are not actually addressed in the Safety Element— they are merely mentioned as areas requiring further study. SB 9 and other recent legislation driving the Housing Element fail to plan for multiple proven risks such as wildfire, flooding, and landslides. (we assume due largely to their insolubility). We strongly agree with Supervisor Connolly’s statement in a recent IJ article that, “SB 9 is a flawed law in the sense that things like high-fire-risk zones and other hazards are not adequately accounted for.”

The maps used in the Safety Element demonstrate the great risk to Santa Venetia from liquefaction, seismic shaking amplification, historic flooding and sea level rise, and fire.

# **Santa Venetia Neighborhood Association**

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Any one of these risk factors will severely impact emergency evacuation on North San Pedro Road, the sole route in and out of Santa Venetia.

For example:

Map 2-9, (Seismic Shaking Amplification Hazards) shows that parts of Santa Venetia are on or adjacent to “Soil Type E (200 m/sec > Vs). The strongest amplification of shaking is expected for this soil type. Soil type E includes water-saturated mud and artificial fill.”

Map 2-11 (Liquefaction Susceptibility Hazards) shows that our neighborhood is directly adjacent to areas of “very high” level of liquification susceptibility.

Map 2-12 (Landslide Hazards) does not accurately portray the landslide risk on Crestview, Sunny Oaks, Bayhills Drive and surrounding streets.

We are concerned by the language regarding flooding, which reads: “Development in flood hazard areas in the County is not restricted, but rather municipal code requirements and other regulations consider existing and projected flood zones and extents when reviewing the design and adaptation measures of proposed development.” (p. 9)

Map 2-13 (Flood Hazard Areas) directly follows, which demonstrates the severe flooding risk our community faces. This risk is exacerbated by our inadequate and aging levies.

We noted with interest the section on wildfire:

Fire hazard severity zones (FHSZ) are CAL FIRE-designated areas of significant fire hazard that influence how people construct buildings and protect property to reduce risk associated with wildland fires. A CAL FIRE countywide assessment of wildland fire threat revealed that approximately 82 percent of the total land area of the County is ranked as having moderate to very high fire hazard severity zone ratings. (p. 11)

We ask the date on which the countywide assessment was conducted, and where it has been made publicly available.

Map 2-15 (Fire Hazard Severity Zones) is dated August 15, 2021 but cites CALFIRE 2007 as its source. We ask that you clarify this discrepancy.

Map 2-19 (Sea Level Rise) projects near-term (2040-2050) sea level rise of - 50 cm (1.6 ft) in Santa Venetia, which is the highest risk category.

The Disaster Preparedness, Response, and Recovery section states:

The MWPA is conducting an Evacuation Ingress-Egress Risk Assessment to create a rating system of roads, presenting a visual risk assessment of the County’s roadways at various levels of aggregation (geographic areas, evacuation zones, or other). In addition to the software platform, a report will also present an initial list of risk factors for improvement by area, by risk category, and by responsible agency. (p. 20)

# **Santa Venetia Neighborhood Association**

Page 4 of 4

June 30, 2022

We see that this assessment is in progress; we ask that it reflect Santa Venetia's undeniable status as one of Marin County's most vulnerable areas. We urge you not to exploit our neighborhood for development and exacerbate existing risks

Figure 2-24 Goal EHS-5. Safety from Wildfire, Program Implementation Table states that funding for fire evacuation safety "may require grant funding or additional revenue." (p. 56). We ask where such funding is available.

As we stated in previous letters regarding the updated housing sites list, not only do we object to the placement, density, and extraordinarily high number of selected sites, we reject the process under which the State and, by extension, the County are operating. With the Safety Element still in progress, and no consensus on critical infrastructure improvements, it is premature to move forward with site identification. We must also acknowledge the cumulative impact of such massive development. For example, we need to analyze the repercussions to Santa Venetia (before adding a single new unit) from the upcoming Northgate development, which will add nearly 1,500 units. We question the purpose of updating the Housing Element to remove organizations that currently provide needed services to our community and beyond, such as Old Gallinas School.

To quote from the County's July 9, 2021 appeal, unincorporated Marin County (lacks) "Availability of land suitable for urban development or for conversion to residential use." That this and nearly every other statewide appeal was denied proves that the entire process needs further evaluation before continuing. We urge you to take a pause from this rushed process to consider — truly consider — these impacts.

Please consider the safety of your constituents, rather than complying with state laws that put us at even greater risk of fire, flooding, and landslides.

This push for development is couched as filling a need for "affordable" housing, but in reality, only a minority of the new building will serve truly low-income residents. The majority of housing will be at market rate, and the building process will override local control, limit public input and community planning, and in some cases remove any environmental oversight.

As we did in our letter of April 11, and past letters, we will close by paraphrasing one of our SVNA members, who stated: "The County's first responsibility is for the health and safety of the existing residents of our neighborhood." We again ask you to consider this as you move forward.

These are just a few of the concerns that we have. The SVNA has encouraged our members to send comment letters as well, citing their concerns about this update. Please include those concerns as concerns of the SVNA.

Thank you, SVNA Board of Directors

cc: Damon Connolly, District 1 Supervisor

**From:** [Michael Dyett](#)  
**To:** [safetelement](#)  
**Cc:** [Michael Dyett](#); [Stephanie Moulton-Peters](#)  
**Subject:** Safety element Comments: Evacuation Routes and SB99 Determinations  
**Date:** Thursday, June 30, 2022 7:11:14 PM

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Hi,

I believe the safety element could be strengthened if it included more specific information about the capacities and evacuation times under specific hazard evacuation scenarios for decks Fred emergencies, contrasting flood hazards for example with wild fire hazards. I also think more attention could be paid to the needs of environmental justice communities and getting public transit service or paratransit service to those in evacuation areas, and whether contraflow lane should be specifically designated in advance and signed accordingly. Finally I would like to see more explicit attention to the relative capacity of agencies who would work on evacuation planning and whether, for example, South Marin Fire has stepped up along with Mill Valley and are state and federal agencies fully involved and committed? Covid 19 affected interagency planning in Contra COSTA I know from my work for the City of Richmond. I realize that upon closer reading of the draft some of these questions may be answered but I do think more attention to them in the policies and actions particularly in terms of the environmental justice communities in the county would be warranted. I don't believe the draft actually maps and quantifies times under a evacuation scenarios and how they relate to level of service expectations for the identified routes.

Thank you for considering these remarks. Cordially  
Michael V. Dyett F AICP

Michael Dyett  
(415) 260-4976

Sent via [Superhuman iOS](#)

**From:** [judy wong](#)  
**To:** [safetelement](#)  
**Subject:** building more housing on Atherton corridor  
**Date:** Thursday, June 30, 2022 8:13:11 PM

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my concerns about building dense housing along Atherton corridor:

1. the traffic. this is one way in and one way out for many houses already. can you imagine the traffic mess adding dense housing will do.

Think about emergency evacuations. that would be a disaster.

2. this is a major animal corridor, which the dense housing will destroy. the animals were here before us, lets not totally destroy their habitat

3. poor city planning to put dense low income housing on Atherton. they are not walking distance to anything and not near mass transportation(like the train)

4. i see many empty buildings and empty lots in Novato. You do NOT need to ruin Atherton ave. It is state mandated that each county build x number of affordable houses. it was not mandated by the state that so much needs to go on county property(like Atherton).

Most of these affordable houses, need to be put in town, where people can walk to do errands, or take the train. think of train access when deciding where to put these high density houses.

this is just poor city planning to put high density homes on Atherton

5. Judy Arnold had identified a vacant property that could be built on, in Ignacio. Also the old Pini building remains vacant. build that 3 stories high with affordable housing(included garage underneath). people can easily walk to do many errands from here and they can walk to train.

Firemans fund is another spot. again, close to the train

i am concerned that many people are on vacation now, and will miss submitting concerns about building affordable housing on Atherton corridor

sincerely

Judy Wong

**From:** [hentz francine](#)  
**To:** [safetelement](#)  
**Subject:** Tomales Water Issues  
**Date:** Thursday, June 30, 2022 8:35:28 PM

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Hello,

I did send a comment to the Housing Element re this topic, but thought I should mention water quality issues we're experiencing in Tomales, due to the extremely low water table. Our previously pristine well water is coming out coffee colored, and we are currently recycling our laundry and wash water to accommodate our landscaping. Also we are currently filtering our drinking water for the first time ever.

Thought this should be considered, as water is a resource in short supply these days. Thanks for any consideration you may give this matter.

Sincerely, Francine Hentz and Dan Erickson, long time home and property owners in Tomales



**From:** [Bill Fridl](#)  
**To:** [safetelement](#)  
**Subject:** draft Safety Element  
**Date:** Thursday, June 30, 2022 9:45:44 PM  
**Attachments:** [image001.jpg](#)

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Hi there,

I live in greater Mill Valley. These hills are going to burn during my lifetime (and I'm old!) It's possible that hundreds will die, unable to get off the hills to safety because the roads couldn't handle the exodus.

And Marin bureaucrats are still trying to squeeze in more housing. Because some other bureaucrats said to.

Ridiculous...

Bill Fridl  
222 Cleveland Ave  
Mill Valley, CA

Oakland Firestorm 1991 - Oakland - LocalWiki





June 30, 2022

County of Marin  
Board of Supervisors  
Planning Commission  
Community Development Agency

*Submitted via email: [housingelement@marincounty.org](mailto:housingelement@marincounty.org),  
[BOS@marincounty.org](mailto:BOS@marincounty.org), [planningcommission@marincounty.org](mailto:planningcommission@marincounty.org), and  
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### RE: Draft Housing & Safety Elements

To Whom It May Concern:

The Environmental Action Committee of West Marin (EAC) is based in Point Reyes Station and has been working to protect the unique lands, waters, and biodiversity of West Marin since 1971. We appreciate the opportunity to comment on the Draft Housing and Safety Element updates.

Since EAC's founding, we have been committed to the health of West Marin's lands, estuaries, bays, and watersheds. In one of our earliest campaigns, we advocated for sustainable community planning to safeguard the irreplaceable natural environments from 1960s development plans that would have paved over the lands we know today as the Point Reyes National Seashore, Golden Gate National Recreation Area, Marin County Parks and Open Space, Marin Municipal Water District Watershed, Gary Giacomini Open Space, and more than 136,000 acres of productive agricultural lands.

These comments are focused on communities in the West Marin watersheds and proposed changes to the Countywide Plan (CWP) that would have long-term impacts to sustainable planning. We have organized this letter into three sections:

- 1) Public Process and Countywide Plan (CWP) Integrity**
- 2) General Questions and Inconsistencies in the Draft Housing Element**
- 3) Requested Actions for the CDA to Incorporate into the Draft Housing & Safety Elements**

We look forward to providing more substantive comments in the coming months with the release of the Draft Environmental Impact Report (Draft EIR) that we understand will narrow site selection, allowing for more comprehensive comments on both the Housing and Safety Elements.

## **Section 1: Public Process and Integrity of the Countywide Plan (CWP)**

### **1.1. Public Process Concerns.**

EAC has participated in the public processes for the Housing and Safety Element since January 2022. While we are grateful to the Community Development Agency (CDA) for the availability of online meetings and remote access to staff for questions, the planning process has been less than ideal, and in our opinion is one of the main reasons that the Draft Housing Element proposes precedent-setting rollbacks to the County's environmental corridors and conservation zoning. This could have been avoided with ground-up community planning.

Due to the pandemic, the CDA engaged in a series of online meetings and developed online tools to encourage public input. While online meetings do increase accessibility for some, these meetings are not collaborative and exclude individuals who do not have access to the internet<sup>1</sup> or the skills to understand how to comment or communicate through the complex portals. Ultimately, the online meeting process constrains public engagement and collaboration, reducing the planning session to online PowerPoint presentations for community members who have access to the internet and a home computer. It becomes an experience of being talked at rather than participating in a dialogue.

The online forums prevent actual collaboration, dialogue, and input that is fostered through in-person community-by-community meetings. In addition, the online forum prevents public employees, and appointed and elected officials from engaging with and being accountable to a local community while making decisions that propose to dramatically change the development of that community.

### **1.2. Online Mapping Tools and Relationship to the Countywide Plan (CWP).**

The CDA released an extensive series of online mapping tools to gather broad community feedback to identify parcels appropriate for potential development. As the Draft Housing Element report indicates, hundreds of people participated in the use of the tools to make suggestions and recommendations of sites for consideration<sup>2</sup>. The multiple versions of maps and lists of potential sites was an overwhelming amount of information that kept changing from week-to-week, making it difficult to understand what was being proposed.

EAC's review of the Draft Inventory Sites<sup>3</sup> and the Balancing Act Tool established that the information collected was not informed by the CWP nor were these documents easily

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<sup>1</sup> June 14, 2022 Draft Housing Element Workshop, community members from the San Geronimo Valley were unable to participate due to a power outage.

<sup>2</sup> This data collection was limited to English speaking individuals with computers, internet access, and with the technology skills to navigate the online tools. While some efforts have been made to offer information in Spanish, this effort has not been comprehensive.

<sup>3</sup> County of Marin Draft Inventory Site List Google Map available at:

<https://www.google.com/maps/d/u/0/viewer?mid=1fpxZN5FM9A7ZBYywc1FyYZNkqItdN056&ll=38.05956845131791%2C-122.6762669999998&z=10>

accessible in the distribution of materials intended to inform and guide participating members of the public in the process.

In other words, the tools designed to gather public input were not designed or grounded in the CWP's policies or framework that is the supreme document to guide future physical development of a community. All decisions on future development should flow from the CWP, the supreme document to guide future physical development of a community, as is supported by 40 years of case law.

Instead, the CDA is proposing changes to the CWP to meet the Regional Housing Needs Allocation (RHNA). This subverts the strategic land-use intentions of the CWP. While we understand the need to identify additional sites to create a planning buffer—as parcels will be removed after the Draft EIR is released—the process is akin to a kitchen sink approach.

### 1.3. The Case for Ground-Up Community Engagement.

In-person and coordinated local community engagement should not be disregarded. We found two examples within the Draft Housing Element where community stakeholders helped to inform and find solutions that meet specific community needs when compared to the January 2022 inventory of sites.

- **San Geronimo Valley:** The County's top-down planning approach identified 90 potential housing units in the Tamalpais School District parcel and former Golf Course parcel that is currently owned by the Trust for Public Land. In the local Community Plan, the CWP, and Plan Bay Area 2050 these locations are inappropriate and infeasible for development. Thanks to local community engagement, the inappropriate site selections were removed and replaced with alternate locations that have potential to provide housing and serve the needs of the community that lacks affordable housing options and that will complement the villages of the San Geronimo Valley.
- **Community of Bolinas:** The top-down planning approach incorrectly identified the public park and local businesses as appropriate areas for future development. Following the release of the maps, the local community stakeholders and the Bolinas Community Land Trust worked with the CDA to identify parcels that were planned for affordable housing and to identify other potential sites to serve the needs of the community, also lacking in affordable housing options, that are in alignment with the current community culture and infrastructure.

In both examples, community groups found out about site selection *after it was released* to the public and had to work backwards, investing rushed time and effort to provide information to community members and provide input to the CDA for better site selection. In

the end, the site selections seem to be balanced in the community planning, pending the release of the Draft EIR.

Unfortunately, the same type of community coordination has not occurred in other communities in unincorporated Marin County. At the June 14th Public Workshop, coastal community members expressed that they did not have the opportunity to fully review plans, coordinate community response, or provide education to the community on what is happening. This is a major shift in the way that the County of Marin engages with their community members around development planning.

The County of Marin has a storied history of responsive community planning to plan for development proactively and sustainably. As mentioned in the introduction of our letter, the 1970s community planning safeguarded the irreplaceable habitats and natural resources that sustain our human and natural environment. The last update to the CWP in 2007 served as another example of collaborative community engagement and development that resulted in an award-winning CWP that would help protect sensitive coastal habitats; ensure resource availability; reduce greenhouse gas impacts; encourage infill and redevelopment projects focused on underutilized development near transit and job centers.

Under pressure of the RHNA timeline, the CDA has moved away from bottom-up community collaboration and relied on top-down consultant-informed planning that undermines the goals of our CWP, disregards the time and effort of the public participating in the comprehensive CWP updates of the past, and reduces public confidence in community engagement and outreach.

## **Section 2: General Questions and Inconsistencies in the Draft Housing Element**

Below we have outlined questions and inconsistencies within the Draft Housing Element that we would like to have addressed in the public process. We have also included suggestions to increase public understanding and transparency.

### **2.1. Guiding Principles of Housing Element Update.**

Why is the Housing Element update applying only three of the twelve CWP Guiding Principles to this update? The CWP is the supreme document that guides future physical development of the community. All Guiding Principles of the CWP should apply in housing site selection to ensure appropriate site selection that is informed by this overarching framework.

### **2.2. Land Use Element Update.**

Due to the non-standard organization and layout of the Marin's CWP, it is unclear what modifications are being made to the Land Use Element. Where can the public easily find a list of the Land Use Element policies that are being updated? How does the County cross reference for internal consistency between elements? How is this information being provided to the public to ensure that subordinate land-use actions comply with the CWP at the time they are being passed and implemented?

### **2.3. Table H-2.5: Population by Unincorporated County Community.**

The total population of the communities based on the figures provided in *Table H-2.5 Population by Unincorporated County Community* does not equal 68,902 as the total line indicates. The total is 47,396 with a variance of 21,506 people. Why is there a variance in these totals? What is the correct number?

### **2.4. Population by Unincorporated County Community + Housing Element Projected Population Increase.**

It would be helpful for the report to integrate or include a table that demonstrates the potential population increase if the Draft Housing Element was implemented. This provides important information for the public to cross-examine against the projected population increases in Marin County over the next 8 years.

### **2.5. Table H-2.21: Vacant Units by Type.**

The paragraphs of text preceding and describing *Table H-2.21 Vacant Units by Type* highlight some specific community vacancy rates and the high percentages of second homes or vacation units in coastal Marin County. Unfortunately, this table is organized by type of vacancy and not by community like the other tables in the Draft Housing Element.

We would like to see a table of vacancy rates that includes the community level information to better understand which communities are impacted more heavily by seasonal, recreational, or occasional use. This is an important aspect of the housing challenges in coastal Marin County as vacation rentals, second homes, and investment properties remove critical residential housing stock.

### **2.6. Inclusion of “Other Vacant” Sites (Abandoned or Red-Tagged).**

Has the County reviewed specific parcels in areas of coastal Marin villages that are categorized as “other vacant” that are abandoned or red-tagged to be included as potential development sites in the Draft Housing Element Update? Abandoned or red-tagged<sup>4</sup> housing units not in current use as residential housing stock could be identified for redevelopment or subdivision.

### **2.7. Availability of Water Table H-3.2: Water Capacity for New Development.**

We are unable to find reference to the Buck Center Inventory Site that proposes 249 housing units on this table. Where would the water supply for this site come from? Is there capacity to serve the proposed units within the existing water district?

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<sup>4</sup> Eligible, red-tagged units that are eligible to be brought up to current code and safety standards

## **2.8. Wastewater Infrastructure Capacity and Sensitive Environmental Habitat Areas.**

It would be helpful for the County to overlay a heat map based on number of units proposed in the Site Inventory List over a GIS map of environmental resources including shorelines, sea-level rise projections, emergent groundwater projections, wetlands, creeks, the stream conservation planning area, water capacity based on *Table H-3.2 Water Capacity for New Development by Water District or Private Well*, and *Table H-3.5 Wastewater Treatment Capacity*. Without this information or the pending Draft EIR, it is difficult to comment on the feasibility of potential sites based on the ability to be able to support the potential development.

## **2.9. Table H-3.11: Coastal Zone Development (1982-2022).**

This table seems to be incomplete. Only two cells are updated for *Units Constructed* for the years 1988-2002 and 2002-2010, and the rest of the table is blank.

## **2.10. Implementing Programs Contradictions.**

Throughout the Draft Housing Element there are numerous references to the 2007 CWP land-use policies that are focused on promotion of compact neighborhoods, encouraging infill development, and promoting cluster development.

In unincorporated areas of Marin County, there are proposed Inventory Sites that do not meet this definition. For example, locations in Inverness on Balmoral Road do not meet these criteria; and the site selection seems arbitrarily based on allocating potential housing units to each coastal village rather than reviewing the layout of the communities and proposed locations to proximity of services, transportation, and the village core.

Locations like the Buck Center are located outside of the City-Center Corridor and would require a precedent-setting change to the CWP to modify the environmental planning corridors and rezone A-60 agricultural conservation zoning, promoting urban sprawl.

These examples highlight a fundamental contradiction with the CWP as the Housing Element strays from the CWP policies and guidelines.

## **2.11. By-Right Development and Loss of Local Control.**

The requirement in this RHNA cycle that sites that are not developed in 8 years may thereafter be subject to by-right development creates a host of unintended and unknown consequences for the County and communities to cope with in the coming years.

The large number of potential locations being identified in this RHNA allocation creates an environment in which developers may side-step local community planning. It benefits developers to delay developing housing units on the identified parcels, instead waiting

until the 9th year to submit applications, benefitting from a streamlined permitting process, which in some cases, may not require a project specific CEQA analysis.

This potential for thousands of streamlined development projects needs to be analyzed to ensure that all potential development locations are not sited near sensitive environmental resources and that the community infrastructure and resources are able to support the development projects.

## **2.12. Analysis on Upzoning and Potential to Exacerbate Displacement, Gentrification, and Fragmentation.**

We are not aware of comprehensive analysis by the County of potential consequences or outcomes of upzoning and the increased housing supply on disadvantaged communities. It has been reported that upzoning without promotion and support of affordable housing within communities has the potential to create additional displacement, gentrification, or greater social and economic fragmentation<sup>5</sup>.

The County needs to examine and unravel its history of exclusionary zoning practices and promote locally planned housing development to address the housing crisis in our communities. However, this type of planning must be accompanied by additional sets of policies to ensure the increased housing supply and density does not displace, gentrify, or further fragment communities.

In addition, the County needs to ensure any new housing stock is not converted to short-term rentals, investment properties, or vacation homes that harms the residential community. Otherwise, we are only exacerbating housing problems, promoting urban sprawl, diminishing future potential development locations, and placing pressure on our finite natural resources without achieving the intended goals to provide residential housing within our communities.

## **2.13. General By-Right and Coastal Zone Development Questions.**

During public workshops, County staff and consultants stated that by-right or ministerial permitting will take place under the RHNA allocations if the locations are not developed in 8 years. However, it has also been stated that this will not apply in the Coastal Zone.

Can you please provide the authority for the Coastal Act savings clause or other reference in the regulations?

Will any rezoning need to take place in the Coastal Zone? If so, a Local Coastal Planning amendment will need to occur, and coastal resource impacts should be closely reviewed and coordinated with the California Coastal Commission staff.

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<sup>5</sup> Brookings, Double Edged-Sword of Upzoning. July 15, 2021. Available [www.brookings.edu/blog/how-we-rise/2021/07/15/the-double-edged-sword-of-upzoning](http://www.brookings.edu/blog/how-we-rise/2021/07/15/the-double-edged-sword-of-upzoning)



In areas that are subject to by-right development in the future, will potential development projects be required to prove access to freshwater and wastewater treatment ability?

#### **2.14. Potential Site Inventory: Priority Development Areas and Impacts to Infrastructure and Resources.**

Some of the Potential Site Inventory locations in unincorporated Marin County are not located in Priority Development Areas<sup>6</sup> and fail to meet the criteria for sustainable development. Development in these locations would promote urban sprawl and increase greenhouse gas emissions<sup>7</sup>, both conflict with the goals of Marin's CWP.

How is the County reconciling the distribution of potential housing locations in rural areas lacking adequate infrastructure (roads, wastewater treatment, access to water, public transportation, and job centers) that would increase populations and negative impacts on these limited resources?

#### **2.15. Best Available Science and Data to Inform Planning.**

Is the County able to integrate the most up to date science and data into the Draft EIS and the Draft Housing and Safety Elements? Specifically, the County's Climate Vulnerability Reports are now out of data as new science and data has been released regarding the potential severity of rising sea levels and new mapping systems that integrate the impacts of emergent groundwater. Rising sea levels and emergent groundwater predictions should require any potential sites within 100 feet of a shoreline or wetland be removed. In low-lying areas within floodplains, the setback should be much greater.

### **3. Requested Actions to Incorporate into the Draft Housing & Safety Elements**

It is difficult to comment on the potential site list in the Draft Housing Element and Draft Safety Element without the Draft EIR that ultimately will narrow the list of sites. However, we have made some recommendations below:

#### **3.1. Marin's award-winning Countywide Plan must be honored, not rolled back. Do not change our environmental corridor boundaries.**

In 2007, Community members volunteered their time and worked with the Community Development Agency to help update the CWP with a theme of "sustainable communities" creating a plan that would reduce negative impacts on the environment

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<sup>6</sup> Association of Bay Area Governments, Priority Development Areas. Available at: <https://abag.ca.gov/our-work/land-use/pda-priority-development-areas>

<sup>7</sup> Priority Development Areas are defined as: 1) Infill to be in existing urban areas that are not to extend beyond urban growth boundaries and that are not Priority Conservation Areas. 2) must have a completed plan for significant job and population growth. 3) Either A) Transit-Rich, at least 50% of the area is within a 1/2 mile of ferry, rail, or bus service that runs every 15 minutes, or b) Connected Community, entire area within 1/2 mile of bus stop with peak service of 30 minutes or less or 1/2 mile of high quality transit and must be in an area identified by the California Department of Housing and Community Development as High Resource or has in place two policies to reduce Vehicle Miles Traveled (bicycle and pedestrian planning projects).

through strategic land-use planning that encourages development to infill sites near transportation corridors and discourages development in hazardous areas subject to wildfires, flooding, and sea level rise. It does not make any sense that the County is planning to change the environmental corridors that contradict the guidelines of the CWP and would initiate urban sprawl development.

### **3.2. Do Not Rezone A-60 Parcels or Modify Environmental Corridors.**

Agricultural conservation zoning should not be changed to pave the way for developers to build housing over the next 8 years. A-60 zoning has protected the Inland Rural Corridor from urban sprawl development since 1973. The County should make decisions based on sustainable development and incorporate the long-term consequences of changing the CWP Corridors and roll-backs to A-60 zoning before making these precedent-setting changes. The Buck Center site and other proposed A-60 sites should be excluded from the list.

### **3.3. Protect Sensitive Habitat Areas and Depleted Water Resources from Irresponsible Development Locations.**

New potential development sites should be at least 100 feet away from shorelines, creeks, and wetlands to protect habitat, water quality, and potential development from rising sea levels and emergent groundwater.

Locations within mapped floodplains, within 100 feet of riparian corridors, wetlands, or shorelines should be removed from consideration to protect critical and sensitive environmental habitat areas.

Sites located within critical watersheds that provide habitat for endangered and threatened species should be removed from consideration.

The County's Inventory Site List continues to include inappropriate locations for development that are too close to creeks, wetlands, and shorelines and agricultural lands that would expand suburban sprawl outside of urban growth boundaries. This conflicts with climate change vulnerability planning and studies the County has been working on for years and will only exacerbate problems in the coming decades.

### **3.4. Proposed housing should be in areas with adequate water and wastewater infrastructure to reduce environmental harms and avoid exacerbating lack of water availability due to extreme drought conditions.**

The rural villages of West Marin are without any centralized wastewater treatment systems, and any new development that would be susceptible to flooding should not be developed. Our communities will only set the stage for increasing bacterial loads in our freshwaters systems and beaches that are threats to public and environmental health.

In addition, freshwater is provided to communities through a network of water districts or private wells. In some communities, the viability of household wells is unstable. Specifically, in Nicasio, household wells run dry each summer. The smaller water districts in the rural coastal communities are extremely vulnerable to drought conditions, as demonstrated in the 2021 Water Year where some communities were on the brink of water rationing.

### **3.5. Avoid Environmental Hazards and Focus on Urban Area Infill.**

It is essential to apply current environmental hazards planning to remove locations susceptible to environmental hazards including wildfire, flooding, and sea level rise.

Locations proposed in high wildfire risk areas should be reconsidered, and the County should focus on infill near community services and transportation corridors. Infill will provide access to public transportation and services and align with the Sustainable Communities Strategy Growth Geographies as Priority Development Areas.<sup>8</sup> Adding thousands of housing units to rural areas will increase the number of Vehicle Miles Traveled (VMT), undermining Marin and California's greenhouse gas emission reduction goals.

### **3.6. Protect Residential Communities with Complementary Programs and Policies.**

Housing should be prioritized for people that live and work in our communities on a full-time basis. We can't simply build our way out of this crisis. Without ensuring safeguards that proposed development will serve the residential and workforce communities, we may exacerbate our existing affordable housing crisis. The County needs to find ways to further restrict short-term rentals, tax investment housing that does not serve as a primary residence (e.g., vacancy tax that reduces investment property incentives), and explore other solutions to preserve our communities.

### **3.7. Honor the Sustainable Communities Strategies of Plan Bay Area 2050.**

The County should promote infill near commercial cores, job centers, and transit centers, as well as promoting mixed-use commercial spaces. The Bay Area Association of Governments released the Plan Bay Area 2050<sup>9</sup> strategy that identifies Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs). The Draft Housing Element refers to the County obtaining funding by developing PDAs, but fails to honor the protections intended by PCAs. The full potential site list of 6,500 locations includes parcels in areas of PCAs.

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<sup>8</sup> The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments, Plan 2050, Chapter 1. Growth Geographies. Available at: <https://www.planbayarea.org/2050-plan/final-plan-bay-area-2050/chapter-1-introduction-and-growth-geographies>

<sup>9</sup> Association of Bay Area Governments and Metropolitan Transportation Commission, Plan Bay Area 2050. Available at: <https://www.planbayarea.org/>

**3.8. Any significant amendments to the CWP environmental corridors or conservation zoning must take place as a transparent and comprehensive public process.**

We recommend the CDA conduct an update to the CWP in the coming years that will fully engage local community members to update Community Plans and to prioritize engagement with the unincorporated villages to ensure consistency throughout planning and housing element documents.

**3.9. We request the Planning Commission and Board of Supervisors uphold the current CWP and not approve any updates that are not specifically required by the State of California<sup>10</sup>.**

The County should not make precedent-setting changes to expand the City-Center Corridor and should remove all A-60 agricultural zoning parcels from site selection and rezoning plans.

Thank you for the consideration of our comments. We look forward to further engagement on the Housing and Safety Element update process in the coming months and the release of the Draft EIR.

Respectfully,



Morgan Patton, Executive Director  
Environmental Action Committee of West Marin



Bridger Mitchell, Board President  
Environmental Action Committee of West Marin

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<sup>10</sup> There is no legal requirement for the County to change the CWP environmental corridors and or A-60 zoning. The proposed changes seem to be based on the RHNA and the CDA's scramble for site selection to meet the allocation. If the Buck Center (and any other A-60 parcels remaining on the list) are removed from consideration, this will eliminate the need to amend the Countywide Plan environmental corridors, any needs to change A-60 zoning, and respect the will of the residents of Novato who voted to create an urban growth boundary.

west  
marin

environmental  
action  
committee



Tomales Design Review Board

Point Reyes Station  
Village Association



SIERRA  
CLUB

MARIN COUNTY GROUP



Resource Renewal Institute  
40 Years. Innovation for a Sustainable Future.



Inverness  
ASSOCIATION



TURTLE ISLAND  
RESTORATION NETWORK



June 30, 2022

County of Marin  
Board of Supervisors  
Planning Commission  
Community Development Agency

*Submitted via email: [housingelement@marincounty.org](mailto:housingelement@marincounty.org), [BOS@marincounty.org](mailto:BOS@marincounty.org),  
[planningcommission@marincounty.org](mailto:planningcommission@marincounty.org), and [DRodoni@marincounty.org](mailto:DRodoni@marincounty.org)*

**RE: Draft Housing and Safety Elements**

The under-signed organizations and individuals appreciate the opportunity to comment on the Draft Housing and Safety Element updates. These comments are focused on the proposed changes to the Countywide Plan (CWP) that would have long-term impacts to community-led sustainable planning.

**Public Process and Inconsistencies with the Countywide Plan**

While we are grateful to the Community Development Agency (CDA) for the availability of online meetings and remote access to staff for questions, the planning process has been less than ideal, and in our opinion is one of the main reasons that there are proposed precedent-setting rollbacks to the County's environmental corridors and conservation zoning folded into the Draft Housing Element. This could have been avoided up front with ground-up in-person community planning.

Site selection by the CDA was driven by consultants, rather than the local communities. The CDA provided online tools and maps to collect data and potential site locations from the general public, but they failed to integrate those resources with the CWP that is the requirement to inform future physical development in

unincorporated Marin County. Decisions on future development flows first from the CWP's policies and guidance as has been upheld and strengthened by more than 40 years of case law.

It is our understanding from the June 14th public workshop that several coastal communities have not had the opportunity to fully review plans, understand the proposed CDA changes, or effectively coordinate community engagement and recommendations into this process. This is a major change in the manner in which the County of Marin has historically engaged with the community around development planning, especially when the CDA is proposing a significant revision to expand the City-Center Corridor and potentially change A-60 zoning on multiple parcels.

There is no legal requirement for the County to change the CWP environmental corridors and or A-60 zoning. Instead, the proposed changes seem to be based solely on the RHNA and the CDA's scramble for site selection to meet the allocation. If the Buck Center (and any other A-60 parcels remaining on the list) are removed from consideration, this will eliminate the need to amend the CWP environmental corridors, change A60 zoning, and uphold the will of the residents of Novato who voted to create an urban growth boundary.

The County of Marin has a storied history of responsive community planning to proactively and sustainably plan for development. This began with the community push back to the 1960s pro-development planning that would have paved over the lands we know today as the Point Reyes National Seashore, Golden Gate National Recreation Area, Marin County Parks and Open Space, Marin Municipal Water District Watershed, Gary Giacomini Open Space, and more than 136,000 acres of productive agricultural lands.

The 1970s community planning safeguarded the irreplaceable habitats and natural resources that sustain our human and natural environments. The 2007 update to the CWP was another example of collaborative community engagement and development resulting in an award-winning CWP that would protect sensitive coastal habitats; ensure resource availability; reduce greenhouse gas impacts; encourage infill and redevelopment projects to recolonize the asphalt with projects focused on underutilized development near transit and job centers.

Unfortunately, under pressure with the Regional Housing Needs Allocation (RHNA) timeline, the CDA departed from bottom-up community collaboration to top-down planning that undermines the goals of our CWP, disregards the time and effort of the public participating in the comprehensive CWP updates of the past, and reduces public confidence in community engagement and outreach.

## Requested Action

- We request the Planning Commission and Board of Supervisors uphold the current CWP and not approve any updates that are not specifically required by the State of California. This includes not making precedent-setting changes to expand the City-Center Corridor and also removing all A-60 agricultural zoning from site selection and rezoning plans.
- We request the Planning Commission and Board of Supervisors recommend the CDA conduct an update to the CWP in the coming years that will fully engage local community members and prioritize engagement with the unincorporated villages to update Community Plans to ensure consistency throughout documents and a community-led process.

Thank you for considering these comments.

Morgan Patton  
Executive Director  
Environmental Action Committee of West Marin (EAC)

Eric Morey  
Chair  
San Geronimo Valley Planning Group

Ken Levin  
President  
Point Reyes Station Village Association

Karen Anderson  
Resident  
Olema

Donna Clavaud  
Chair  
Tomales Design Review Board

Kathleen Hartzell  
President  
Inverness Association

Chance Cutano  
Director of Programs  
Resource Renewal Institute

Judy Schriebman  
Chair Marin Group ExCom  
Sierra Club, Marin Group

Megan Isadore  
Executive Director  
River Otter Ecology Project

Laura Chariton  
Watershed Alliance of Marin

Preston Brown  
Director of Watershed Conservation  
Salmon Protection And Watershed Network (SPAWN)

Bridger Mitchell  
Resident  
Inverness

Robert Johnston  
Resident  
Inverness

**From:** [Loretta Figueroa](#)  
**To:** [safetylement](#)  
**Cc:** [Loretta Figueroa](#)  
**Subject:** Marin County Community Development Agency | Public Draft Safety Element  
**Date:** Thursday, June 30, 2022 11:59:47 PM

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#### Reader Introduction

The Safety Element of a General Plan contains the policies and implementation programs to prepare for and protect the public from the harmful impacts of environmental hazards that could occur in that community. In the Marin County Wide Plan, the Safety Element goals and policies are presented as Section 2.6 Environmental Hazards and Safety of the Natural Systems and Agriculture Element. Currently the Safety Element covers three types of environmental hazards:

- Geologic and Seismic Hazards
- Flooding and Sea Level Rise
- Wildfire

I have lived in the Almonte area, near Tamalpais High School, for more than 35 years. Public Safety and Environmental Sustainability are two of my main concerns.

I can see Hwy 101 and Miller Avenue by Tam High School from my home. If there is a major fire disaster, and residents flee for safety in their vehicles, I should be able to see the expected traffic jam and walk out with my backpack. Others will be trapped in their cars. Fatally trapped.

When I moved here, our narrow streets were mostly unencumbered by parked vehicles. That's no longer true. I like the "Park Like Your Life Depends On It" from the Oakland Fire Department.

Environmental Sustainability is more than solar panels, an electric car, and LED lights. We need to be able to walk safely.

That's it for now.

Be well. Be safe.

*LJ*

Loretta (Lorri) Figueroa  
[millvalleyfig@yahoo.com](mailto:millvalleyfig@yahoo.com)



**From:** [Margaret Kathrein](#)  
**To:** [safetylement](#)  
**Subject:** Housing and Safety Elements  
**Date:** Saturday, July 2, 2022 5:07:42 PM

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Comments and suggestions relevant to the current County of Marin Draft Housing Element:

1. The restrictions of the Juvenile Hall Site Master Plan prohibit consideration of this entire area for possible housing sites.

The Juvenile Hall Site Master Plan (adopted 1994) was developed through collaboration between the County of Marin and community.

The Plan encompasses the Jeanette Prandi and Juvenile Hall Sites.

The Master Plan provides:

- SW corner of the site, Jeanette Prandi Way, shall remain as County Administrative and Storage Facilities only
- Rotary Senior Housing, Jeanette Prandi Way, limited to 55 units, single story only
- Juvenile Hall and County Parks Offices shall remain as County facilities. No additional development permitted.
- Lower SE portion reserved for walking paths, soccer fields and recreational use only
- Upper Idylberry Corridor transferred to Open Space District

2. Proportionality, Density, and design issues need to be further addressed. The Lucas Valley Community is comprised of limited density, all single story, Eichler design.

3. Fiscal issues related to subsidized housing or rental units have not been thoroughly considered or explained.

4. The Lucas Valley Wildland Urban Interface (WUI) zone, while not the highest fire danger, still presents significant fire danger, with single road, 2 lane, evacuation limitations.

This fire danger was obvious with a fire dangerously close to home in Lucas Valley in August 2021. This fire danger is sufficiently high to limit and reduce proposed housing numbers.

5. Water shortages and drought conditions in Marin County present limiting factors to proposals for housing in such large numbers at this time.

Thank you for your consideration.

Please excuse my slight delay in responding as I was traveling out of the country.

Sincerely,

Margaret Kathrein  
1098 Idylberry Road  
San Rafael, CA

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**From:** [suzi l](#)  
**To:** [safetylement](#)  
**Subject:** To the Marin Board of Supervisors  
**Date:** Thursday, July 28, 2022 4:48:00 PM

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You don't often get email from sletteer@gmail.com. [Learn why this is important](#)

We must find a way to fight the housing mandated by the state of California for Mill Valley. The city is nearly out of control already regarding traffic. I have been caught twice in a traffic jam on my street, Lovell, with a emergency vehicle that could not proceed. This is an EXTREME safety problem. This must be obvious to every one of you that with global warming this will only become more dangerous. And then there is the water problem, And there is not even the space to improve infrastructure to the point MV could accommodate thousand more cars and residents.

Streets have already been becoming choked due to the added residents from ADUS. In my neighborhood cars are require to inch around each other. The cost of street widening will be astronomic.

I am hearing that businesses are slated to be replaced by housing. So will we be required to leave Mill Valley to get ordinary needs met? Do we go to San Rafael for a tank of gasoline, to get oil changed, to get a hair cut, to get keys made? This is so inefficient in time and resources it is truly insane it is being contemplated.

Who will be monitoring the Above Moderate, Moderate, and Below Moderate levels of housing? This is guaranteed corruption. Social engineering on this scale is impossible, especially with a community that is effectively built out now. I hear proposed housing is planned for flood zones! Good work, BOS!

Susan Letteer  
MV resident of 30 years

**From:** [CHRIS WRIGHT](#)  
**To:** [safetylement](#)  
**Subject:** Fire safety MMWD  
**Date:** Tuesday, August 2, 2022 5:00:08 PM

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[You don't often get email from [wrightc1@mac.com](mailto:wrightc1@mac.com). Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification> ]

MMWD does not have enough rangers to police the lakes. I have walked out there since June of last year. I have only seen a ranger on the trail twice. I have definitely seen lots of cigarette butts. They talk about what they are doing for prevention after the fire starts. What about stopping the fire before it starts. They need to police the lakes and not from a truck (walk). People smoke because they can. I have seen someone frying a fish a few days after the fire. The phone service out there is not good. I called in the fire last month to the ranger station. I have xfinity which rarely works. We were lucky. A few minutes later I flagged down a ranger and let him know about the fire. Why didn't he already know? They should have an emergency response that goes out right away. You are more than welcome to call me if you want the whole story. Not just MMWD's story. I also no the man who helped the burn victim. My phone number is 925-353-7309 Chris

Thanks



# Marin Local Agency Formation Commission

Regional Service Planning | Subdivision of the State of California

7/26/2022

Dear County Administrator Hymel,

This letter is to inform the County of Marin that the Marin Local Agency Formation Commission (LAFCo) has identified two disadvantaged unincorporated communities (DUC) within Marin County's jurisdictional boundary. The DUCs identified are in the areas of Marin City (Census Tract 1290, Block Group 1) and California Park (Census Tract 1121, Block Group 1). Senate Bill 244 (Wolk), effective on January 1, 2012, imposed several requirements and restrictions on LAFCos, cities, and counties with regard to DUCs. The legislature found that many DUCs lack access to basic infrastructure, including, but not limited to streets, sidewalks, storm drainage, clean drinking water, and adequate sewer service.

Pertaining specifically to LAFCos, SB 244 requires LAFCos to identify DUCs when making municipal service review determinations (GC 56430(a)), sphere of influence determinations (GC 56425(e)(5)), and proposed city annexations of over 10 acres. A "disadvantaged community" is defined in Water Code Section 7905.5(a) as a community with an annual median household income (MHI) less than 80 percent of the statewide MHI. The statutory definition of DUCs comes from Government Code Section 56033.5, which defines a DUC as "inhabited territory" that constitutes all or a portion of a "disadvantaged community". "Inhabited territory" may be defined by Government Code Section 56046 as having at least 12 registered voters, or it can be determined by "commission policy".

This letter is intended to both serve as an informational courtesy to the County to identify the DUCs based on the updated U.S. Census data, as well as an official request from Marin LAFCo for recognition of the DUCs in the upcoming Marin County Housing Element update. The current Housing Element, while making mention of the existence of DUCs, does not actually identify any. Marin LAFCo believes the official designation of the DUCs in the Housing Element by the County could potentially aid in obtaining grant funding opportunities for those impacted areas.

The Commission greatly appreciates your consideration in this matter. If you have any questions, please don't hesitate to reach out to us directly at any time.

Sincerely,

Jeren Seibel  
Deputy Executive Officer  
Marin Local Agency Formation Commission

**Administrative Office**  
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**Damon Connolly, Regular**  
County of Marin  
**Dennis Rodoni, Regular**  
County of Marin  
**Judy Arnold, Alternate**  
County of Marin

**Sashi McEntee, Chair**  
City of Mill Valley  
**Barbara Coler, Regular**  
Town of Fairfax  
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Sanitary District #5

**Larry Loder, Regular**  
Public Member  
**Richard Savel, Alternate**  
Public Member