

# 2026 PALOS VERDES PENINSULA

Multi-Jurisdictional Hazard Mitigation Plan  
Volume 2  
Planning Partner Annexes

AGENCY SUBMITTAL DRAFT  
MARCH 2026



# Palos Verdes Peninsula

## Multi-Jurisdictional Hazard Mitigation Plan

### 2026

#### PREPARED FOR

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# 1. INTRODUCTION

## 1.1 Background

The Palos Verdes Peninsula cities and two special-purpose districts have jointly developed a hazard mitigation plan (HMP) to advance their shared commitment to reducing natural hazard risks to residents, community assets, and critical lifelines throughout the Palos Verdes Peninsula (Planning Area). This plan includes annexes for each of the jurisdictions, outlining their unique capabilities, vulnerabilities, and mitigation opportunities.

While the cities of Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills, and Rolling Hills Estates previously maintained existing local hazard mitigation plans, the 2026 update marks their first combined, multi-jurisdictional planning effort. The City of Rolling Hills Estates served as the lead agency for the 2026 Palos Verdes Peninsula Multi-Jurisdictional Hazard Mitigation Plan (MJHMP).

Multi-jurisdictional hazard mitigation planning can be an effective process to build partnerships between communities that face common hazard risks, leading to shared solutions. It can also help build a foundation to shift priorities as risks and vulnerabilities change. Multi-jurisdictional planning processes are encouraged by the Federal Emergency Management Agency (FEMA), and offer the following advantages:

- Improves communication and coordination among jurisdictions and other regional entities
- Enables comprehensive mitigation approaches to reduce risks that affect multiple jurisdictions
- Maximizes economies of scale by leveraging individual capabilities and sharing costs and resources
- Avoids duplication of efforts, and
- Provides an organizational structure that local jurisdictions may find supportive.

For the Palos Verde Peninsula MJHMP 2026, a Planning Partnership was formed and was made up of jurisdictional representatives seeking Disaster Mitigation Act of 2000 (DMA 2000) compliance. They were responsible for participating throughout the process, reviewing information, and providing input, informing the risk assessment, developing mitigation strategies, and adopting the MJHMP. The DMA 2000 defines a local government as follows:

“Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.”

All participating jurisdictions in a multi-jurisdictional plan must meet the requirements of Chapter 44 of the Code of Federal Regulations (44 CFR):

“Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan.” (Section 201.6(a)(4)).

Each participating Planning Partner prepared a jurisdiction-specific annex to this plan. These annexes, as well as information on the process by which they were created, are contained in this volume.

## 1.2 The Planning Partnership

### 1.2.1 Initial Solicitation and Letters of Commitment

The City of Rolling Hills Estates coordinated with the Peninsula jurisdictions to participate in this planning effort. The contacts each jurisdiction identified in the letter of intent to participate were informed of the planning process, attended meetings, provided direct input, and reviewed plan documents.

#### **Municipalities**

City of Palos Verdes Estates  
City of Rancho Palos Verdes  
City of Rolling Hills  
City of Rolling Hills Estates

#### **Special-Purpose Districts**

Abalone Cove Landslide Abatement District  
Klondike Canyon Geologic Hazard Abatement District

Risk assessment maps for the Planning Area are provided in Volume 1 of this MJHMP while maps showing the risk assessment results for each of the participating municipalities are provided in their individual annexes in this volume.

### 1.2.2 Planning Partner Expectations

The planning team and consultant, Black & Veatch Corporation (Black & Veatch), developed the following list of Planning Partner expectations, which were provided and discussed at a formal kickoff meeting held in May 2025:

- Re-confirm lead and primary points of contact for the update effort.
- Support and participate in the Planning Committee meetings.
- Provide support required to implement the public involvement strategy.
- Participate in the planning process through the following:
  - Planning Committee meetings
  - Public meetings and outreach efforts
  - Workshops and Planning Partner-specific training sessions, and
  - Public review and comment periods prior to adoption.
- Perform a “consistency review” of all technical studies, plans, and ordinances specific to hazards.
- Review the risk assessment and identify hazards and vulnerabilities specific to the jurisdiction.
- Attend the mandatory jurisdictional annex workshop.
- Review and determine if the mitigation recommendations chosen in Volume 1 will meet the needs of the jurisdiction.
- Create an action plan that identifies each project, who will oversee the task, how it will be financed, and when it is estimated to occur.
- Formally adopt the MJHMP.

By adopting the MJHMP, each Planning Partner also agrees to the plan implementation and maintenance protocol established in Volume 1. Failure to meet these criteria would result in a Planning Partner being dropped from the Planning Partnership by the Planning Committee, and thus, losing eligibility under the scope of the plan. All Planning Partners met the Planning Partner expectations, including attendance at mandatory workshops.

### 1.2.3 Final Coverage

All of the above jurisdictions submitted letters of commitment to participate, completed an annex template, fully met the participation requirements for this update, and will be covered by the 2026 Palos Verde Peninsula Multi-

Jurisdiction Hazard Mitigation Plan upon FEMA’s approval of the plan and adoption of the plan by their individual governing bodies.

## **1.3 Annex Development**

### **1.3.1 Capability Assessment**

A capability assessment creates an inventory of a jurisdiction’s mission, programs, and policies, and evaluates its capacity to carry them out. All participating jurisdictions compiled a capability assessment which helped to identify potential gaps in the jurisdictions’ capabilities. Specifically, if the capability assessment identified an opportunity to add a missing core capability or expand an existing one, then doing so has been selected as an action in the jurisdiction’s action plan. The sections below describe specific capabilities evaluated under the assessment.

#### ***Planning and Regulatory Capabilities***

Jurisdictions can develop policies and programs and implement rules and regulations to protect and serve residents. Local policies are typically identified in planning documents, implemented via a local ordinance, and enforced by a governmental body. Because the planning and regulatory authority of counties and municipalities is generally broader than that of special-purpose districts, the assessment of these capabilities is more detailed for those partners.

#### ***Development and Permitting Capability***

The Planning Area municipalities regulate land use through the adoption and enforcement of zoning, subdivision, and land development ordinances, building codes, building permit ordinances, floodplain, and stormwater management ordinances. When effectively prepared and administered, these regulations can mitigate hazards. As special-purpose districts typically do not have the ability to regulate land use, this capability was assessed only for the municipalities.

#### ***Fiscal Capability***

Assessing a jurisdiction’s fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant-funding eligibility, and local jurisdictional authority to generate internal financial capability, such as through impact fees (fees charged to a development project).

#### ***Administrative and Technical Capability***

Without appropriate personnel, the mitigation strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard mitigation. These resources include technical experts, such as engineers, scientists, and grant writers.

#### ***Education and Outreach Capability***

Regular engagement with the public on hazard mitigation provides opportunities to open a two-way dialogue that can result in a more resilient community. Use of a jurisdictional website, social media outlets, and other outreach resources to communicate mitigation information are assessed for each Planning Partner. Assessing outreach and education capability illustrates the connection between the government and community members.

## ***Compliance with National Flood Insurance Program Requirements***

Flooding is the costliest natural hazard in the United States and homeowners face increasingly high flood insurance premiums. Community participation in the National Flood Insurance Program (NFIP) opens up opportunities for additional grant funding associated specifically with flooding issues. Assessment of a jurisdiction's current NFIP status and compliance provides a greater understanding of the local flood management program, opportunities for improvement, and available grant funding opportunities. The NFIP is not available to special-purpose districts, so this set of capabilities was assessed only for the municipalities.

## ***Participation in Voluntary Programs***

Participation in voluntary programs, such as the National Weather Service's StormReady and the National Fire Protection Association's Firewise USA, can enhance a jurisdiction's ability to mitigate, prepare for, and respond to natural hazards. These programs complement each other by focusing on communication, mitigation, and community preparedness to save lives and minimize the impact of natural hazards on a community. Participation in these programs demonstrates a jurisdiction's commitment to go beyond the minimum requirements set forth by local, state, and federal regulations to create a more resilient community. The programs reviewed here are only applicable to the municipalities, so were not included in the capability assessments for the special-purpose districts.

## ***Adaptive Capacity***

An adaptive capacity assessment evaluates a jurisdiction's ability to anticipate impacts that may occur in the future. By looking at public support, technical adaptive capacity, and other factors, jurisdictions can identify their core capability for resilience against issues such as sea level rise and climate change. The assessment provides jurisdictions with an opportunity to identify areas for improvement by ranking their adaptive capacity as high, medium, or low.

### **1.3.2 Mitigation Action Plan Development**

#### ***Risk Ranking***

The risk-ranking methodology for partner annexes was the same as that used for the Planning Area risk ranking described in Volume 1. Each Planning Partner was asked to review the ranked risk for its jurisdiction, based on the impact on its population and/or facilities. The cities based this ranking on the probability of occurrence of each hazard, and its potential impact on people, property, and the economy. Special-purpose districts based this ranking on probability of occurrence and the potential impact on their constituency, facilities, and the facilities' functionality after a hazard event.

The objectives of this exercise were to familiarize the Planning Partnership with how to use the risk ranking, part of the assessment results, as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as "high" and "medium" for each jurisdiction were considered to be priorities for identifying mitigation actions, although jurisdictions also identified actions to mitigate hazards ranked "low," as appropriate.

#### ***Information Reviewed to Develop the Action Plan***

Each Planning Partner was provided with a toolkit of relevant documents to assist in developing their jurisdiction's action plan and was required to attend a workshop that provided guidance to develop their action plans. The toolkits were used during the mandatory workshop and in follow-up work conducted by the Planning Partners. Planning

Partners reviewed the following information included in the toolkit to assist in the identification of proposed mitigation actions:

- **Capability assessment**—Reviewed to identify capabilities that the jurisdiction does not currently have but should consider pursuing, or capabilities that should be revisited and updated to include best available information; also reviewed to determine how existing capabilities can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- **NFIP compliance table**—Reviewed to identify opportunities to increase floodplain management capabilities.
- **Adaptive capacity**—Reviewed to identify ways to leverage or continue to improve existing capacities and to improve understanding of other capacities.
- **Future integration opportunities**—Reviewed to identify specific integration actions to be included in the mitigation strategy.
- **Jurisdiction-specific vulnerabilities**—Reviewed to identify actions that could reduce known vulnerabilities.
- **Mitigation best practices catalog**—Reviewed to identify actions that the jurisdiction should consider including in its action plan.
- **Public input**—Reviewed to identify potential actions and community priorities.

### Action Plan Prioritization

The mitigation actions recommended in each jurisdiction’s action plan were prioritized using the same prioritization method in the 2023 California State HMP. This methodology allows for each Planning Partner to reflect changes in community priorities through prioritization of each action. Each action is reviewed and scored based on 15 questions, as presented in Table 1-1.

**Table 1-1 Mitigation Action Prioritization Categories**

Category	Question
Life Safety	Will the action result in life safety?
Property Protection	Will the action result in property protection?
Cost-Effective	Will the action be cost-effective (future benefits exceed cost)?
Technically Feasible	Is the action technically feasible?
Legal Authority	Does the jurisdiction have the legal authority to implement?
Funding Available	Is funding available for the action?
Environmental	Will the action have a positive impact on the natural environment?
Climate Change	Will the action mitigate impacts from climate change?
Equity Priority Community	Does the action benefit equity priority communities?
Administrative Capacity	Does the jurisdiction have the administrative capability to execute the action?
Multi-Hazard	Will the action reduce risk to more than one hazard?
Timeline	Can the action be completed in less than 5 years?
Stakeholder Support	Is there stakeholder (outside of jurisdiction staff) support for the action?
Other Local Objective	Will the action meet other local objectives (such as capital improvements, economic development, environmental quality, or open space preservation?)
Support Policies	Does the action support the policies of other plans and programs?

The answers to each of these questions are weighted as follows:

- Yes = 3 points
- Not sure/could be either yes or no/question is difficult to quantify = 1 point
- No = 0 points

After the scoring of each action, priorities are assigned based on the following:

- 31 or more = High Priority
- 15 to 30 = Medium Priority
- 0 to 14 = Low Priority

### **Classification of Actions**

Each recommended action was also classified based on the hazard it addresses and the type of mitigation it involves. Mitigation types used for this classification are as follows:

- **Local Plans and Regulations**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Structure and Infrastructure Projects**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Education and Awareness Programs**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Climate Resiliency**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effects.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities to build capacity, or to respond to consequences of insufficient capacity. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

### **1.3.3 Annex-Preparation Process**

#### **Templates**

Templates were created for the two types of jurisdictions (municipalities and special districts) participating in this plan to help the Planning Partners prepare their jurisdiction-specific annexes. The templates were designed so that all criteria of Section 201.6 of 44 CFR for local governments would be met based on the partners' capabilities and mode of operation.

The templates were designed to lead all partners through the necessary steps to generate the Disaster Mitigation Act-required elements specific to their jurisdictions. The templates and accompanying instructions were used by every Planning Partner to develop the jurisdictional annexes.

#### **Toolkit**

Each Planning Partner was provided with a toolkit to assist in completing the annex template and developing their jurisdiction's action plan. The toolkits contained the following:

- Information on past hazard events that have impacted the planning area.

- The risk assessment results developed for the plan update.
- Jurisdiction-specific annex templates, with instructions for completing them.
- A catalog of mitigation best practices and suggested actions to enhance adaptive capacity.
- The results of the public survey on community awareness of hazards conducted as part of the public involvement strategy.

### **Workshop**

All partners were required to attend and participate in a virtual technical assistance workshop held December 2, 2025, where key elements of the annex template were discussed. The workshop focused on how the toolkit could be used to facilitate completion of the template and develop each jurisdiction's mitigation action plan. The templates were subsequently completed by a designated point of contact for each partner and a member of the planning team. The workshop addressed the following topics:

- The jurisdictional annex templates and the toolkit.
- Natural events history.
- Jurisdiction-specific issues.
- Risk ranking.
- Status of prior actions.
- Developing the action plan.
- Benefit-cost review.
- Prioritization protocol.
- Next steps.

Following the conclusion of the workshop, a copy of the presentation given at the workshop session was provided to each of the Planning Partners.

## 2. PALOS VERDES ESTATES



**Figure 2-1 Malaga Cove, Palos Verdes Estates**

Source: (City of Palos Verdes Estates 2025)

### 2.1 Local Hazard Mitigation Planning Team

**Table 2-1 Local Planning Team**

	Primary Point of Contact	Alternate Point of Contact
Name and Title:	Kristen Jo, Emergency Preparedness & Community Outreach Coordinator	George Gabriel, Deputy City Manager
Address:	340 Palos Verdes Drive West Palos Verdes Estates, CA 90274	340 Palos Verdes Drive West Palos Verdes Estates, CA 90274
Phone Number:	310-750-9788	424-506-8623
Email:	kjo@pvestates.org	ggabriel@pvestates.org
<b>Contributors:</b>		
Name and Title: Method of Participation:	Kristen Jo, Emergency Preparedness & Community Outreach Coordinator Served as the primary point of contact for the City throughout the planning process, participated on the Steering Committee, attended meetings, provided input on the City’s annex, identified mitigation strategies, and reviewed the draft plan.	
Name and Title: Method of Participation:	Kerry Kallman, City Manager Attending meetings, provided input and feedback on the City’s annex, and reviewed the draft plan.	

Name and Title:	Oscar Antillon, Public Works Director
Method of Participation:	Attended meetings, provided input on the City’s annex, identified mitigation strategies, and reviewed the draft plan.
Name and Title:	Sheryl Brady, Community Development Director
Method of Participation:	Attended meetings, provided input on the City’s annex, identified mitigation strategies, and reviewed the draft plan.

## 2.2 Jurisdictional Profile

### 2.2.1 Location and Features

The City of Palos Verdes Estates is within the Los Angeles, Long Beach metropolitan area, approximately 30 miles southwest of downtown Los Angeles. The City is a coastal community advantageously sited on the beautiful, rugged shoreline of the Palos Verdes Peninsula. Elevations range from sea level to 217 feet above sea level (City of Palos Verdes Estates 2019).

Palos Verdes Estates lies on the western side of the Palos Verdes Hills from the coastal bluffs up to western crest of the hills. The Palos Verdes Hills constitute an isolated land peninsula projecting into the ocean at the southwest border of the Los Angeles Basin. In general, the peninsula resembles the islands off the coast of Southern California. Northwest of the Palos Verdes Hills, a belt of irregular dune-sand topography extends inland from the coast and overlaps the lowland and northwest border of the hills (City of Palos Verdes Estates 2019).

The Palos Verdes Hills represent a miniature Coast Range mountainous area of low altitude. They have a maximum northwest-southeast length of about 9.5 miles and a width of 4 to 5 miles. The crest and greater part of the upper slopes of the hills form a rolling land, characterized by smoothly rounded hills and wide, gently sloping valleys. The lower slopes are marked by a series of coastal terraces, with canyons, some deep, advancing inland across the terraces. The west and south coasts are bordered by a sea cliff that has in general a height of 100 to 150, but up to 300 feet in Palos Verdes Estates. At Bluff Cove and Malaga Cove, the cliffs are 300 and 200 feet high, respectively (City of Palos Verdes Estates 2019).

### 2.2.2 History

The City of Palos Verdes Estates, incorporated on December 20, 1939, is the oldest of the four cities on the Palos Verdes Peninsula (City of Palos Verdes Estates 2025). Palos Verdes Estates first functioned as an unincorporated community and the Homes Association was liable for taxes on all parkland. After the economic crash in 1929, the association owed parkland taxes to Los Angeles County and area residents were afraid that the parklands might be sold for payment. City incorporation was voted in 1939 and the parklands were deeded to the new City in 1940 by the Homes Association (City of Palos Verdes Estates 2019).

### 2.2.3 Governance

Palos Verdes Estates, which was incorporated in 1939, is a General Law City operating within rules established by the California Legislature. The organizational structure of the local government is of the City Council–City Manager form. The City Manager, hired by the City Council, is responsible for Planning, organizing, and directing all administrative activities such as enforcing municipal laws, directing the daily operations of the City, and preparing and observing the municipal budget. The City Council is composed of five City Council members elected at large by the citizens of Palos Verdes Estates, with one member elected by the City Council to serve as Mayor. The City Council acts upon all legislative matters concerning Palos Verdes Estates, approving and adopting all ordinances,

resolutions, contracts, and other matters requiring overall policy decisions and leadership (City of Palos Verdes Estates 2019).

The City of Palos Verdes Estates City Council assumes responsibility for adoption of this plan; Emergency Preparedness will oversee its implementation.

## 2.3 Current Trends

### 2.3.1 Population

According to the California Department of Finance, the population of City of Palos Verdes Estates as of January 2024 was 12,999. Since 1970, the population has declined by an average annual rate of 0.6 percent.

### 2.3.2 Development

Table 2-2 Recent and Expected Future Development Trends

Criterion	Response					
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan?	No.					
Is your jurisdiction expected to annex any areas during the performance period of this plan?	No.					
Provide the number of new construction permits for each hazard area or provide a qualitative description of where development has occurred.	Infill development occurs within the city. According to the updated California Fire Hazard Severity Zones Map, adopted July 8, 2025, by Ordinance No 768, the majority of the City has been removed from the Very High Fire Hazard Severity Zone. Regardless of the location within the city, all structures and building continue to be subject to the code required under CBC Chapter 7A					
Are any areas targeted for development or major redevelopment in the next 5 years?	No.					
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?		<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
	Single Family	12	4	8	10	16
	Multi-Family	0	0	0	0	0
	Other (mobile homes, accessory dwellings, mixed use, etc.)	12	8	8	7	14
	Commercial	0	0	0	0	0
	Total	24	12	16	17	30
Describe the level of buildout in the jurisdiction, based on your jurisdiction's buildable lands inventory. If no such inventory exists, provide a qualitative description.	Infill development occurs throughout the city. This includes new single-family residences, structure additions to existing single-family residences, and remodeling existing residences					

## 2.4 Capability Assessment

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

Findings of the capability assessment were reviewed to identify opportunities to expand or improve upon capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan.

### 2.4.1 Planning and Regulatory Capabilities

Jurisdictions have the ability to develop policies and programs and to implement rules and regulations to protect and serve residents. Local policies are typically identified in community plans, implemented through local ordinance, and enforced through a governing body. An assessment of planning and regulatory capabilities is presented in Table 2-3.

**Table 2-3 Planning and Regulatory Capabilities**

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Codes, Ordinances, &amp; Requirements</b>				
<b>Building Code</b>	Yes	No	Yes	No
<b>Comment:</b>	<i>Chapter 15 (Buildings and Construction); passed January 28, 2025; provides requirements for buildings in the City and includes the Floodplain Management regulations (Chapter 15.50).</i>			
<b>Zoning Code</b>	Yes	No	Yes	No
<b>Comment:</b>	<ul style="list-style-type: none"> <li><i>Chapter 17 (Zoning Procedures) was established to provide the economic and social advantages resulting from an orderly planned use of land resources and to conserve and promote the public interest, health, comfort, and convenience of the city and its inhabitants, and to preserve the public peace, safety, morals, order, and general welfare of the city and its inhabitants.</i></li> <li><i>Chapter 18 (Zoning Requirements) has specific permitted and prohibited uses for each zone within the City. The City has a coastal zone overlay zone to protect the coastal bluffs and protect parklands within the coastal zone.</i></li> </ul>			
<b>Subdivisions</b>	Yes	No	Yes	No
<b>Comment:</b>	<i>Chapter 16 (Subdivisions)</i>			
<b>Stormwater Management</b>	Yes	No	Yes	No
<b>Comment:</b>	<i>Chapter 13.08 (Storm Drains and Stormwater Management and Pollution Control) is for the protection and enhancement of the quality of surface waters and surface water bodies, including the Santa Monica Bay and Machado Lake, in a manner consistent with the Federal Clean Water Act (33 U.S.C. Sections 1251 et seq.), the California Porter-Cologne Water Quality Control Act (Cal. Water Code Sections 13000 et seq.), and the municipal National Pollutant Discharge Elimination System (NPDES) permit.</i>			
<b>Post-Disaster Recovery</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Real Estate Disclosure</b>	No	Yes	Yes	No
<b>Comment:</b>	<i>California Civil Code 1102</i>			

		Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Growth Management</b>		Yes	No	No	No
<b>Comment:</b>	<p>The City's General Plan sets forth broad policy guidance in the areas of land use, circulation, conservation, recreation, open space, housing, scenic highways, seismic safety, safety and noise. The various General Plan elements provide a consistent set of policies and programs intended to preserve and enhance the quality of life, while accommodating growth and change in a proactive manner.</p> <p>As part of the Housing Element, the City incorporated findings of the Southern California Association of Governments (SCAG) Regional Housing Needs Assessment to identify the total new housing needed for the City between 2021 and 2029. The City included a goal in the element to provide adequate sites for new housing consistent with the capacity of roadways, sewer lines, and other infrastructure to handle increased growth.</p>				
<b>Site Plan Review</b>		Yes	No	No	No
<b>Comment:</b>	<p>Chapter 17.22 (Site Plan Permits) which requires site plan reviews in the R-M and C zones when a new structure is added, when a second story is added, when 1,000 square feet or more of floor area is added, or when a grading permit is required. The site plan review process shall ensure that the development standards and other city land use regulatory ordinances are applied in a coordinated fashion. The process shall incorporate architectural review conducted by the Palos Verdes Homes Association art jury and any other function of the Homes Association in order to assist in project coordination. This process is intended to promote coordination and consistency by providing all interested parties with sufficient facts to fully understand the implications and merits of a project and by facilitating well-informed decisions.</p>				
<b>Environmental Protection</b>		Yes	No	Yes	No
<b>Comment:</b>	<ul style="list-style-type: none"> <li>Chapter 17.10 (Environmental Quality) provides guidelines for study of proposed activities and the effect that such activities would have on the environment in accordance with the requirements of the California Environmental Quality Act (CEQA)</li> <li>Chapter 19 (Coastal Regulations)</li> </ul>				
<b>Flood Damage Prevention</b>		Yes	Yes	Yes	No
<b>Comment:</b>	<p>Chapter 15.5 (Floodplain Management); appoints the Planning Director as the floodplain administrator; new or substantial improvement of structures in the floodplain must have the lowest floor, including basement, elevated 1 foot above the effective base flood elevation. The City requires a development permit for any construction or development within any area of special flood hazard established in PVEMC.</p>				
<b>Emergency Management</b>		Yes	No	Yes	No
<b>Comment:</b>	<p>Chapter 2.28 (Emergency Services) – Chapter 2.28.080 establishes the City's response organization, responsibilities, functions, and interactions required to mitigate the effects of hazards affecting the City. Hazards identified in this Plan include earthquakes, hazardous material, multi-casualty incident, storm/flood, wildland/major fire, and civil disturbance/terrorism.</p>				
<b>Climate Change</b>		No	No	Yes	No
<b>Comment:</b>	-				
<b>Planning Documents</b>					
<b>General Plan</b>		Yes	No	Yes	No
<b>Is the General Plan compliant with Assembly Bill 2140?</b>		Yes			
<b>Comment:</b>	<ul style="list-style-type: none"> <li>Establishes policies, programs, goals and objectives to protect the community from risks associated with seismic, tsunami, flood, land movement, and fire hazards.</li> <li>Safety Element was updated in November 2023 and compliant with SB 379. The Safety Element integrates climate change and discusses how the element relates to the Local Hazard Mitigation Plan (LHMP). It also includes summarizes the impacts of the hazards of concern in the City.</li> <li>Housing Element was updated in May 2024 and was certified by HCD as being in substantial compliance with State Housing Law.</li> </ul>				

		Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Capital Improvement Plan</b>		Yes	No	No	Yes
<i>How often is the plan updated?</i>		Every 5 years			
<b>Comment:</b>	<i>Palos Verdes Estates' Capital Improvement Program (CIP) lays out the 5-year (Fiscal Year 2025-26 through Fiscal Year 2029-30) plan for the financing, scheduling, and maintenance of the City's major public assets.</i>				
<b>Disaster Debris Management Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Floodplain or Watershed Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Stormwater Plan</b>		Yes	No	No	Yes
<b>Comment:</b>	<i>The City's Storm Water Master Plan is currently being updated to ensure it continues to mitigate the impacts of flooding, water pollution, erosion, and property damage throughout the City. During the update process, the City will review the current LHMP and integrate where appropriate.</i>				
<b>Urban Water Management Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Habitat Conservation Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Economic Development Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Community Wildfire Protection Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Forest Management Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Climate Action Plan</b>		Yes	No	Yes	Yes
<b>Comment:</b>	<i>The City's Climate Action Plan (CAP) was finalized in January 2018 which was developed to reduce greenhouse gas (GHG) emissions within the City. The plan serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policies to achieve over the next 20 years (through 2038). The CAP aligns with the State's Climate Change Action Plan by advancing its goals and identifying specific initiatives and programs that target GHG emission reduction.</i>				
<b>Threat &amp; Hazard Identification &amp; Risk Assessment (THIRA)</b>		No	No	No	No
<b>Comment:</b>	-				
<b>Post-Disaster Recovery Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Continuity of Operations Plan</b>		No	No	No	No
<b>Comment:</b>					
<b>Public Health Plan</b>		No	No	No	No
<b>Comment:</b>					

**Opportunities to Expand Planning and Regulatory Capabilities**

The City has identified several opportunities to integrate the LHMP into plans, codes, and ordinances. During the LHMP update process, the Capital Improvement Plan, Storm Water Master Plan, and Climate Action Plan were all identified as integration opportunities. Refer to Table 3-14 for a mitigation action to integrate these plans.

### 2.4.2 Development and Permitting Capabilities

Jurisdictions regulate land use through the adoption and enforcement of zoning, subdivision and land development ordinances, building codes, building permit ordinances, floodplain, and stormwater management ordinances. When effectively prepared and administered, these regulations can lead to hazard mitigation. Development and permitting capabilities are presented in Table 2-4.

**Table 2-4 Development and Permitting Capabilities**

Criterion	Response
<b>Does your jurisdiction issue development permits?</b>	Yes
<b>If no, who does? If yes, which department?</b>	Planning Commission – has final authority on housing and commercial development projects, neighborhood compatibility applications, conditional use permits and variances. The Commission makes recommendations to the Council for pre-zoning and rezoning projects, tentative parcel and tract maps, annexations, General Plan amendments and zone text (municipal code) amendments.
<b>Does your jurisdiction track permits by hazard area?</b>	No, it is based on address.
<b>Does your jurisdiction have a buildable lands inventory?</b>	Yes – located in Chapter III of the 2021-2029 Housing Element

### 2.4.3 Fiscal Capabilities

Assessing a jurisdiction’s fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant funding eligibility, and local jurisdictional authority to generate internal financial capability, such as through impact fees. An assessment of fiscal capabilities is presented in Table 2-5.

**Table 2-5 Fiscal Capabilities**

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes – can be used for any hazard mitigation activity; however, it is only eligible for use with voter approval.
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Accessible – can be used for any hazard mitigation activity; however, it is only eligible for use with voter approval.
Incur Debt through Special Tax Bonds	Accessible – can be used for any hazard mitigation activity; however, it is only eligible for use with voter approval.
Incur Debt through Private Activity Bonds	Accessible – can be used for any hazard mitigation activity; however, it is only eligible for use with voter approval.
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Accessible - can be used for both on-site and off-site capital improvements, including seismic hazard repair and maintenance, drainage, and critical facilities.

### Opportunities to Expand Fiscal Capabilities

Through the City’s Capital Improvement Plan, the City will identify projects that can reduce hazard risk in the City. If feasible, the City will prioritize those projects and implement accordingly. The City will continue to identify grant opportunities as well to fund mitigation projects.

### 2.4.4 Administrative and Technical Capabilities

Planning regulatory and fiscal capabilities provide the backbone for successfully developing a mitigation strategy; however, without the appropriate personnel, the strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard mitigation. These resources include technical experts, such as engineers and scientists, as well as personnel with capabilities that may be found in multiple departments, such as grant writers. An assessment of administrative and technical capabilities is presented in Table 2-6.

**Table 2-6 Administrative and Technical Capabilities**

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	Yes
<i>If Yes, Department /Position:</i> Director of Building and Planning	
Engineers or professionals trained in building or infrastructure construction practices	Yes
<i>If Yes, Department /Position:</i> Director of Public Works/City Engineering	
Planners or engineers with an understanding of natural hazards	Yes
<i>If Yes, Department /Position:</i> Director of Public Works/City Engineering	
Staff with training in benefit-cost analysis	No
Surveyors	No
Personnel skilled or trained in GIS applications	Yes
<i>If Yes, Department /Position:</i> Director of Public Works/City Engineering	
Scientist familiar with natural hazards in local area	No
Emergency manager	Yes
<i>If Yes, Department /Position:</i> City Manager	
Grant writers	No
Procurement Services and Management	No

### Opportunities to Expand Administrative and Technical Capabilities

Due to the size of the City, hiring additional dedicated personnel is not feasible. However, City personnel have opportunities to be cross-trained in certain areas to help expand the current capabilities of the City.

### 2.4.5 Education and Outreach Capabilities

Regular engagement with the public on issues regarding hazard mitigation provides an opportunity to directly interface with community members. Assessing the education and outreach capability illustrates the connection between the government and community members, which opens a two-way dialogue that can result in a more resilient community, based on awareness and engagement. An assessment of education and outreach capabilities is presented in Table 2-7.

**Table 2-7 Education and Outreach Capabilities**

Criterion	Response
Do you have a public information officer or communications office?	Yes

Criterion		Response
Do you have personnel skilled or trained in website development?		Yes
Do you have hazard mitigation information available on your website?		Yes
<i>If yes, briefly describe:</i>	<p>The City has a <a href="#">disaster preparedness page</a> on its website that the City uses to communicate hazard-related information.</p> <p>The four cities of the Palos Verdes Peninsula launched the <a href="#">Know Your Zone evacuation readiness website</a>. With the aim to prepare Peninsula residents and businesses to evacuate in the event of an emergency, the site houses Zonehaven, a cloud-based evacuation platform with pre-established, Peninsula-wide evacuation zone maps. The evacuation zones will help fire, police and other emergency service agencies prepare for emergencies, streamline the evacuation process, and reduce confusion by enabling a single verified source of emergency information.</p>	
Do you use social media for hazard mitigation education and outreach?		Yes
<i>If yes, briefly describe:</i>	The City uses Facebook, X (formerly Twitter), Nextdoor, and Nixle for education and outreach purposes.	
Do you have any citizen boards or commissions that address issues related to hazard mitigation?		Yes
<i>If yes, briefly describe:</i>	<p>PVP CERT (Palos Verdes Peninsula Community Emergency Response Team) is a government/community resource that provides basic training in disaster preparedness and disaster response to help residents, their neighborhoods, and their city in an emergency. This program prepares teams of residents as first responders to support regular emergency personnel in a disaster.</p> <p>The DDP (Disaster District Program) is a comprehensive community-based resource that supports disaster preparedness and disaster response. The DDP is comprised of six disaster districts, each containing a cache of emergency supplies, resources, and communication equipment for disaster service workers to use during an incident. This program aims to increase disaster preparedness and survivability in neighborhoods during a disaster.</p> <p>Additionally, the PVE NART (Palos Verdes Estates Neighborhood Amateur Radio Team) group is designed to support the city of Palos Verdes Estates by providing critical emergency radio communication through the equipment installed in the disaster caches and/or the Emergency Operations Center (EOC). The program is comprised of dedicated volunteers who can provide a redundant source of emergency communication.</p>	
Do you have any other programs in place that could be used to communicate hazard-related information?		Yes
<i>If yes, briefly describe:</i>	The City uses Alert SouthBay where residents can sign up to receive emergency alerts. Lastly, the City utilizes their social media accounts to relay information before, during, and after emergencies.	
Do you have any established warning systems for hazard events?		Yes
<i>If yes, briefly describe:</i>	<p>The City uses Alert SouthBay which is an emergency alert and warning notification system established as part of an integrated, interoperable regional platform by thirteen South Bay cities including the City of Palos Verdes Estates. The Alert SouthBay emergency notification system aims to keep communities informed about disasters and major emergencies via SMS (text), email, phone, and other means of communication. The notification system gives the police, fire department, the LA County Office of Emergency Management, and specific contract cities, the ability to deliver critical notifications to the City.</p> <p>The City of Palos Verdes Estates has developed a comprehensive community-based disaster preparedness and response program known as the Palos Verdes Estates DDP. With a select group of volunteers, the program is designed to increase disaster readiness and survivability</p>	

Criterion	Response
	at the neighborhood level during a disaster. The program divides the City into 6 Disaster Districts, each equipped with a cache of equipment and supplies to support community responders. Managed by sworn Disaster Service Worker Volunteers under the City's Disaster Services Coordinator, the program integrates the resources of disaster services including area CERT members, Neighborhood Amateur Radio Team (NART), Disaster Service Workers (DSW) and the Palos Verdes Estates Police Department's Reserve Corps.

### Opportunities to Expand Education and Outreach Capabilities

The City will continue to review, evaluate, and expand its current education and outreach capabilities as needed.

## 2.4.6 Community Classifications

Table 2-8 Community Classifications

	Participating?	Classification or Number	Date Classified
FIPS Code	N/A	06-037-2670	N/A
UEI#	Yes	N/A	N/A
Community Rating System	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	N/A	N/A
Public Protection (ISO for Fire)	Yes – LA County Fire Division 1	2	May 11, 2018
StormReady	No	N/A	N/A
TsunamiReady	No	N/A	N/A
Firewise	No	N/A	N/A

## 2.4.7 Adaptive Capacity for Climate Change

Table 2-9 Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating <sup>a</sup>
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts	High
<i>Comment:</i>	<i>The City developed a CAP in 2018 to reduce GHG emissions within the city. The City's CAP serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policies to achieve desired outcomes over the next 20 years. The CAP includes an overview of GHG emissions in the City. The City's LHMP was completed in 2018 and was developed to meet SB 379 requirements for assessing vulnerabilities associated with climate change. Lastly, the City has access to numerous resources at the state and federal level to understand potential climate change impacts.</i>
Jurisdiction-level monitoring of climate change impacts	Medium
<i>Comment:</i>	<i>The City has access to county and state data to monitor projected impacts of climate change.</i>
Technical resources to assess proposed strategies for feasibility and externalities	Medium
<i>Comment:</i>	-
Jurisdiction-level capacity for development of GHG emissions inventory	High
<i>Comment:</i>	<i>Appendix A of the City's CAP provides a complete report of the City's GHG inventory</i>

Criterion		Jurisdiction Rating <sup>a</sup>
Capital planning and land use decisions informed by potential climate impacts		High
Comment:	<i>The City's CIP provides a 5-year plan for financing, scheduling, and maintenance of the City's major public assets. It serves as the blueprint for how the City will maintain, protect, and improve, both the functions and aesthetics of its systems. Projects focus on making improvements throughout, so the City remains efficient and prepared for the future.</i>	
Participation in regional groups addressing climate risks		Medium
Comment:	-	
Implementation Capacity		
Clear authority/mandate to consider climate change impacts during public decision-making processes		Medium
Comment:		
Identified strategies for GHG mitigation efforts		High
Comment:	<i>Chapters 6 through 11 of the CAP provide goals and mitigation measures in reducing the impacts of GHG and climate change. Chapter 12 of the CAP provides the City's plan for implementation and monitoring of GHG emissions and climate change impacts.</i>	
Identified strategies for adaptation to impacts		High
Comment:	<i>Chapters 6 through 11 of the CAP provide goals and mitigation measures in reducing the impacts of GHG and climate change. Chapter 12 of the CAP provides the City's plan for implementation and monitoring of GHG emissions and climate change impacts.</i>	
Champions for climate action in local government departments		Medium
Comment:	<i>Through the integration and implementation of projects and improvements identified in the CAP and LHMP</i>	
Political support for implementing climate change adaptation strategies		High
Comment:	<i>Ensuring the City is in alignment with state and federal policies to address climate change and GHG emissions</i>	
Financial resources devoted to climate change adaptation		Medium
Comment:	<i>The City's CIP identifies projects to protect the City and its residents. While not stand-alone funding devoted to climate change, the City has resources to make improvements that can factor in climate change projections when identifying and designing projects.</i>	
Local authority over sectors likely to be negative impacted		Medium
Comment:	-	
Public Capacity		
Residents' knowledge of and understanding of climate risk		Medium
Comment:	<i>The City has its CAP and LHMP posted online for residents.</i>	
Residents' support of adaptation efforts		Unsure
Comment:	-	
Residents' capacity to adapt to climate impacts		Medium
Comment:	<i>Most residents have the capacity to adapt to climate impacts; however, some may require funding or assistance to implement any adaptation measures to their homes.</i>	
Local economy current capacity to adapt to climate impacts		Medium
Comment:	<i>Overall, the local economy has the capacity to adapt to climate impacts; however, funding and assistance may be required to implement any necessary measures.</i>	
Local ecosystems capacity to adapt to climate impacts		Unsure
Comment:	<i>This depends on ecosystem health and how well it can adapt to changing climates.</i>	

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

## 2.5 National Flood Insurance Program Compliance

Table 2-10 National Flood Insurance Program Compliance

Criterion	Response
<b>Flood Risk Summary</b>	
Please describe areas of the jurisdiction prone to flooding, specifically those outside of the mapped floodplain.	The City does not have any identified areas that are consistently prone to flooding outside of the mapped floodplain. While the City actively maintains its storm drain system and clears inlets prior to rain events, localized flooding can occasionally occur. This is typically due to temporary blockages caused by debris from the large, forested areas within the City or during storms that exceed the design capacity of the drainage infrastructure. These occurrences are unpredictable and not tied to specific locations.
Do FEMA flood maps adequately address flood risk in the jurisdiction?	FEMA flood maps generally address the primary flood risk within the jurisdiction; however, they do not account for localized flooding that may result from intense storm events or temporary inlet blockages. Recent changes in storm frequency and intensity have introduced conditions that can exceed system design capacity, which is not reflected in FEMA mapping.
How many structures in the jurisdictions Special Flood Hazard Area (SFHA) have been determined to be substantially damaged from any hazard event?	To date, the City has no record of any structures within the SFHA being substantially damaged from any hazard event.
Additional comments on flood risk	Localized flooding may occur during severe storms due to factors such as debris accumulation at storm drain inlets or rainfall exceeding system capacity. Additionally, the regional flood control district maintains larger conveyance systems that carry water from other jurisdictions. During major storm events, these systems can also become overwhelmed, which may contribute to flooding impacts within the City. The City has no control over these regional systems.
<b>Staff Resources</b>	
Provide an explanation of the jurisdiction’s NFIP administration services (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, review and use of any other base flood data, notification of other agencies, base flood elevation changes due to physical alterations, documentation of floodplain development, map determinations, and remedial action
What local department is responsible for floodplain management?	Planning
Who is your floodplain administrator? (department/position)	Chapter 15.5 (Floodplain Management); appoints the Planning Director as the floodplain administrator
Are any staff certified floodplain managers (CFMs)?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program?	No, we contract engineering services. The city utilizes consultants to update our storm water master plan.
<i>If yes, what type of assistance/training is needed?</i>	
<b>Insurance Summary <sup>a</sup></b>	

Criterion	Response
How many flood insurance policies are in force in your jurisdiction?	51
<i>What is the insurance in force?</i>	\$16,654,000
<i>What is the premium in force?</i>	\$42,657
How many total loss claims have been filed in your jurisdiction?	15
<i>What were the total payments for losses?</i>	\$39,750
Does the jurisdiction maintain a list of properties that have been damaged by flooding?	No
Does the jurisdiction maintain a list of property owners interested in flood mitigation?	No
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	N/A
How many properties have been mitigated (elevation or acquisition)?	Unknown
<b>Compliance History</b>	
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No
Does your jurisdiction have a Substantial Damage Response Plan?	No
Summarize the jurisdiction’s Substantial Damage determination procedures.	The City’s floodplain management code defines substantial damage as damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty percent of the market value of the structure before the damage occurred.
Summarize the jurisdiction’s Substantial Improvement procedures.	The City’s floodplain management code defines substantial improvement as any reconstruction, rehabilitation, addition, or other proposed new development of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures that have incurred “substantial damage,” regardless of the actual repair work performed.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
Are any RiskMAP projects currently underway in your jurisdiction?	No.
<b>Regulation</b>	
What is the date that your flood damage prevention ordinance was last amended?	2021
Does the jurisdiction’s administration of the floodplain exceed NFIP requirements? (freeboard, mapping, etc.)	Meets the minimum
<b>Community Rating System</b>	
Does your jurisdiction participate in the Community Rating System (CRS)?	No

a. According to FEMA statistics as of (August 31, 2025)

## 2.6 Integration

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

### 2.6.1 Existing Integration

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

- **Education and Outreach** – The City has a [disaster preparedness page](#) on its website that the City uses to communicate hazard-related information.
  - The four cities of the Palos Verdes Peninsula launched the [Know Your Zone evacuation readiness website](#). With the aim to prepare Peninsula residents and businesses to evacuate in the event of an emergency, the site houses Zonehaven, a cloud-based evacuation platform with pre-established, Peninsula-wide evacuation zone maps. The evacuation zones will help fire, police and other emergency service agencies prepare for emergencies, streamline the evacuation process, and reduce confusion by enabling a single verified source of emergency information.
- **Disaster Shed Assessments** – The City is currently in the process of completing an assessment of six disaster sheds to ensure they are with the necessary equipment and supplies needed to support disaster service workers before, during, and after disasters.
- **Grant Application** – The City is working on preparing and submitting a grant for defensible space. The title of the project is called Hazardous Fuels Reduction and Defensible Space, and it aims to reduce or prevent vegetation-related fire hazards and habitat degradation by removing flammable invasive vegetation and replanting with fire-resistant native species. The funding source is through the Hazard Mitigation Grant Program.

### 2.6.2 Opportunities for Future Integration

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

- **Capital Improvement Plan** – The City will review the Capital Improvement Plan to identify potential projects that could be funded through FEMA’s HMA program.
- **Storm Water Master Plan** – The City’s current Storm Water Master Plan is in need of an update to ensure it continues to mitigate the impacts of flooding, water pollution, erosion, and property damage throughout the City. During the update process, the City will review the current LHMP and integrate where appropriate.
- **Climate Action Plan** - The City’s [Climate Action Plan](#) (CAP) was finalized in January 2018 which was developed to reduce GHG emissions within the City. The plan serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policies to achieve over the next 20 years (through 2038). While the CAP aligns with the State’s Climate Change Action Plan, it does integrate the

LHMP. Upon the next update of the CAP, the City will review the LHMP and integrate into the CAP where appropriate.

## 2.7 Risk Assessment

### 2.7.1 Jurisdiction-Specific Natural Hazard Event History

Table 2-11 lists past occurrences of natural hazards, resulting in a disaster declaration, for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

**Table 2-11 Past Natural Hazard Events**

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Fire	Woolsey Fire	FM-5280-CA	November 9, 2018	Reduced air quality
Fire	Wildfires	EM-3409-CA	November 9, 2018	Reduced air quality
Fire	Wildfires	DR-4407-CA	November 12, 2018	Reduced air quality
Biological	Covid-19 Pandemic	EM-3428-CA DR-4482-CA CA20-01	March 13, 2020 March 22, 2020 March 4, 2020	Restrictions in place where necessary
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	DR-4683-CA CA23-1	January 14, 2023 January 4, 2023	Localized flooding
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	EM-3592-CA CA23-3	March 10, 2023 March 1, 2023	Localized flooding
Severe Storm	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4699-CA	April 3, 2023	Localized flooding
Severe Storm	Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides	DR-4769-CA	April 13, 2024	Localized flooding
Fire	Palisades Fire	FM-5549-CA	January 7, 2025	Reduced air quality
Fire	Eaton Fire	FM-5550-CA	January 8, 2025	Reduced air quality
Fire	Wildfires and Straight-Line Winds	DR-4856-CA	January 8, 2025	Reduced air quality

### 2.7.2 Hazard Ranking

The prioritization and categorization of identified hazards for the City of Palos Verdes Estates is based principally on the Priority Risk Index (PRI), a tool used to measure the degree of risk for identified hazards in a particular planning area. The PRI was used to assist the City in identifying hazards that pose the most significant threat. Table 3-12 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy.

**Table 2-12 Hazard Risk Ranking Summary**

Hazard	Weighted Risk Factors					PRI	Risk Ranking
	Probability	Impact	Spatial Extent	Warning Time	Climate Change		
Drought	1.2	0.3	0.8	0.1	0.4	2.8	Medium
Earthquake	0.9	0.9	0.8	0.4	0.2	3.2	High
Flood	0.9	0.3	0.2	0.1	0.4	1.9	Low
Landslide	1.2	0.6	0.6	0.4	0.4	3.2	High
Sea Level Rise	0.9	0.3	0.2	0.1	0.4	1.9	Low
Severe Weather - Heat Wave	0.9	0.6	0.8	0.1	0.4	2.8	Medium
Severe Weather - Strong Wind	1.2	0.6	0.8	0.1	0.4	3.1	High
Tsunami	0.6	0.3	0.4	0.1	0.2	1.6	Low
Wildfire	0.9	0.9	0.6	0.4	0.4	3.2	High

Note: PRI Value 1 to 1.9 = Low Hazard Risk Ranking  
 PRI Value 2.0 to 2.9 = Medium Hazard Risk Ranking  
 PRI Value 3.0 to 4.0 = High Hazard Risk Ranking

### 2.7.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

#### Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 1
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: 0

#### Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- No additional vulnerabilities noted.

## 2.8 Status of Previous Plan Mitigation Actions

Table 2-13 summarizes the mitigation actions that were recommended in the prior plan and their implementation status at the time this update was prepared.

**Table 2-13 Status of Prior Plan Actions**

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
Identify potential landslide vulnerabilities and consult with subject matter experts to implement mitigation activities	Ongoing/in progress as part of the LHMP update	Identified as a Current Capability	-	-
Perform a building audit to identify soft story structures and develop an implementation Plan to retrofit the buildings for seismic activity	-	No Longer Feasible	-	-
The Los Angeles County Fire Department Forester promotes the Ready Set Go program that focuses on the wildland urban interface	Ongoing – the City actively participates in this program and conducts outreach and education throughout the City.	Identified as a Current Capability	-	-
Provide links on city’s website to flood zone maps from FEMA and assist residents in identifying best practices in developing property outside of the flood zone.	-	Removed. Unneeded	-	-
Link the EOP hazards to the LHMP hazard	Ongoing – the City will be updating the EOP and link the identified hazards in LHMP to the EOP.	-	Yes	PVE-02
Integrate the LHMP into existing programs, ordinances, and building codes	Ongoing/In Progress	-	Yes	PVE-02
Perform a building audit to identify soft story structures and develop implementation Plan to retrofit for seismic activity.	-	No Longer Feasible	-	-
Encourage citizens to take water-saving measures, such as the following: <ul style="list-style-type: none"> <li>• Installing low-flow water-saving showerheads and toilets.</li> <li>• Turning water off while brushing teeth or during other cleaning activities.</li> </ul>	Ongoing – the City actively participates in educational outreach to encourage residents to adopt best practices before and during inclement weather.	Identified as Current Capability	-	-

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<ul style="list-style-type: none"> <li>Adjusting sprinklers to water the lawn and not the sidewalk or street.</li> <li>Running the dishwasher and washing machine only when they are full.</li> <li>Checking for leaks in plumbing or dripping faucets.</li> <li>Installing rain-capturing devices for irrigation.</li> </ul>				
Continue to monitor. Study future impacts of sea level rise and the impact on existing facilities.	Ongoing Capability	-	-	-
Study the potential impacts of a tsunami on existing facilities. Identify potential impacts to the Beach Club.	Ongoing Capability	-	-	-

## 2.9 Hazard Mitigation Strategy

This section includes the following components of the mitigation strategy for this jurisdiction:

- Hazard Mitigation Action Plan Matrix
- Mitigation Action Prioritization
- Mitigation Action Classification and Natural Hazards Addressed

**Table 2-14 Hazard Mitigation Action Plan Matrix**

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
PVE-01	Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are in high- or medium-risk hazard areas.	Food, hydration, shelter; Energy; Communications; Transportation	Existing	1, 2	Lead: Planning Support: Public Works	Yes	Very High (\$1,000,000 and above)	FEMA HMGP and FEMA FMA, Staff Time, CIP Budget	Long-Term (5 years or more)
PVE-02	Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including: <ul style="list-style-type: none"> <li>• Storm Water Master Plan Update</li> <li>• Sewer Master Plan</li> <li>• Capital Improvement Plan</li> <li>• EOP</li> </ul>	Safety and Security; Communications; Transportation	Both	4	Lead: Planning, Public Works Support: City Manager	Yes	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)
PVE-03	Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements: <ul style="list-style-type: none"> <li>• Evaluate the current floodplain ordinance to determine if updates are needed</li> </ul>	All located in the floodplain	Both	1, 2, 4	Lead: Planning Support: City Manager	Yes	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	<ul style="list-style-type: none"> <li>Upon FEMA flood map revisions, update and adopt the City's floodplain ordinance</li> </ul>								
<b>PVE-04</b>	Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following: <ul style="list-style-type: none"> <li>Public outreach</li> <li>Integrate into appropriate plans and programs</li> </ul>	Communications; Safety and Security	Both	1, 2, 4	Lead: Planning Support: City Manager	Yes	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)
<b>PVE-05</b>	Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.	N/A	N/A	2, 4	Lead: Emergency Management Support: Planning, Public Works, City Manager	Yes	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)
<b>PVE-06</b>	Storm Water Master Plan Update – The City will update the current Storm Water Master Plan. The Plan mitigates impacts of flooding, water pollution, erosion, and property damage by identifying deficiencies in existing drainage systems. This action will include the update of the master plan and the integration of the LHMP, where applicable.	Safety and Security; Water Systems	Both	1, 2, 4	Lead: Cal OES & Public Works Support: Community Development	Yes	High (\$250,000 - \$1 million)	Staff Time, General Fund	Short Term (less than 5 years)
<b>PVE-07</b>	Fire Safety Weed Abatement Program – The City will expand its current wildfire fuel reduction efforts through vegetation management programs (contractor services and goat grazing). Contractor services will be performed in high-risk areas and include removal of weeds, brush, and dead shrubs; tree/shrub trimming; and hazard tree and shrub removal. Goat grazing will	Safety and Security	Both	1, 2, 4, 5	Lead: Public Works Support: Community Development, City Manager's Office, Fire Department	Yes	High (\$250,000 - \$1 million)	Staff Time, General Fund, FEMA HMGP, California Climate and Wildfire Resilience Grants	Short Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	provide fuel modification by using goats to seasonally graze between April and September each year. Lastly, the City will incorporate a no-fee community weed abatement permit program to allow residents to participate in removing vegetation in public areas adjacent to their properties. This will also include public education programs on defensible space, wildfire preparedness, and allowable community vegetation removal.								
<b>PVE-08</b>	Sewer Master Plan – The City will work on preparing a Sewer Master Plan that will aim at mitigating potential public health and safety issues that may arise with seismic activity or land movements by identifying infrastructure flaws, reducing stormwater flow/ infiltration, and upgrading pipes. This action will include the preparation of the master plan and the integration of the LHMP, where applicable.	Safety and Security; Food, Hydration, Shelter; Water Systems	Both	1, 2, 4	Lead: Cal Water Support: Public Works	Yes	Moderate (\$50,001 - \$250,000)	Staff Time, General Fund	Short Term (less than 5 years)
<b>PVE-09</b>	Retaining Wall Repair – The City will repair the retaining wall along Palos Verdes Drive and Blufftop Trail to mitigate potential safety hazards that arise with landslides, earthquakes, and erosion.	Safety and Security	New	1	Lead Public Works Support: Community Development	Yes	Moderate (\$50,001 - \$250,000)	General Fund, CIP Budget, FEMA HMGP	Short Term (less than 5 years)
<b>PVE-010</b>	Tree Trimming – The City will expand its current tree trimming program. This action will include the expansion and implementation of a tree trimming program that will reduce the impact of falling	Safety and Security	Both	1, 2, 4	Lead: Public Works Support: Bennett Landscaping	Yes	Moderate (\$50,001 - \$250,000)	General Fund, CIP Budget	Short Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	hazards, such as branches and limbs, during strong wind events.								
<b>PVE-011</b>	Disaster District Program (DDP) Container Audits – The City will complete DDP audits to determine if all six emergency containers in PVE are fully updated and stocked with equipment and supplies Disaster Service Workers need to support themselves and emergency operations during an activation. If items are needed, the City will purchase those items and restock the containers accordingly.	Safety and Security; Food, Hydration, Shelter; Communications	Existing	2, 3, 4	Lead: Emergency Management Support: City Manager, Police Department	Yes	Moderate (\$50,001 - \$250,000)	Staff Time, General Fund	Short Term (less than 5 years)
<b>PVE-012</b>	Communication Capabilities – There is a need in the City to increase internal communication capabilities among city staff members to promote effective coordination and response during events through Alert SouthBay and other internal communication methods, including developing communication protocols, internal newsletters, training, and shared radio systems. The City will work on increasing capabilities to mitigate misunderstandings and confusion during emergencies. This will create more effective and timely responses.	Safety and Security; Communications	N/A	4	Lead: Emergency Management Support: City Manager	Yes	Low (less than \$50,000)	Staff Time, General Fund, CIP Budget, FEMA HMGP	Short Term (less than 5 years)

Table 2-15 Mitigation Action Prioritization

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
PVE-01	3	3	3	3	3	1	3	1	3	3	1	1	1	1	1	31	High
PVE-02	3	3	3	3	3	1	0	1	1	3	3	1	3	3	1	32	High
PVE-03	3	3	3	3	3	1	0	1	1	3	3	1	3	1	1	30	Medium
PVE-04	3	3	3	3	3	1	0	1	3	3	3	3	3	3	1	36	High
PVE-05	3	3	3	3	3	1	0	1	1	3	3	3	3	1	1	32	High
PVE-06	3	3	3	3	3	1	0	1	3	3	3	3	3	1	1	34	High
PVE-07	3	3	3	3	3	1	0	1	3	3	3	3	3	1	1	34	High
PVE-08	3	3	3	3	3	1	0	1	3	3	3	1	3	1	1	32	High
PVE-09	3	3	3	3	1	1	3	1	1	3	1	3	3	1	1	31	High
PVE-010	3	3	3	3	1	1	1	1	1	3	1	3	3	1	1	29	Medium
PVE-011	3	3	3	3	3	1	1	1	1	3	1	3	3	1	1	31	High
PVE-012	3	3	3	3	3	1	1	1	1	3	3	3	3	3	1	35	High

Note: 31 or more = High Priority  
 15 to 30 = Medium Priority  
 0 to 14 = Low Priority

Table 2-16 Mitigation Action Classification and Natural Hazards Addressed

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
PVE-01	■	■	■						■						
PVE-02	■						■	■	■	■	■	■	■	■	■
PVE-03	■								■						
PVE-04	■		■		■	■	■	■	■	■	■	■	■	■	■
PVE-05	■					■	■	■	■	■	■	■	■	■	■
PVE-06	■								■						
PVE-07	■	■		■		■	■								■
PVE-08	■	■				■			■						
PVE-09		■							■		■				
PVE-010		■					■								■
PVE-011	■					■	■	■	■	■	■	■	■	■	■
PVE-012	■		■			■	■	■	■	■	■	■	■	■	■

## 2.10 Public Outreach

Table 2-17 Public Outreach

Local Outreach Activity	Date	Number of People Involved
Facebook post through the City of Palos Verdes Estates city page to inform residents of the LHMP update process beginning	February 19, 2025	Unknown
Facebook post through Palos Verdes Estates Police Department page to invite residents to complete the public survey	September 13, 2025	Unknown



Figure 2-2 Facebook Post

Source: Palos Verdes Estates Police Department 2025

## 2.11 Information Sources Used for This Annex

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

- City of Palos Verdes Estates municipal website
- City of Palos Verdes Estates Housing Element (2021-2029)
- City of Palos Verdes Estates Safety Element (November 2023)
- City of Palos Verdes Estates Municipal Code

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit.** The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

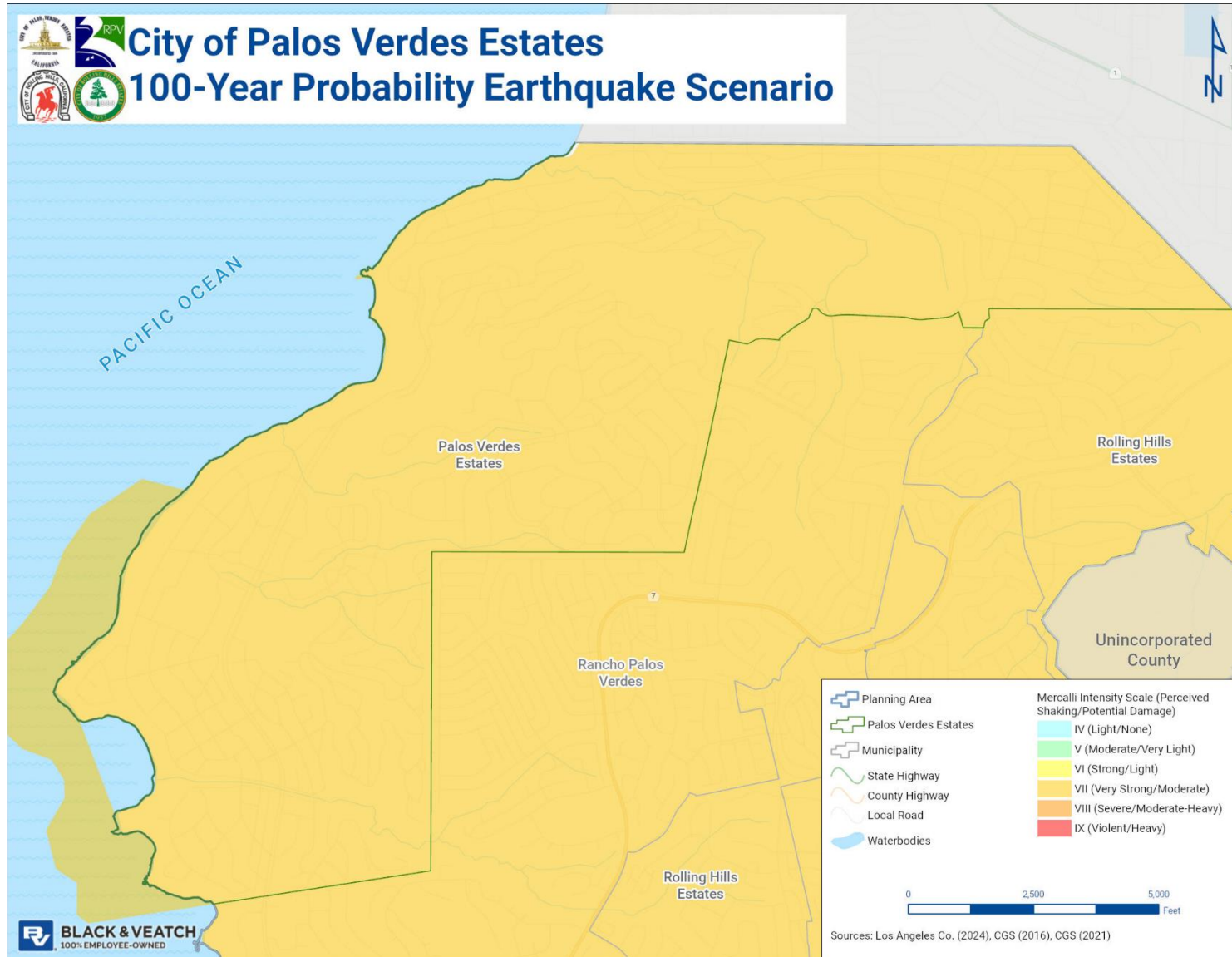


Figure 2-3 Earthquake Hazard Map – 100-Year Probability Earthquake Scenario

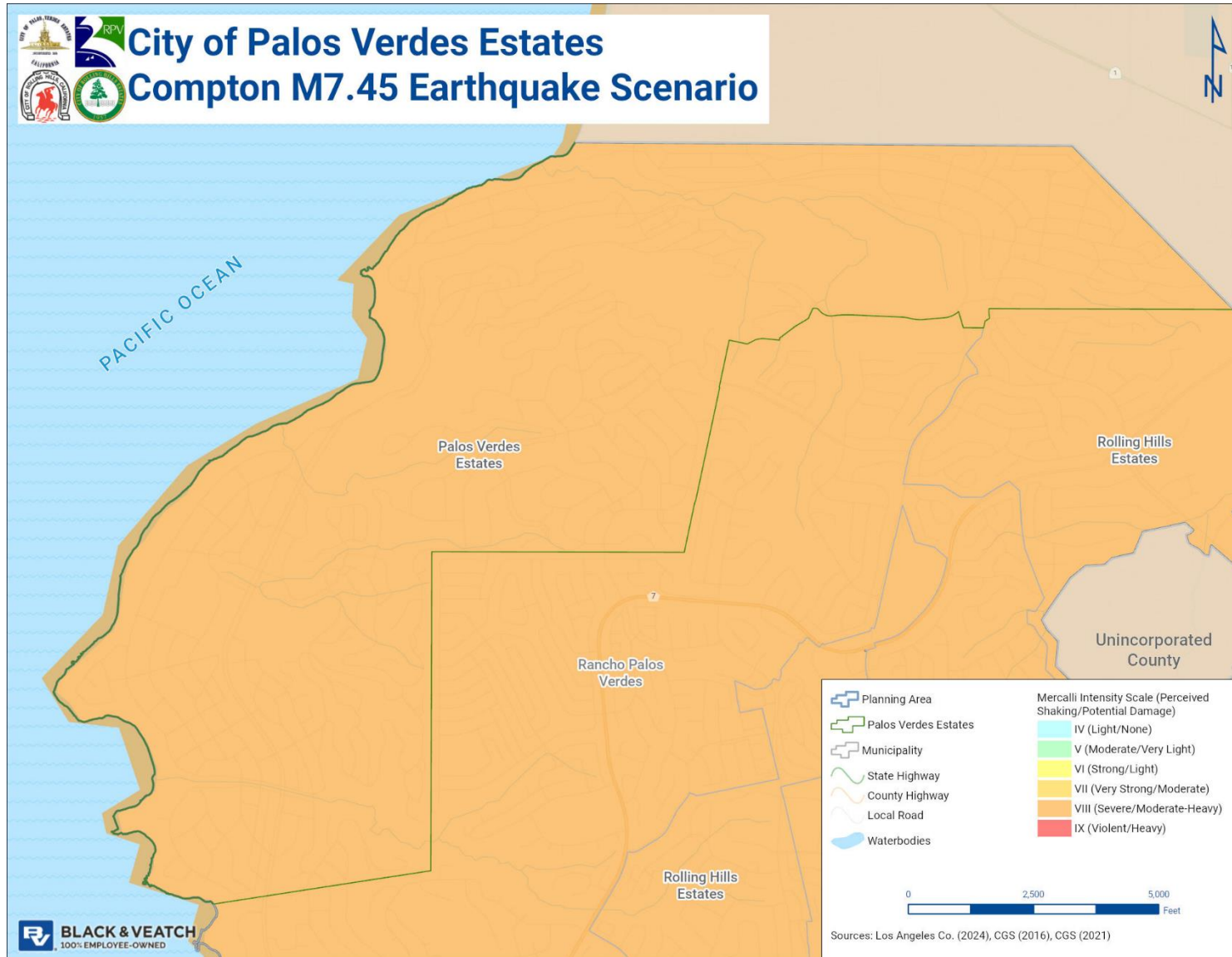


Figure 2-4 Earthquake Hazard Map – Compton M7.45 Earthquake Scenario

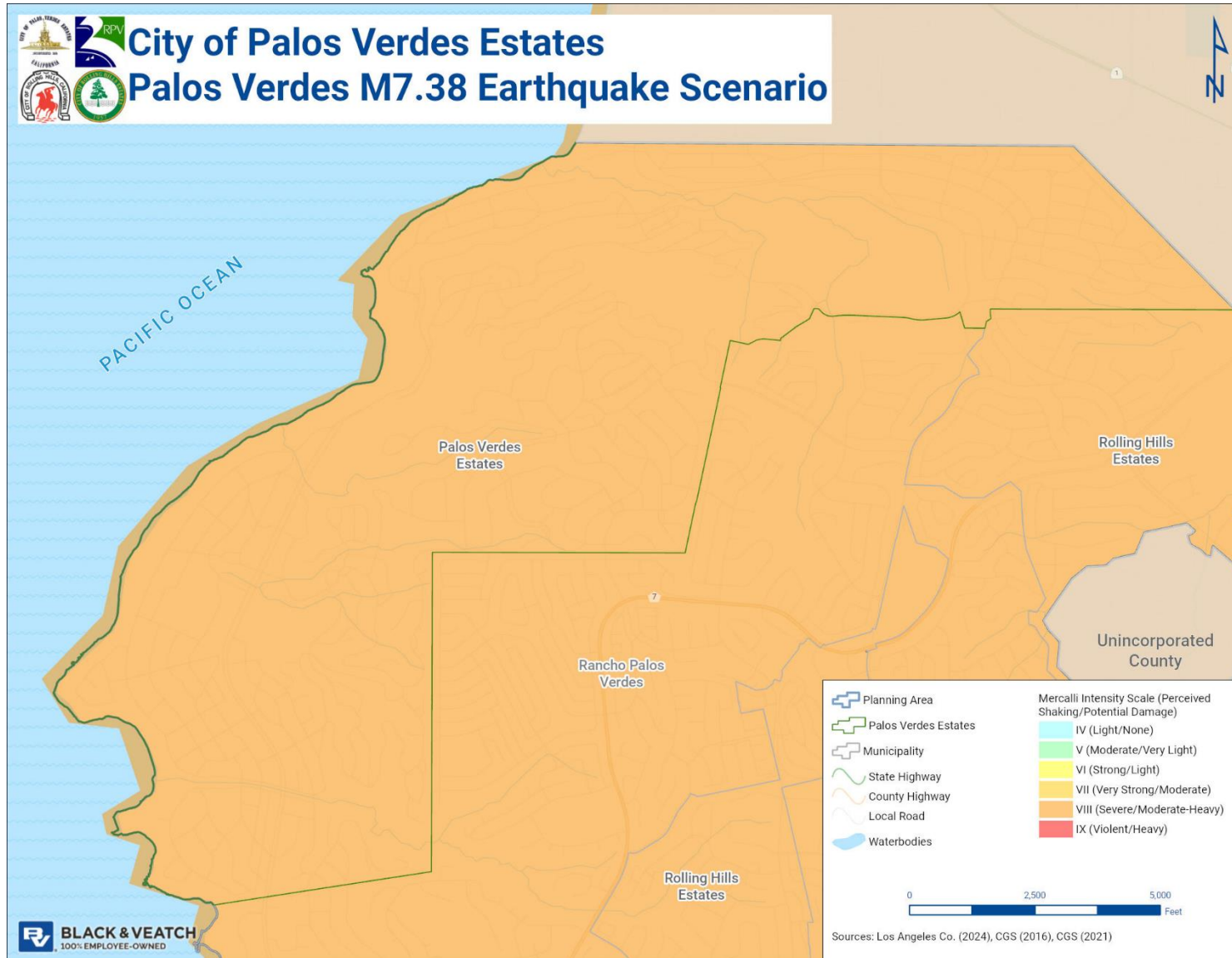


Figure 2-5 Earthquake Hazard Map – Palos Verdes M7.38 Earthquake Scenario

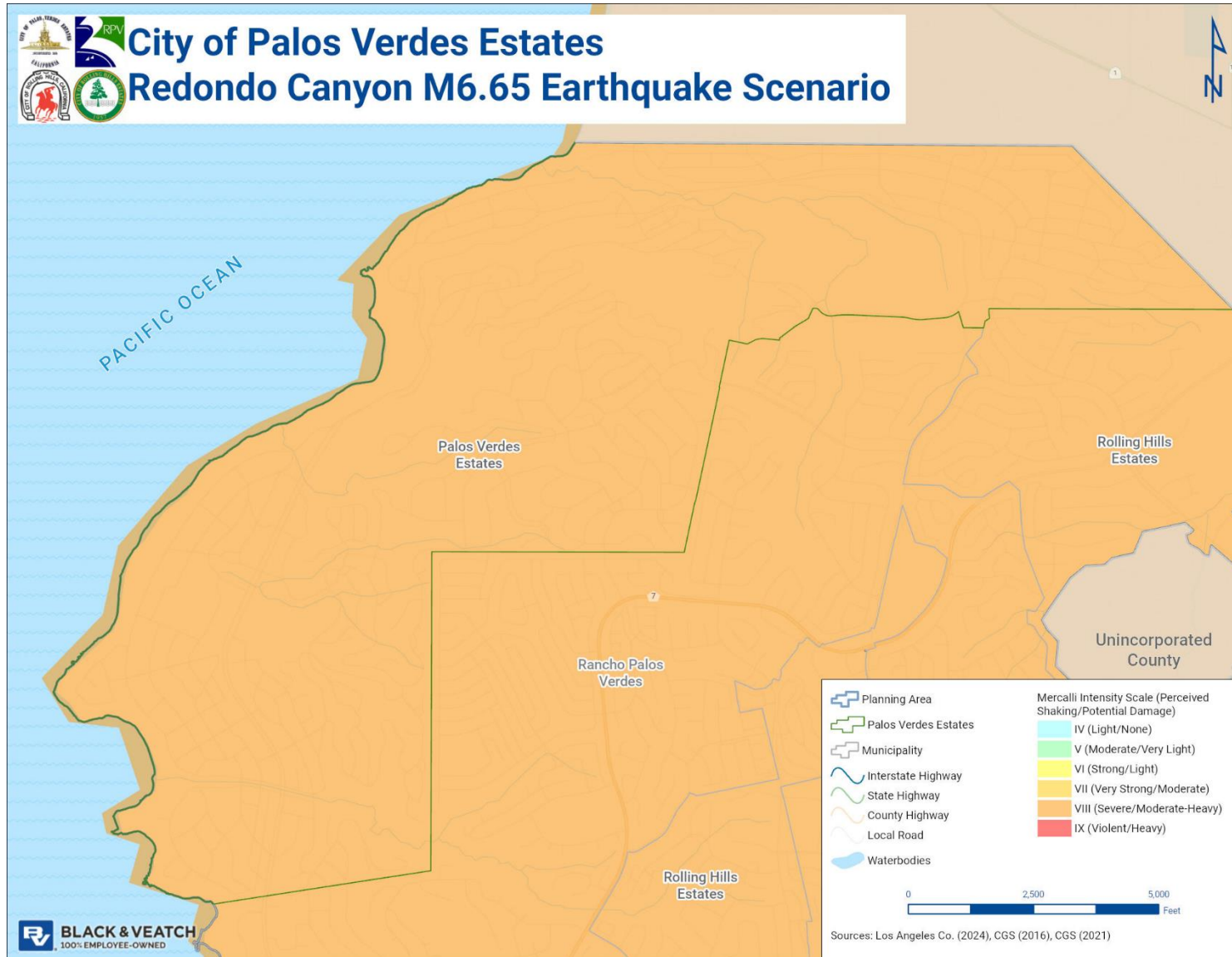


Figure 2-6 Earthquake Hazard Map – Redondo Canyon M6.65 Earthquake Scenario

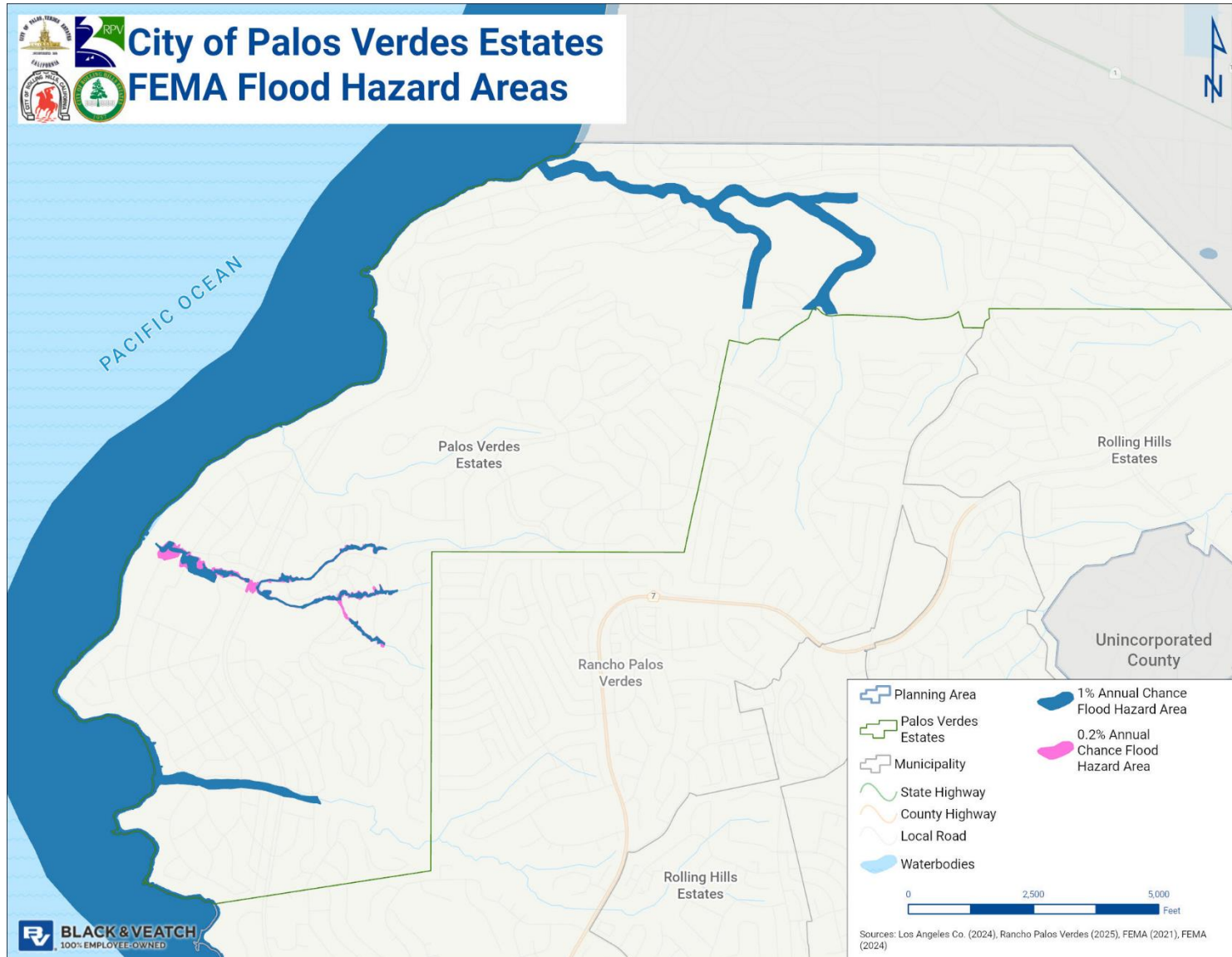


Figure 2-7 Flood Hazard Map – FEMA Flood Hazard Areas

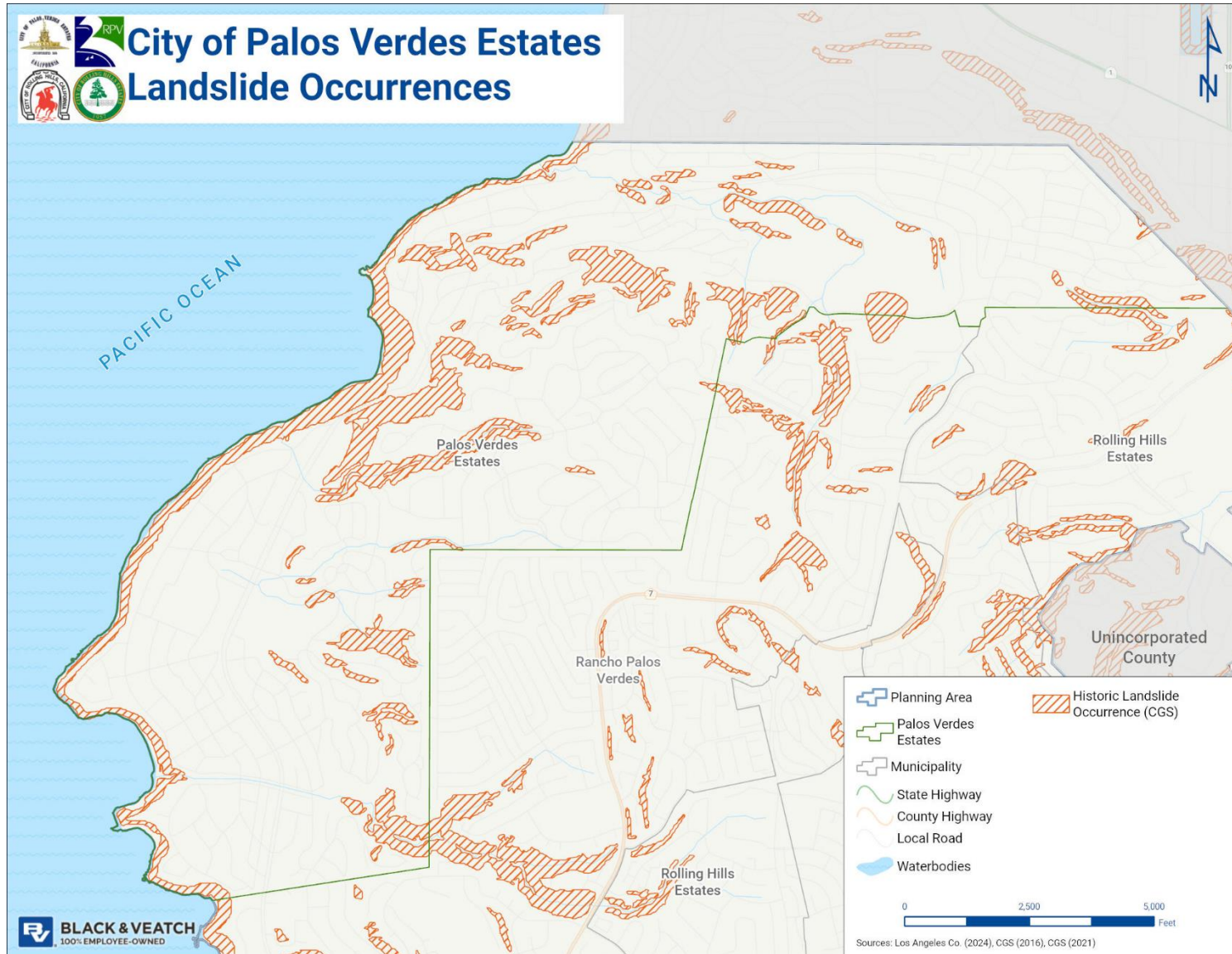


Figure 2-8 Landslide Hazard Map – Landslide Occurrences

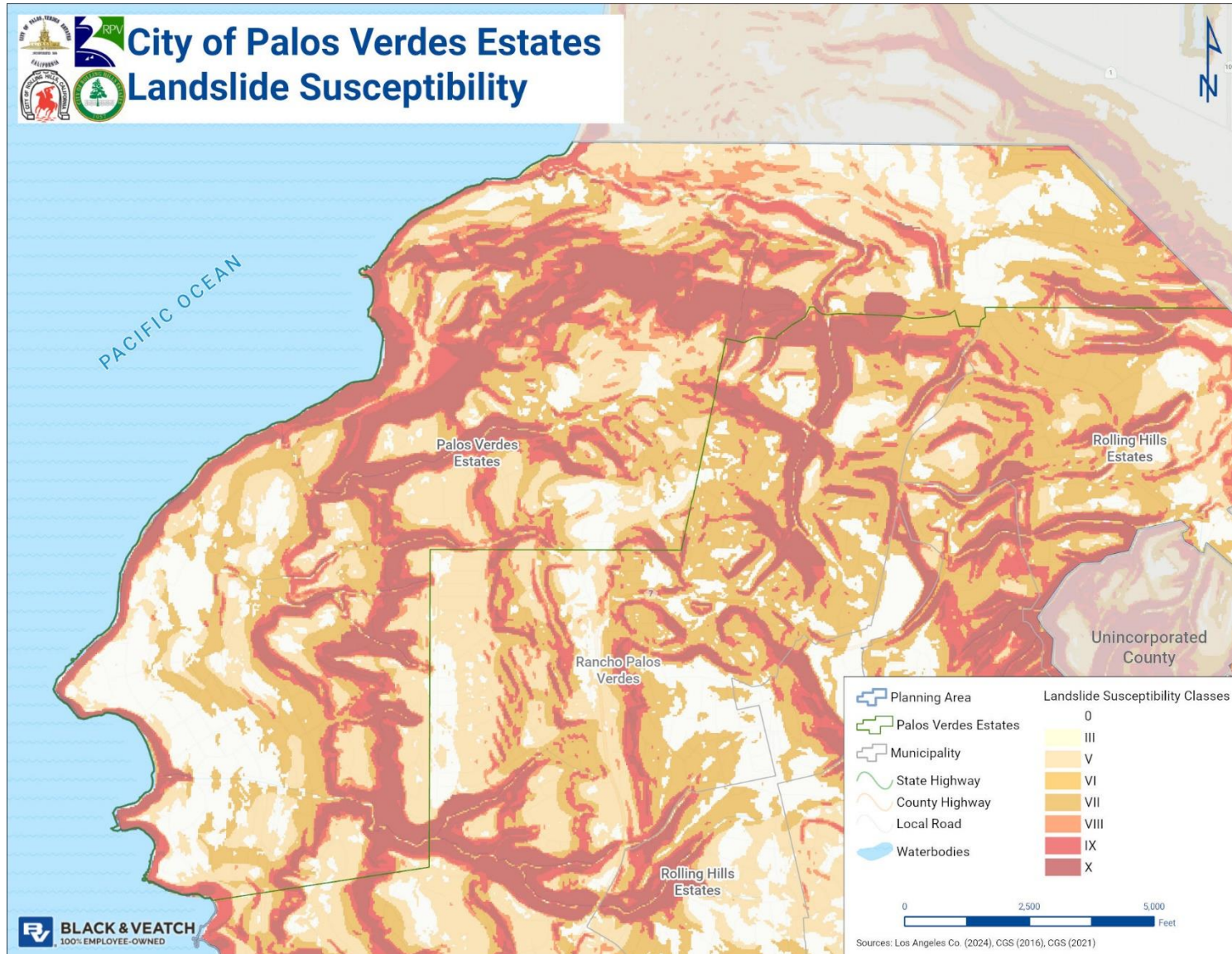


Figure 2-9 Landslide Hazard Map – Landslide Susceptibility

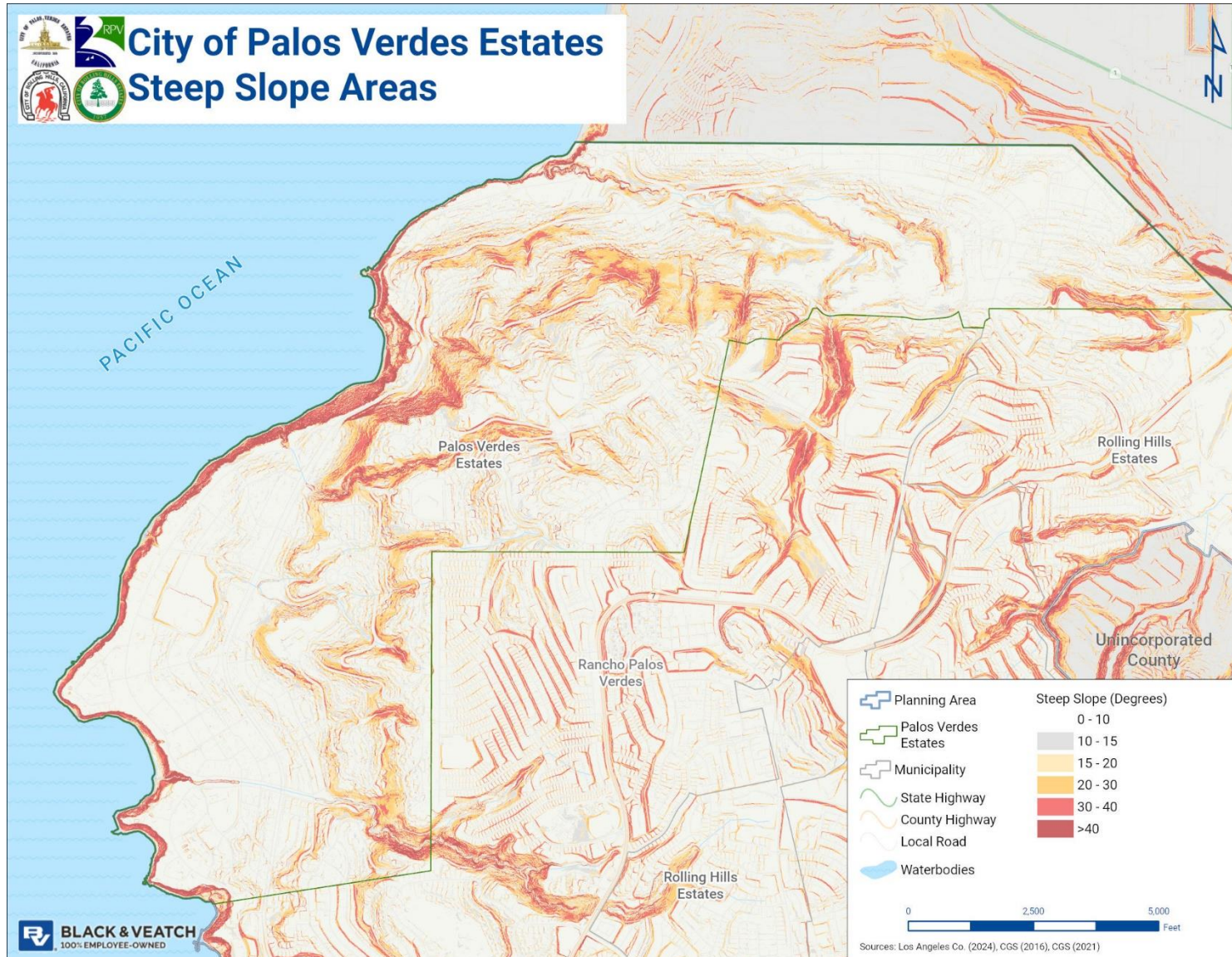


Figure 2-10 Landslide Hazard Map – Steep Slope Areas

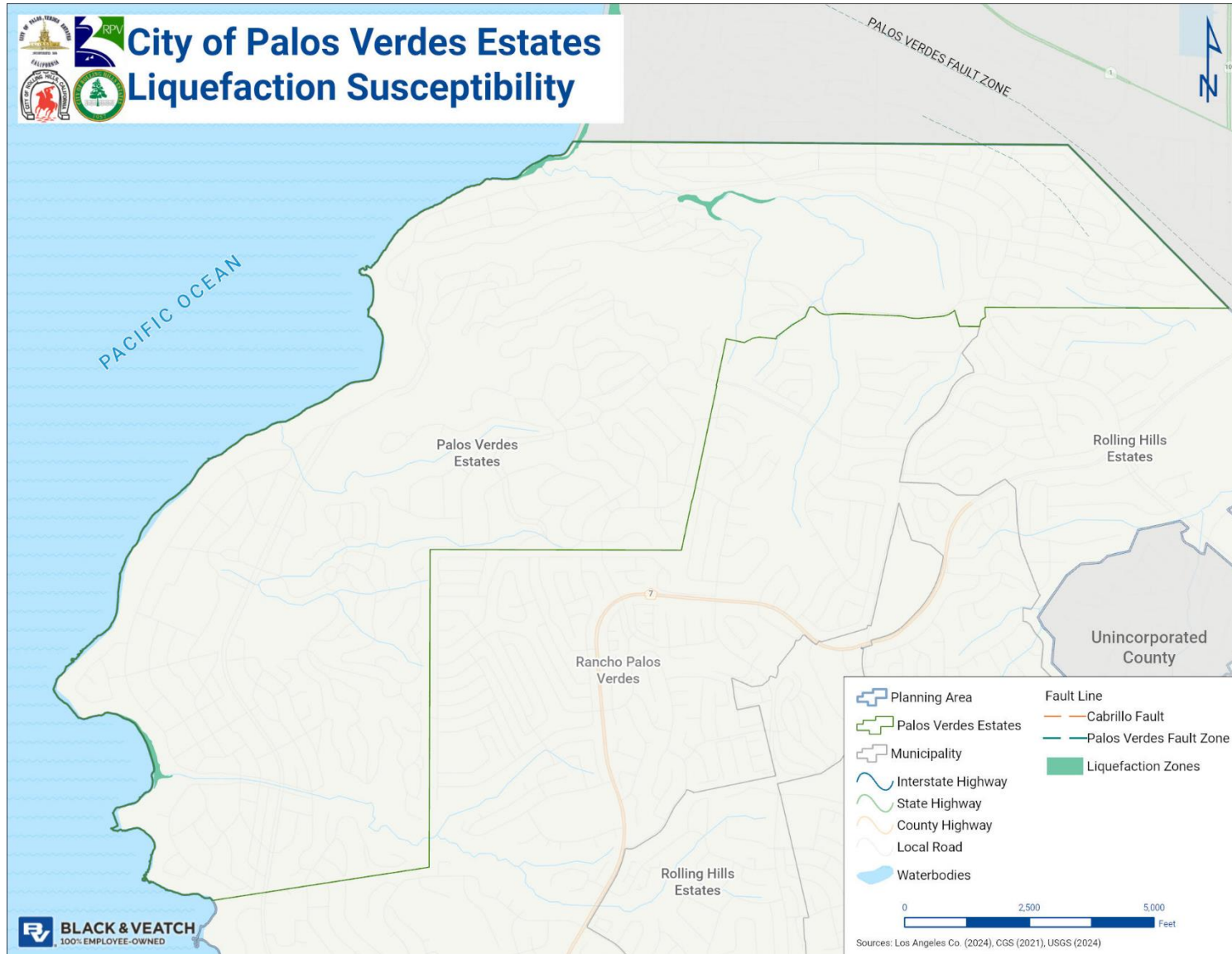


Figure 2-11 Liquefaction Hazard Map – Liquefaction Zones

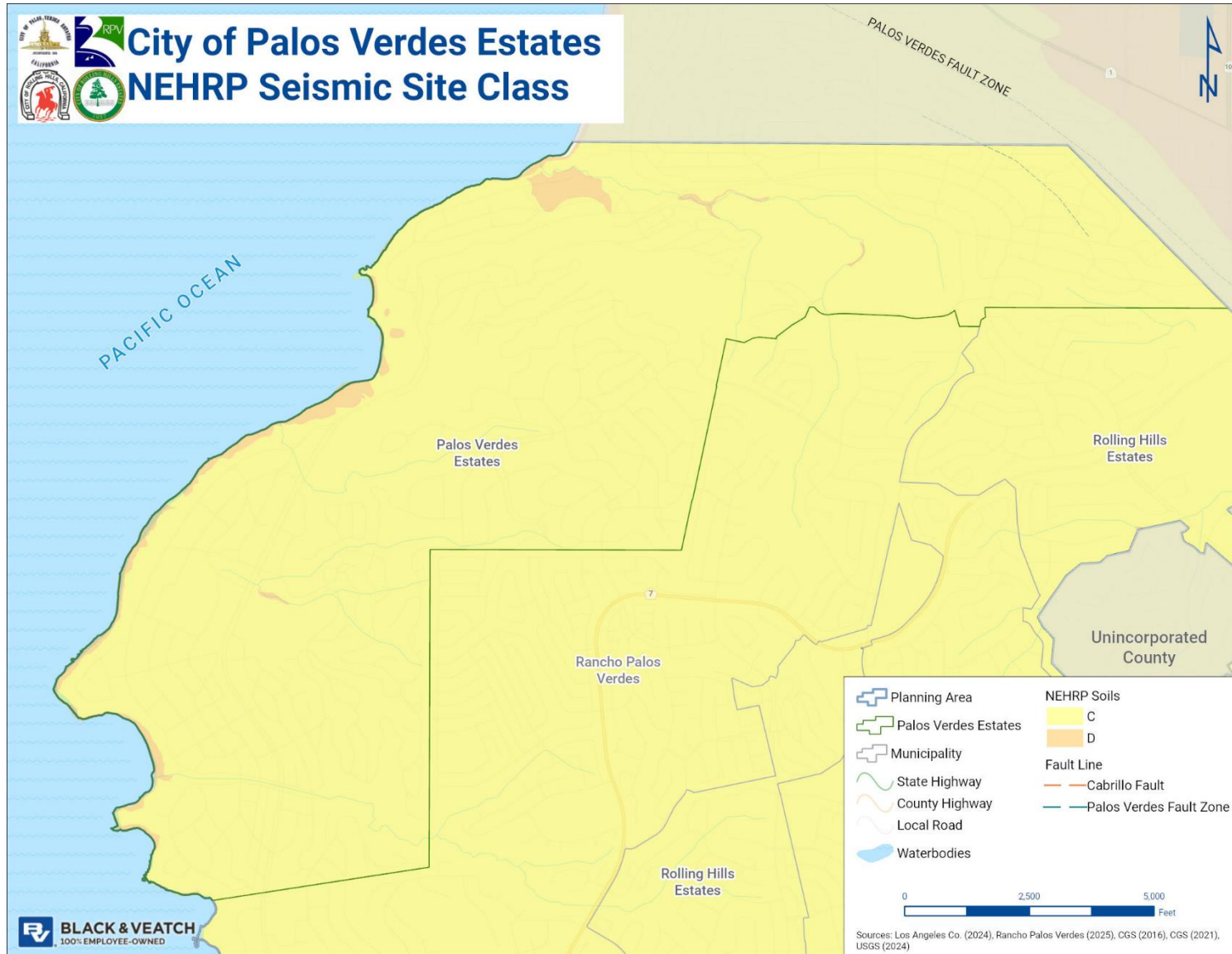


Figure 2-12 Liquefaction Hazard Map – NEHRP Seismic Site Class

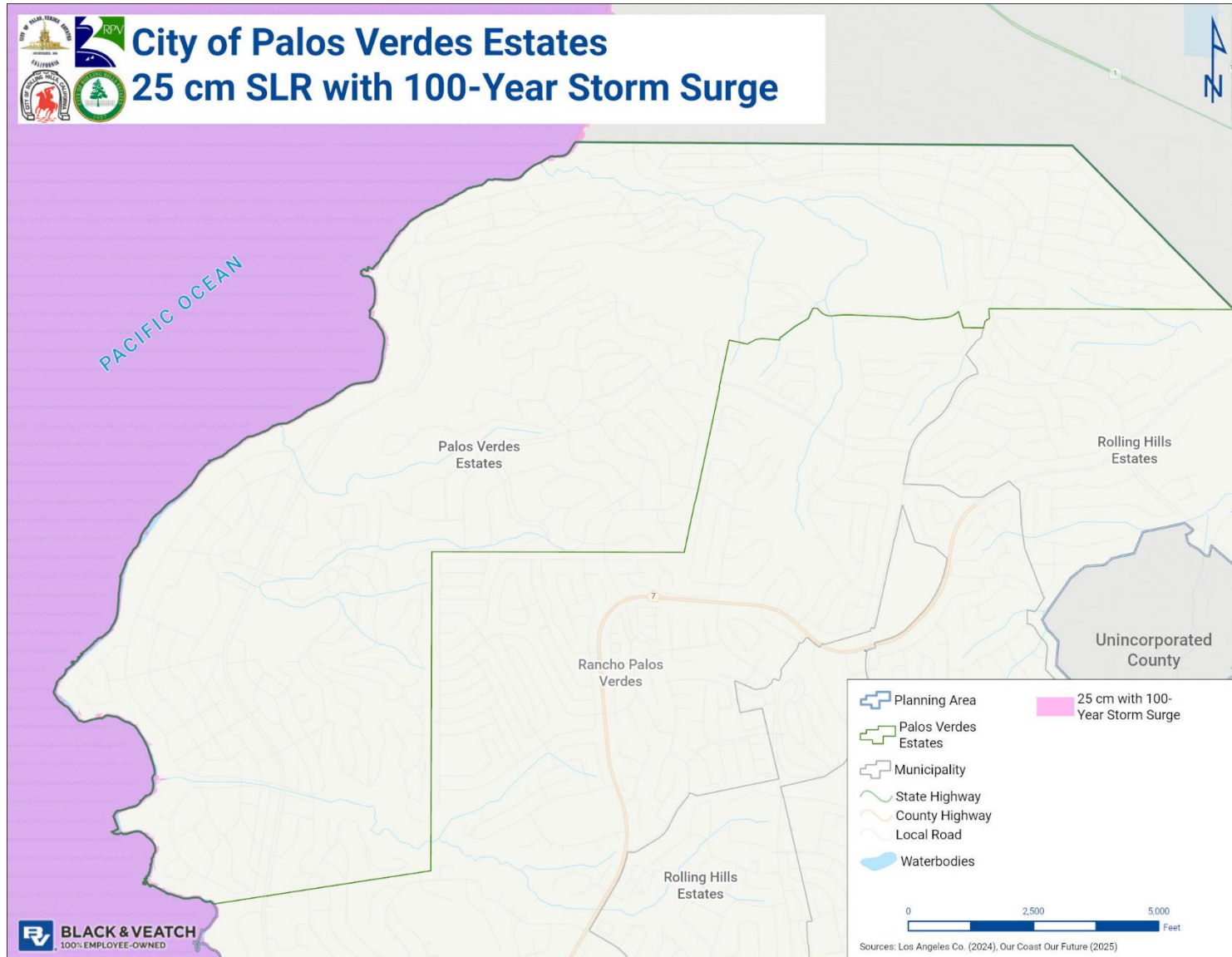


Figure 2-13 Sea Level Rise Hazard Map – 25-cm Sea Level Rise with 100-Year Storm Surge

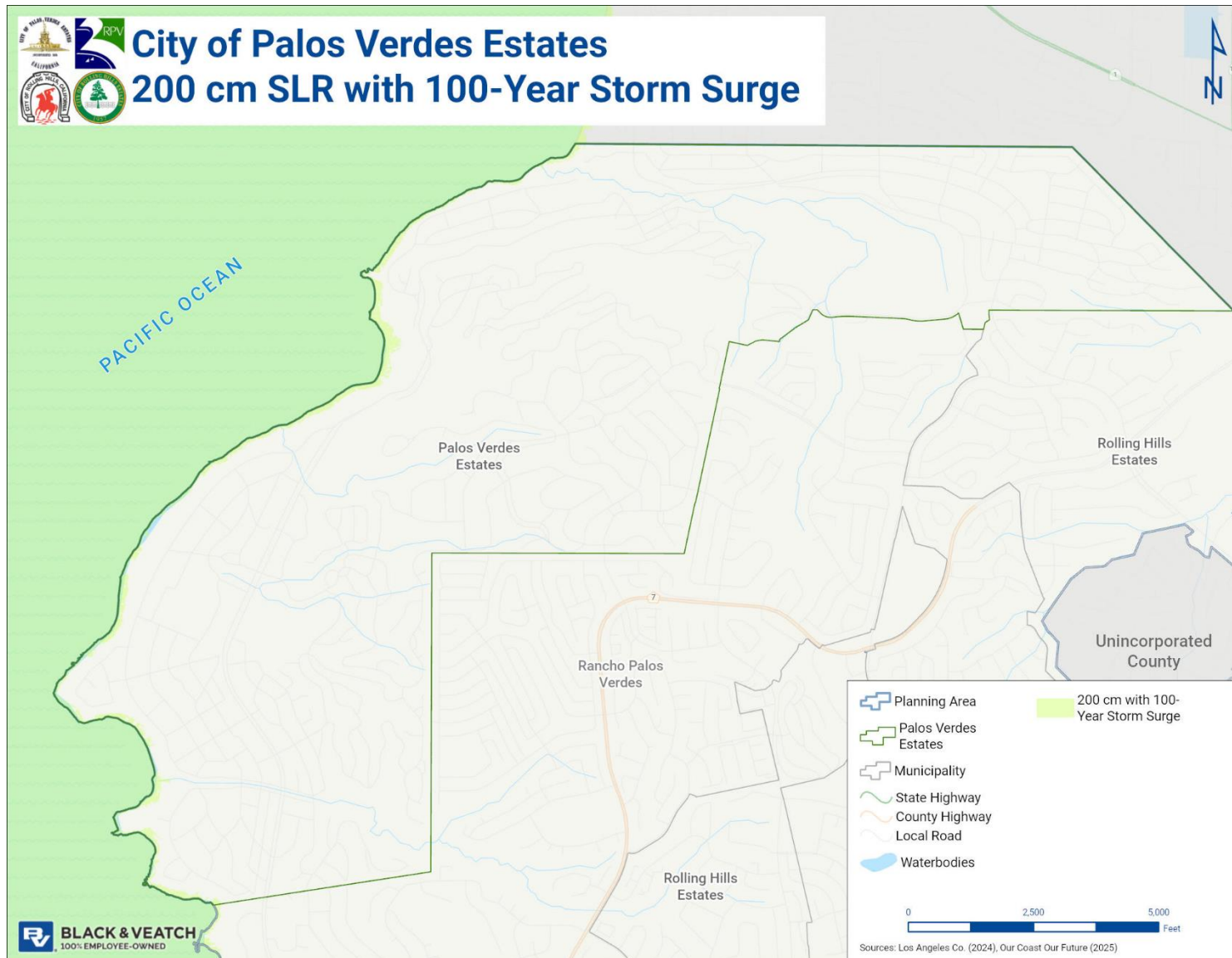


Figure 2-14 Sea Level Rise Hazard Map – 200-cm Sea Level Rise with 100-Year Storm Surge

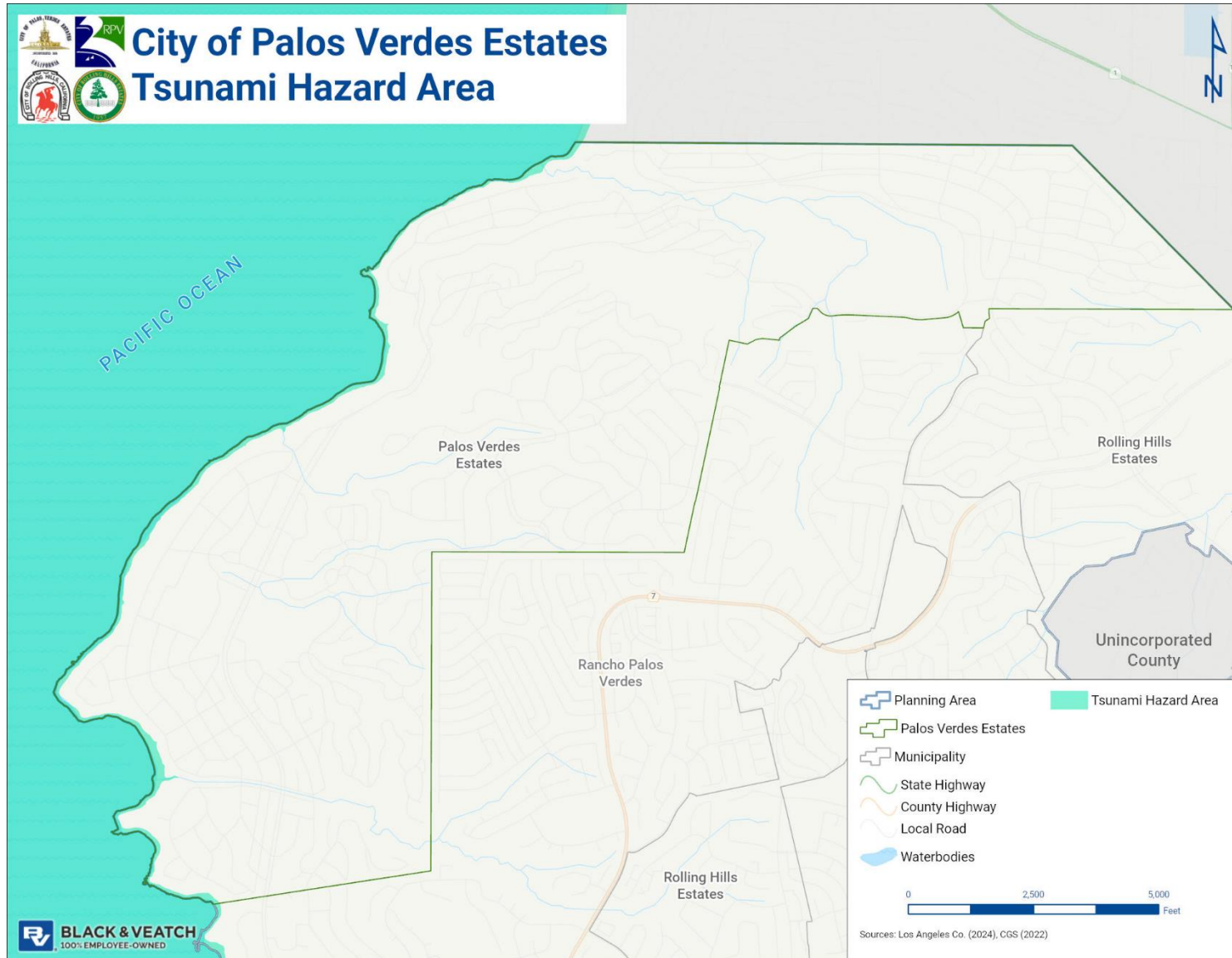


Figure 2-15 Tsunami Hazard Map – Tsunami Hazard Area

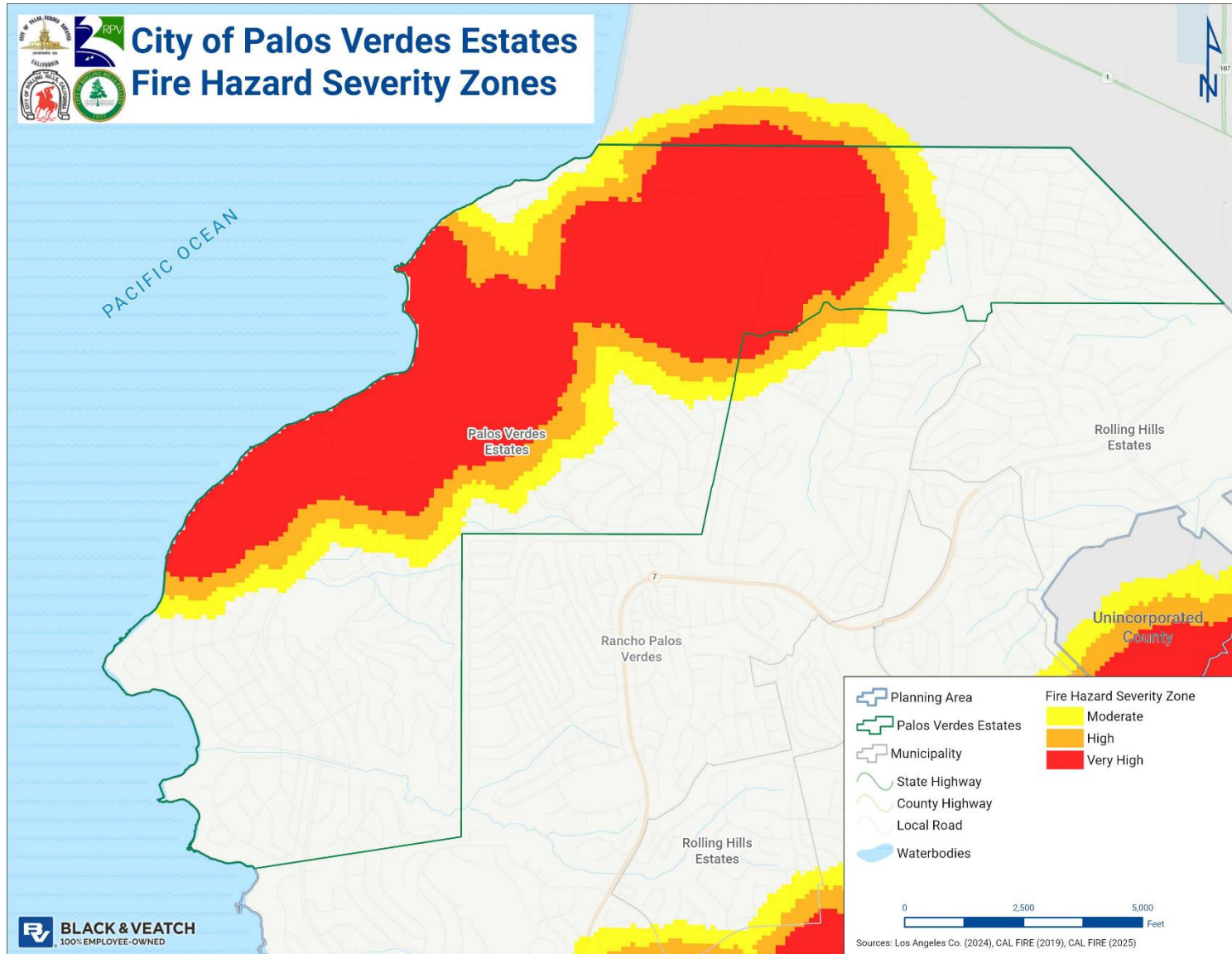


Figure 2-16 Fire Hazard Map – Fire Hazard Severity Zones

### 3. RANCHO PALOS VERDES



**Figure 3-1** Rancho Palos Verdes Point Vicente Lighthouse

Source: (Rancho Palos Verdes 2025)

### 3.1 Local Hazard Mitigation Planning Team

**Table 3-1** Local Planning Team

	Primary Point of Contact	Alternate Point of Contact
Name and Title:	Luna Mohammad	Catherine Jun
Address:	30940 Hawthorne Blvd. Rancho Palos Verdes, CA 90275	30940 Hawthorne Blvd. Rancho Palos Verdes, CA 90275
Phone Number:	310-923-3282	310-544-5203
Email:	<a href="mailto:Lmohammad@rpvca.gov">Lmohammad@rpvca.gov</a>	<a href="mailto:CJun@rpvca.gov">CJun@rpvca.gov</a>
<b>Contributors:</b>		
Name and Title:	Ara Mihranian, City Manager	
Method of Participation:	Plan Feedback, Landslide Committee	
Name and Title:	Brandy Forbes, Community Development Director	
Method of Participation:	Plan Feedback	
Name and Title:	Amy Seeraty, Community Development Senior Planner	
Method of Participation:	Plan Feedback	
Name and Title:	David Copp, Deputy Public Works Director	
Method of Participation:	Landslide Subcommittee	
Name and Title:	Matt Waters, Rec and Parks Senior Administrative Analyst	
Method of Participation:	Plan Feedback	
Name and Title:	Deanna Fraley, Public Works Principal Engineer	
Method of Participation:	Plan Feedback	
Name and Title:	Ramzi Awaad, Public Works Director	
Method of Participation:	Planning Committee	
Name and Title:	Megan Barnes, Public Information Officer	
Method of Participation:	Planning Committee	

Name and Title: Method of Participation:	Robert Moya, Deputy Finance Director Plan Feedback
Name and Title: Method of Participation:	Daniel Trautner, Recs and Park Director Plan Feedback
Name and Title: Method of Participation:	Lukasz Buchwald, IT Manager Plan Feedback
Name and Title: Method of Participation:	Octavio Silva, Community Development Deputy Director Plan Feedback
Name and Title: Method of Participation:	Irantzu Pujadas, City Management Administrative Analyst Plan Feedback
Name and Title: Method of Participation:	James O'Neil, Finance Senior Administrative Analyst Plan Feedback
Name and Title: Method of Participation:	Jane Lin, Finance Senior Accountant Plan Feedback
Name and Title: Method of Participation:	Juan Hernandez, Public Works Superintendent Plan Feedback
Name and Title: Method of Participation:	Katie Lozano, Open Space and Trails Manager Plan Feedback
Name and Title: Method of Participation:	Robert Moya, Finance Deputy Director Plan Feedback
Name and Title: Method of Participation:	Russ Bryden, Public Works Dept Principal Engineer Plan Feedback
Name and Title: Method of Participation:	Vina Ramos, Finance Director Plan Feedback
Name and Title: Method of Participation:	Eric Wolterding, Recs & Parks Dept, Administrative Analyst Plan Feedback
Name and Title: Method of Participation:	David Rasor, Building Official Plan Feedback

## 3.2 Jurisdictional Profile

### 3.2.1 Location and Features

The City of Rancho Palos Verdes is located on the Palos Verdes Peninsula in the southwest tip of Los Angeles County. The City has a total area of 13.6 square miles. The Palos Verdes Peninsula (Peninsula) has a unique physiography, formed over millions of years of submerging and lifting from the Pacific Ocean. Once an island, the Peninsula is 9 miles wide by 4 miles deep, now rises above the Los Angeles Basin, with the highest elevation at 1,480 feet. The terrain of much of the planning area is rolling hills, steep slopes, canyons and coastal bluffs (Multi-Jurisdictional Hazard Mitigation Plan for Rancho Palos Verdes and Rolling Hills Estates 2020).

The City is predominately built out with single-family residential development with scattered concentrations of multi-family residential and commercial development. The remaining vacant parcels are mostly steep slopes, canyons and areas impacted by land movement. Several park sites and an extensive amount of preserved natural open space and passive parkland, particularly along the City’s coastline, provide the majority of recreational resources for residents. (Multi-Jurisdictional Hazard Mitigation Plan for Rancho Palos Verdes and Rolling Hills Estates 2020).

### 3.2.2 History

Rancho Palos Verdes, located on the Palos Verdes Peninsula in Southern California, began as a sparsely populated area inhabited by cattle ranchers and shepherds in the late 19th century. In the early 1900s, it became a prosperous farming region. In 1913, Frank A. Vanderlip, a prominent banker, purchased the entire 16,000-acre Peninsula with the vision of creating an exclusive residential community. However, plans were delayed by the Great Depression and World War II. In 1953, the Great Lakes Carbon Corporation acquired 7,000 acres from the Vanderlip family and eventually shifted from mining to residential development (Rancho Palos Verdes 2025).

As development accelerated in the 1950s and 1960s, concerns grew over the environmental impact and lack of planning. This led to the formation of the Peninsula Advisory Council and later the grassroots group Save Our Coastline, which opposed unchecked development. These efforts culminated in the incorporation of Rancho Palos Verdes as a city. The County agency responsible for conducting incorporations, the Local Agency Formation Commission, set the election for the proposed city of Rancho Palos Verdes on August 28, 1973 (Rancho Palos Verdes 2025). City incorporation officially occurred and is recognized as September 7, 1973.

### 3.2.3 Governance

The City of Rancho Palos Verdes is governed by a Council-Manager form of government. The Rancho Palos Verdes City Council assumes responsibility for adoption of this plan, and the Rancho Palos Verdes City Manager will oversee its implementation.

## 3.3 Current Trends

### 3.3.1 Population

According to the California Department of Finance, the population of the City of Rancho Palos Verdes as of May 2025 was 40,727. Since 1980, the population has grown at an average annual rate of 2 percent.

### 3.3.2 Development

**Table 3-2 Recent and Expected Future Development Trends**

Criterion	Response
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan?	No
<ul style="list-style-type: none"> <li>If yes, give the estimated area annexed and estimated number of parcels or structures.</li> </ul>	N/A
Is your jurisdiction expected to annex any areas during the performance period of this plan?	No
<ul style="list-style-type: none"> <li>If yes, describe land areas and dominant uses.</li> </ul>	N/A
<ul style="list-style-type: none"> <li>If yes, who currently has permitting authority over these areas?</li> </ul>	N/A
Provide the number of new construction permits for each hazard area or provide a qualitative description of where development has occurred.	77 new construction permits (new SFRs and ADUs combined) City-wide since 2020.

Criterion	Response					
Are any areas targeted for development or major redevelopment in the next 5 years?	The City's Housing Element identifies 31 potential housing sites throughout the City as part of the 2021-2029 housing cycle.					
<ul style="list-style-type: none"> <li>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</li> </ul>	Sites are located along existing and developed commercial corridors (Western Avenue, Hawthorne Blvd., and Silver Spur Road). Other sites include previously developed institutional uses along PVDS and two vacant residential lots (one on Clipper Rd. and one on Montemalaga Dr.)					
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?		<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
	Single Family	6	2	8	8	2
	Multi-Family	0	0	0	0	0
	Other (mobile homes, accessory dwellings, mixed use, etc.)	5	5	14	14	13
	Commercial	0	0	0	0	0
	<b>Total</b>	<b>11</b>	<b>7</b>	<b>22</b>	<b>22</b>	<b>15</b>
Describe the level of buildout in the jurisdiction, based on your jurisdiction's buildable lands inventory. If no such inventory exists, provide a qualitative description.	No buildable land inventory is available. Buildout throughout the City has been limited to single-family residential development including the construction of new single-family structures on vacant lots along with demo and rebuilding of single-family structures. ADU development focused on existing and developing single-family residential lots.					

### 3.4 Capability Assessment

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

Findings of the capability assessment were reviewed to identify opportunities to expand or improve upon capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan.

#### 3.4.1 Planning and Regulatory Capabilities

Jurisdictions can develop policies and programs and implement rules and regulations to protect and serve residents. Local policies are typically identified in community plans, implemented through local ordinance, and enforced through a governing body. An assessment of planning and regulatory capabilities is presented in Table 3-3.

Table 3-3 Planning and Regulatory Capabilities

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Codes, Ordinances, and Requirements</b>				
<b>Building Code</b>	Yes	No	Yes	Yes
<b>Comment:</b>	<i>Building Code (Chapter 15) specifies how new structures can be built. It includes the California Building Code, in addition to any amendments made by the City. Mitigation actions may involve amending the Building Code to improve a building's safety or structural stability.</i>			
<b>Zoning Code</b>	Yes	No	Yes	Yes
<b>Comment:</b>	<i>Zoning Ordinance (Chapter 17) implements the City's General Plan by establishing specific regulations for development. It includes standards for where development can be located, how buildings must be sized, shaped, and positioned, and what types of activities can occur in an area. Hazard mitigation actions that pertain to new or substantially redeveloped buildings can be adopted into the Zoning Ordinance.</i>			
<b>Subdivisions</b>	Yes	No	Yes	Yes
<b>Comment:</b>	<i>Chapter 16 (Subdivisions) regulates and controls the design and improvement of subdivisions and to coordinate subdivision planning with the city's general and specific plans.</i>			
<b>Stormwater Management</b>	Yes	No	No	Yes
<b>Comment:</b>	<i>Chapter 13.10 (Stormwater and Urban Runoff Pollution Control) ensures the future health, safety and general welfare of the citizens of the city and the water quality of the Santa Monica Bay and surrounding coastal areas.</i>			
<b>Post-Disaster Recovery</b>	Yes	Yes	No	Yes
<b>Comment:</b>	<i>Temporary housing ordinance - No. 687U, adopted September 3, 2024</i>			
<b>Real Estate Disclosure</b>	No	Yes	Yes	No
<b>Comment:</b>	<i>California Civil Code 1102 and 1103 which requires disclosure by the seller and/or seller's agent to the potential buyer if the property is subject to flooding or fire hazards.</i>			
<b>Growth Management</b>	Yes	No	No	Yes
<b>Comment:</b>	<i><a href="#">Landslide Moratorium</a> On August 19, 2025, the City Council adopted an ordinance amending the Rancho Palos Verdes Municipal Code to prohibit new residential construction within the landslide complex, including home additions, effective September 18, 2025.</i>			
<b>Site Plan Review</b>	Yes	No	No	No
<b>Comment:</b>	<i>Chapter 17.70 (Site Plan Review) provides procedures that enable the director and/or planning commission to check development proposals for conformity with the provisions of this title and for the manner in which they are applied when no other application is required under this code. The code requires that no new impacts, including, but not limited to, grading, grubbing, development, or conversion to agriculture, within CSS anywhere in the plan area or within any habitat type within the preserve or on vacant lots abutting the preserve, requiring discretionary approval within the City be approved without the City making a determination of conformance to the NCCP/HCP, adopted by the City Council pursuant to Resolution 2019-61, and as may later be amended. Conformance will be demonstrated if the impact is associated with a covered project or activity defined in the NCCP/HCP and all relevant avoidance and minimization measures are included per sections 5.5 and 5.6 of the NCCP/HCP.</i>			
<b>Environmental Protection</b>	Yes	No	No	Yes
<b>Comment:</b>	<i>Chapter 17.56 (Environmental Protection) protects properties and people from environmental nuisances and hazards and sets tolerance levels for adverse environmental effects created by any use or development of land.</i>			
<b>Flood Damage Prevention</b>	Yes	No	No	Yes
<b>Comment:</b>	<i>Chapter 15.42 (Floodplain Management) establishes land use regulation for properties situated in flood prone areas. The director of public works is the designated floodplain administration who is responsible for administering, implementing, and enforcing the code by reviewing development permits in flood prone areas of the City, by ensuring compliance with the provisions of this chapter, and by preventing development in flood prone areas in the city unless the applicant has obtained all necessary permits from those governmental agencies whose approval is required by federal, state, or local law. The City requires that all new construction and</i>			

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
substantial improvements within the special flood hazard area must have the bottom of their first floor elevated to at least 1 foot above the base flood elevation.  Chapter 13.08 (Flood Control Channels)				
<b>Emergency Management</b>	Yes	No	Yes	Yes
<b>Comment:</b> Chapter 2.24 (Disaster Council) – the purpose of the council is to develop and recommend for adoption by the city council, emergency and mutual aid plans and agreements as are necessary to implement such plans and agreements.				
<b>Climate Change</b>	No	No	No	No
<b>Comment:</b> -				
<b>Planning Documents</b>				
<b>General Plan</b>	Yes	No	Yes	Yes
<b>Is the General Plan compliant with Assembly Bill 2140?</b>	Yes			
<b>Comment:</b> General Plan outlines long-term direction for development and policy in a community. There are opportunities to coordinate local hazard mitigation actions with policies governed by the General Plan. Next update to General Plan Safety Element should include integration with the Hazard Mitigation Plan. Also, General Plan is an excellent resource to assist with implementing many of the mitigation action items identified in the Hazard Mitigation Plan.				
<b>Capital Improvement Plan</b>	Yes	No	No	Yes
<b>How often is the plan updated?</b> Five years				
<b>Comment:</b> The <a href="#">Capital Improvement Program</a> plans activities for City-owned facilities and infrastructure for the next 5 years. Mitigation actions may involve construction of new or upgraded facilities and infrastructure.				
<b>Disaster Debris Management Plan</b>	No	No	No	No
<b>Comment:</b> -				
<b>Floodplain or Watershed Plan</b>	Yes	Yes	No	Yes
<b>Comment:</b> <a href="#">Enhanced Watershed Management Program</a> (EWMP) (2019) was developed to implement the requirements of the MS4 Permit on a watershed scale. The goal of these requirements is to reduce the discharge of pollutants to meet the requirements of the regional water quality control board.				
<b>Stormwater Plan</b>	Yes	No	No	No
<b>Comment:</b> The Master Plan of Drainage (2013) provides an analysis of existing storm drain facilities located within the City of Rancho Palos Verdes. The goal of the MPD is to provide information for long-range planning of drainage facility improvements.				
<b>Urban Water Management Plan</b>	Yes	No	No	Yes
<b>Comment:</b> <a href="#">Cal Water Urban Water Management Plan</a> (2021) supports the Palos Verdes District’s historical and projected water demands, water supplies, supply reliability and potential vulnerabilities, water shortage contingency planning, and demand management programs.				
<b>Habitat Conservation Plan</b>	Yes	Yes (HCP)	Yes (NCCP)	Yes
<b>Comment:</b> <a href="#">Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP)</a> (2019) – The Natural Community Conservation Planning Act of 1991, as amended (NCCP Act, California Fish and Game Code Section 2800, et seq.) provides for the preparation and implementation of large-scale natural resource conservation plans. A <b>Natural Community Conservation Plan</b> (NCCP) must identify and provide for the regional or area-wide protection and management of natural wildlife diversity while allowing for compatible and appropriate development and growth. A <b>Habitat Conservation Planning</b> (HCP) process of the Endangered Species Act (ESA) provides an opportunity for species protection and habitat conservation within the context of non-Federal development and land use activities.				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
	The City developed an NCCP/HCP that covers the entire City with the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS). It was prepared to maximize the benefits to wildlife and vegetation communities while accommodating appropriate economic development within the City pursuant to the requirements of the NCCP Act and Section 10(a) of the ESA. This NCCP/HCP is intended to provide for the comprehensive management and conservation of multiple species, including but not limited to those species protected under the ESA.			
<b>Economic Development Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Community Wildfire Protection Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Forest Management Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Climate Action Plan</b>	Yes	No	No	No
<b>Comment:</b>	<a href="#">RPV Emission Reduction Action Plan</a> (2017) – this plan was developed to help the City reduce GHG emissions within in the City. It serves as a guide for action by setting GHG emissions reduction goals and establishing strategies and policies to achieve desired outcomes over the next 20 years. The plan identifies community-wide strategies to lower GHG emissions from a range of sources within the City, including transportation, land use, energy generation and consumption, water, and waste. The plan also aligns with California’s policies that address climate change.			
<b>Threat and Hazard Identification and Risk Assessment (THIRA)</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Post-Disaster Recovery Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Continuity of Operations Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Emergency Operations Plan</b>	Yes	No	No	Yes
<b>Comment:</b>	<b>Emergency Operations Plan</b> was recently updated in December 2025 and is a reference and guidebook to operations during a major emergency impacting Rancho Palos Verdes. The Plan includes a discussion on a wide range of hazards, organization and staffing of the Emergency Operations Center, and connectivity with field responders and external agencies. The Emergency Operations Plan is an excellent source of hazard information for the Hazard Mitigation Plan. Following the activation of the EOP/EOC it is routine to prepare an After-Action Plan. The AAR should include documentation of changes in hazards and vulnerability. That information could be very useful during future HMP updates.			
<b>Public Health Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Other</b>	Yes	No	No	No
<b>Comment:</b>	The 2015 Parks Master Plan Update (PMPU) updated the 1989 Parks Master Plan and established a comprehensive strategy for addressing the future planning of the City’s parks, recreation, and open space resources. The PMPU will function as a living document to help guide and respond to changes in the City’s future park, open space and recreational needs. The PMPU is not intended to be strictly binding to present and future City Councils and the City residents but instead should function as a long-range vision for providing recreation opportunities, with a flexible framework that can be adapted to changes in technology, demographics, economic realities, and recreational trends and preferences.			

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<p><a href="#">Trails Network Plan</a> – On November 27, 1984, the City Council adopted the City’s Trail Network Plan which is intended to serve as an advisory tool for the City decision makers for the implementation and funding of City trails. In the past twenty years, the City has actively sought to acquire and permanently preserve open space within its boundaries. Over this span of time, the City, with active participation from the City’s Preserve Habitat Manager, the Palos Verdes Peninsula Land Conservancy (PVPLC), the City has built the 1,400-acre Palos Verdes Nature Preserve.</p> <p>As a means of implementing the Trails Network Plan, on January 22, 1990, the City Council adopted the Conceptual Trails Plan (CTP) and Conceptual Bikeways Plan (CBP), as two separate documents. Collectively, the CTP and CBP serve as the City’s Trails Network Plan (TNP). The CTP was revised on May 21, 1991, September 16, 1991, and October 26, 1991. The CBP was revised on October 15, 1996. The TNP has not been updated since the mid-1990s.</p> <ul style="list-style-type: none"> <li>• <a href="#">Conceptual Trails Plan</a></li> <li>• <a href="#">Conceptual Bicycle Plan</a></li> </ul> <p><a href="#">Public Use Master Plan</a> – The NCCP required the City to prepare this plan for the nature preserve. It addresses issues pertaining to the preserve including public access, trail and trailhead locations, parking, trail use, fencing, signage, and lighting.</p>				

### Opportunities to Expand Planning and Regulatory Capabilities

The table above, Section 3.6 (Integration), and Section 3.9 (Hazard Mitigation Strategy) identifies opportunities for the City to strengthen planning and regulatory capabilities through hazard mitigation integration. Aligning mitigation efforts with updates to codes, ordinances, and planning initiatives fosters a coordinated approach to reducing hazard risk, supporting resilient development and a safer community. During the MJLHMP update process, the City identified the following areas as priorities for potential integration:

- Building Code
- Zoning Code
- Subdivision
- Stormwater Management
- Post-Disaster Recovery
- Real Estate Disclosure
- Growth Management
- Environmental Protection
- Flood Damage Prevention
- Emergency Management
- General Plan
- Capital Improvement Plan
- Urban Water Management Plan
- Habitat Conservation Plan
- Emergency Operations Plan

### 3.4.2 Development and Permitting Capabilities

Jurisdictions regulate land use through the adoption and enforcement of zoning, subdivision and land development ordinances, building codes, building permit ordinances, floodplain, and stormwater management ordinances. When effectively prepared and administered, these regulations can lead to hazard mitigation. Development and permitting capabilities are presented in Table 3-4.

**Table 3-4 Development and Permitting Capabilities**

Criterion	Response
Does your jurisdiction issue development permits?	Yes
If no, who does? If yes, which department?	Community Development Department
Does your jurisdiction track permits by hazard area?	No
Does your jurisdiction have a buildable lands inventory?	No

### 3.4.3 Fiscal Capabilities

Assessing a jurisdiction’s fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant funding eligibility and local jurisdictional authority to generate internal financial capability, such as through impact fees. An assessment of fiscal capabilities is presented in Table 3-5.

**Table 3-5 Fiscal Capabilities**

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No

### Opportunities to Expand Fiscal Capabilities

The table above, Section 3.6 (Integration), and Section 3.9 (Hazard Mitigation Strategy) identifies opportunities for the City to strengthen fiscal capabilities through hazard mitigation integration. Through the City’s Capital Improvement Plan, the City seeks to identify projects that can reduce hazard risk in the City. If feasible, the City will prioritize those projects and implement them accordingly. The City will continue to identify grant opportunities as well to fund mitigation projects.

### 3.4.4 Administrative and Technical Capabilities

Planning, regulatory, and fiscal capabilities provide the backbone for successfully developing a mitigation strategy; however, without the appropriate personnel, the strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard mitigation. These resources include technical experts, such as engineers and scientists, as well as personnel with capabilities that may be found in multiple departments, such as grant writers. An assessment of administrative and technical capabilities is presented in Table 3-6.

**Table 3-6 Administrative and Technical Capabilities**

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	Yes
<i>If Yes, Department /Position:</i>	<i>Community Development Department – Planning Division; Public Works Department</i>
Engineers or professionals trained in building or infrastructure construction practices	Yes
<i>If Yes, Department /Position:</i>	<i>Public Works Department – engineer; Building and Safety – Building Official and Inspectors, plan checker</i>
Planners or engineers with an understanding of natural hazards	Yes
<i>If Yes, Department /Position:</i>	<i>Public Works Department – engineers; Community Development - Planners</i>
Staff with training in benefit-cost analysis	Yes
<i>If Yes, Department /Position:</i>	<i>Finance Department; Public Works Department</i>

Staff/Personnel Resource		Available?
Surveyors		Yes
<i>If Yes, Department /Position:</i>	Public Works Department	
Personnel skilled or trained in GIS applications		Yes
<i>If Yes, Department /Position:</i>	Community Development Department – Planning Division AND contracted; Public Works Department	
Scientist familiar with natural hazards in local area		No
Emergency Manager		Yes
<i>If Yes, Department /Position:</i>	City Administration Department, Senior Management Analyst; The Emergency Preparedness Committee advises and assists the City Council and staff to ensure that the City of Rancho Palos Verdes develops and maintains a high state of readiness to respond to a wide variety of emergencies and disasters.	
Grant writers		Yes
<i>If Yes, Department /Position:</i>	Contracted out or done by department heads and senior level staff	
Procurement Services and Management		Yes
<i>If Yes, Department /Position:</i>	Finance Department Public Works Department	

### Opportunities to Expand Administrative and Technical Capabilities

The table above, Section 3.6 (Integration), and Section 3.9 (Hazard Mitigation Strategy) identifies opportunities for the City to strengthen administrative and technical capabilities through hazard mitigation integration. When possible, City personnel will complete training to expand their existing capabilities. Developing and expanding these skills will help improve decision-making, make implementation more efficient, and support ongoing progress toward building a more resilient community.

### 3.4.5 Education and Outreach Capabilities

Regular engagement with the public on issues regarding hazard mitigation provides an opportunity to directly interface with community members. Assessing the education and outreach capability illustrates the connection between the government and community members, which opens a two-way dialogue that can result in a more resilient community, based on awareness and engagement. An assessment of education and outreach capabilities is presented in Table 3-7.

**Table 3-7 Education and Outreach Capabilities**

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website?	Yes
<i>If yes, briefly describe:</i>	The City of Rancho Palos Verdes hosts numerous special programs related to public safety, in coordination with the Sheriff's and Fire Departments, and other community partners. The <a href="#">City's website</a> has information on emergency preparedness and links to the EOP and HMP.
Do you use social media for hazard mitigation education and outreach?	Yes
<i>If yes, briefly describe:</i>	RPV has a YouTube channel, Facebook, Instagram, X, and Nextdoor accounts that are used to conduct outreach to residents.
Do you have any citizen boards or commissions that address issues related to hazard mitigation?	Yes
<i>If yes, briefly describe:</i>	Emergency Preparedness Committee; Infrastructure Management Advisory Committee

Criterion		Response
Do you have any other programs in place that could be used to communicate hazard-related information?		Yes
<i>If yes, briefly describe:</i>	<i>PVP CERT, RPV CHOA, RPVtv, PVAN, PVPready.gov</i>	
Do you have any established warning systems for hazard events?		Yes
<i>If yes, briefly describe:</i>	<i>Alert South Bay</i>	

### Opportunities to Expand Education and Outreach Capabilities

The table above, Section 3.6 (Integration), and Section 3.9 (Hazard Mitigation Strategy) identifies opportunities for the City to strengthen education and outreach capabilities through hazard mitigation integration. This can be done by building on current efforts like the city website, social media pages, and through CERT and the emergency preparedness committee. Focusing on these efforts, the City will continue increasing awareness and help the community become better prepared for future natural hazards.

### 3.4.6 Community Classifications

Table 3-8 Community Classifications

	Participating?	Classification or Number	Date Classified
FIPS Code	Yes	06-037-2929	N/A
UEI Number	Yes	JNBQJPKHKMF9	N/A
Community Rating System	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	59573	2022
Public Protection (ISO for Fire)	Yes	2	2017
StormReady	No	N/A	N/A
TsunamiReady	No	N/A	N/A
Firewise	No	N/A	N/A

### 3.4.7 Adaptive Capacity for Climate Change

Table 3-9 Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating <sup>a</sup>
<b>Technical Capacity</b>	
Jurisdiction-level understanding of potential climate change impacts	High
<i>Comment:</i>	<i>The City has a good understanding of potential climate change impacts and integrates the projections and risks into planning and decision-making, where applicable.</i>
Jurisdiction-level monitoring of climate change impacts	Medium
<i>Comment:</i>	<i>The City does some monitoring of climate change impacts; however, expanded additional data collection and coordination can help strengthen monitoring and understanding.</i>
Technical resources to assess proposed strategies for feasibility and externalities	Low
<i>Comment:</i>	<i>We'd need to identify and contract out, dependent on budget, time, and other conditions.</i>
Jurisdiction-level capacity for development of GHG emissions inventory	Low
<i>Comment:</i>	<i>Low, since it is not currently a priority.</i>
Capital planning and land use decisions informed by potential climate impacts	High
<i>Comment:</i>	<i>Potential climate change impacts are integrated into planning, land use decisions, and capital improvement projects which helps make the City more resilient and ensures projects reduce risk and/or provide protection against future hazards.</i>

Criterion	Jurisdiction Rating <sup>a</sup>
Participation in regional groups addressing climate risks	Low
<i>Comment:</i>	-
<b>Implementation Capacity</b>	
Clear authority/mandate to consider climate change impacts during public decision-making processes	Low
<i>Comment:</i>	-
Identified strategies for GHG mitigation efforts	Low
<i>Comment:</i>	-
Identified strategies for adaptation to impacts	Medium
<i>Comment:</i>	<i>As part of this HMP update, the City identified strategies for adapting to potential impacts from natural hazards, while considering climate change projections in developing the strategies.</i>
Champions for climate action in local government departments	Low
<i>Comment:</i>	-
Political support for implementing climate change adaptation strategies	Medium
<i>Comment:</i>	<i>There is some political support for implementing climate change strategies.</i>
Financial resources devoted to climate change adaptation	Low
<i>Comment:</i>	-
Local authority over sectors likely to be negative impacted	High
<i>Comment:</i>	<i>The City has the authority over sectors likely to be impacted by climate change, which helps the City put plans and actions in place to help reduce those impacts.</i>
<b>Public Capacity</b>	
Residents' knowledge of and understanding of climate risk	High
<i>Comment:</i>	<i>Community awareness of climate risks is generally strong, supported by visible local impacts and public information efforts.</i>
Residents' support of adaptation efforts	Medium
<i>Comment:</i>	<i>There is support from residents; however, it can vary depending on the issue, costs, or visible benefits. The City will continue expanding public outreach efforts to help inform residents of adaptation efforts.</i>
Residents' capacity to adapt to climate impacts	Medium
<i>Comment:</i>	<i>Residents have some ability to prepare for and adapt to climate change; however, funding, resources, and access to information may limit adaptive capacity across the City.</i>
Local economy current capacity to adapt to climate impacts	Medium
<i>Comment:</i>	<i>Some local businesses have the ability to adapt to climate change; however, funding, resources, and access to information may limit adaptive capacity across the City.</i>
Local ecosystems capacity to adapt to climate impacts	Medium
<i>Comment:</i>	<i>The City's ecosystems and natural environment can adapt to climate impacts; however, there are certain habitats that remain vulnerable or have limited ability to adjust without protection or restoration efforts.</i>

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

### 3.5 National Flood Insurance Program Compliance

Table 3-10 National Flood Insurance Program Compliance

Criterion	Response
<b>Flood Risk Summary</b>	
Please describe areas of the jurisdiction prone to flooding, specifically those outside of the mapped floodplain.	None identified outside of mapped floodplain
Do FEMA flood maps adequately address flood risk in the jurisdiction?	Yes

Criterion	Response
How many structures in the jurisdictions SFHA have been determined to be substantially damaged from any hazard event?	0/3
Additional comments on flood risk	-
<b>Staff Resources</b>	
Provide an explanation of the jurisdiction’s NFIP administration services (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	RPV Municipal Code: Chapter 15.42 “Floodplain Management” establishes land use regulations for properties situated in flood prone areas.
What local department is responsible for floodplain management?	Public Works
Who is your floodplain administrator? (department/position)	Public Works Director
Are any staff certified floodplain managers (CFMs)?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program?	Yes
<i>If yes, what type of assistance/training is needed?</i>	Basic overview/refresher
<b>Insurance Summary <sup>a</sup></b>	
How many flood insurance policies are in force in your jurisdiction?	53
<i>What is the insurance in force?</i>	\$16,968,000
<i>What is the premium in force?</i>	\$35,458
How many total loss claims have been filed in your jurisdiction?	Unknown
<i>What were the total payments for losses?</i>	\$261,095
Does the jurisdiction maintain a list of properties that have been damaged by flooding?	No
Does the jurisdiction maintain a list of property owners interested in flood mitigation?	No
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	Unknown
How many properties have been mitigated (elevation or acquisition)?	Zero
<b>Compliance History</b>	
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	Zero/None known
Does your jurisdiction have a Substantial Damage Response Plan?	No
Summarize the jurisdiction’s Substantial Damage determination procedures.	N/A
Summarize the jurisdiction’s Substantial Improvement procedures.	N/A
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	December 15, 2020
Are any RiskMAP projects currently underway in your jurisdiction?	No
<b>Regulation</b>	
What is the date that your flood damage prevention ordinance was last amended?	4/21/21
Does the jurisdiction’s administration of the floodplain exceed NFIP requirements? (freeboard, mapping, etc.)	No
<b>Community Rating System</b>	
Does your jurisdiction participate in the Community Rating System (CRS)?	No
<i>If yes, is your jurisdiction interested in improving its CRS Classification?</i>	N/A

a. According to FEMA statistics as of (August 30, 2025)

## 3.6 Integration

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

### 3.6.1 Existing Integration

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

- **RPV General Plan** – Outlines long-term direction for development and policy in a community. There are opportunities to coordinate local hazard mitigation actions with policies governed by the General Plan. Next update to General Plan Safety Element should include integration with the Hazard Mitigation Plan. Also, General Plan is an excellent resource to assist with implementing many of the mitigation action items identified in the Hazard Mitigation Plan. Last updated 2018 – currently undergoing an update.
- **RPV Emergency Operations Plan** - Reference and guidebook for operations during a major emergency impacting Rancho Palos Verdes. The Plan includes a discussion on a wide range of hazards, organization and staffing of the Emergency Operations Center, and connectivity with field responders and external agencies. The Emergency Operations Plan is an excellent source of hazard information for the Hazard Mitigation Plan. Following an activation of the EOP/EOC, it is routine to prepare an After-Action Plan. The AAR should include documentation of changes in hazards and vulnerability. That information could be very useful during future HMP updates. Last updated 2018 – currently undergoing an update.
- **RPV Continuity of Operations Plan** – Provides information and procedures on how the City of Rancho Palos Verdes can continue government operations and services during emergencies. Last updated 2018 – currently undergoing an update.
- **RPV Capital Improvement Program** - Plans activities for City-owned facilities and infrastructure for the next 5 years. Mitigation actions may involve construction of new or upgraded facilities and infrastructure.
- **RPV Master Plan of Drainage** - Provides an analysis of existing storm drain facilities located within the City of Rancho Palos Verdes. The goal of the MPD is to provide long-range planning and prioritization of drainage facility improvements within the City.
- **Enhanced Palos Verdes Peninsula Watershed Management Plan** - Collaborative effort among jurisdictions of the Palos Verdes Peninsula to comply with federal and state water quality regulations.
- **RPV Natural Communities Conservation Plan/Habitat Conservation Plan** - Provide for regional protection of sensitive species and their habitats, while streamlining appropriate economic activity.
- **South Bay Cities Council of Governments Climate Action Plan 2017** - Outlines strategies for reducing GHG emissions in the South Bay region of Los Angeles County.
- **RPV Emission Reduction Action Plan 2017** - Comprehensive plan to reduce GHG emissions within the community.
- **RPV Parks Master Plan Update 2015** - Comprehensive strategy for addressing the future planning of the City’s parks, recreation, and open space resources.

### 3.6.2 Opportunities for Future Integration

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

- **Regional Mass Care and Evacuation Plan** (see action RPV-29 in Table 3-14) – This plan will be developed by the four Peninsula cities in 2026 to provide the procedures for coordination and response during emergencies requiring mass care and sheltering and/or evacuation operations.
- **Regional Utility Disruption Plan** (see action RPV-91 in Table 3-14) – This plan will be developed by the four Peninsula cities to expand on the current utility white paper and provide coordination and response procedures for significant utility disruptions.
- **RPV EOP Hazard Specific Annexes** (see actions RPV-9, 24, 49, 50, 51, 61, 80, 85, and 87 in Table 3-14) – RPV will develop several hazard specific annexes to its Emergency Operations Plan, for all hazards the City is at risk of experiencing, along with the following annexes:
  - **Debris Management Annex** – This plan will provide the procedures and roles for managing debris after an emergency.
  - **Recovery Annex** This plan will provide the procedures and roles for repopulation, reconstruction, and recovery after a disaster.
- **Communication and Warning Plan** – This plan will provide the procedures and roles for managing public information and alerts during emergencies.
- **RPV Emergency Exercise and Training Schedule** – This program will be developed in 2026 to ensure RPV City staff who will play a role in the Emergency Operations Center are properly trained and familiar with City emergency operations, procedures, and plans.

## 3.7 Risk Assessment

### 3.7.1 Jurisdiction-Specific Natural Hazard Event History

Table 3-11 lists past occurrences of natural hazards, resulting in a disaster declaration, for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

**Table 3-11 Past Natural Hazard Events**

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Fire	Woolsey Fire	FM-5280-CA	November 9, 2018	Reduced air quality
Fire	Wildfires	EM-3409-CA	November 9, 2018	Reduced air quality
Fire	Wildfires	DR-4407-CA	November 12, 2018	Reduced air quality
Biological	Covid-19 Pandemic	EM-3428-CA DR-4482-CA CA20-01	March 13, 2020 March 22, 2020 March 4, 2020	\$712,793.00
Flood	Severe Winter Storms, Flooding, and Mudslides	EM-3591-CA	January 9, 2023	Same as below
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	DR-4683-CA CA23-1	January 14, 2023 January 4, 2023	\$349,298.00

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	EM-3592-CA CA23-3	March 10, 2023 March 1, 2023	Same as below
Severe Storm	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4699-CA	April 3, 2023	\$3,415,145.00
Severe Storm	Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides	DR-4769-CA	April 13, 2024	\$38,406,512.00
Fire	Palisades Fire	FM-5549-CA	January 7, 2025	Reduced air quality
Fire	Eaton Fire	FM-5550-CA	January 8, 2025	Reduced air quality
Fire	Wildfires And Straight-Line Winds	DR-4856-CA	January 8, 2025	\$150,000.00

### 3.7.2 Hazard Ranking

The prioritization and categorization of identified hazards for the City of Rancho Palos Verdes is based principally on the Priority Risk Index (PRI), a tool used to measure the degree of risk for identified hazards in a particular planning area. The PRI was used to assist the City in identifying hazards that pose the most significant threat. Table 3-12 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy.

**Table 3-12 Hazard Risk Ranking Summary**

Hazard	Weighted Risk Factors					PRI	Risk Ranking
	Probability	Impact	Spatial Extent	Warning Time	Climate Change		
Drought	1.2	0.3	0.8	0.1	0.4	2.8	Medium
Earthquake	0.9	0.9	0.8	0.4	0.2	3.2	High
Flood	0.9	0.3	0.2	0.1	0.4	1.9	Low
Landslide	1.2	0.6	0.6	0.4	0.4	3.2	High
Sea Level Rise	0.9	0.3	0.2	0.1	0.4	1.9	Low
Severe Weather - Heat Wave	0.9	0.6	0.8	0.1	0.4	2.8	Medium
Severe Weather - Strong Wind	1.2	0.6	0.8	0.1	0.4	3.1	High
Tsunami	0.6	0.3	0.4	0.1	0.2	1.6	Low
Wildfire	0.9	0.9	0.6	0.4	0.4	3.2	High

Note: PRI Value 1 to 1.9 = Low Hazard Risk Ranking  
 PRI Value 2.0 to 2.9 = Medium Hazard Risk Ranking  
 PRI Value 3.0 to 4.0 = High Hazard Risk Ranking

### 3.7.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

### ***Repetitive Loss Properties***

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: 0

### ***Other Noted Vulnerabilities***

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Landslide – refer to the following actions in Table 3-14 (RPV-38, 48, 75, 76, 78, and 80)
  - Over 13,000 buildings are exposed to deep-seated landslides
  - Portuguese Bend Landslide area
- Wildfire – Approximately 15% of the City’s population is living within very high wildfire hazard areas – refer to the following actions in Table 3-14 (RPV-34, 51, 92, 93, 97, 100, 101, 102, and 103)
- Vegetation management related to power outages and wildfire fuel - refer to the following action in Table 3-14 (RPV-102)
- Stormwater and drainage systems - refer to the following actions in Table 3-14 (RPV-68 through 73)
- Lack of backup power in the City
- Limited access and evacuation routes - refer to the following actions in Table 3-14 (RPV-26 and 30)

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

### 3.8 Status of Previous Plan Mitigation Actions

Table 3-13 summarizes the mitigation actions that were recommended in the prior plan and their implementation status at the time this update was prepared.

**Table 3-13 Status of Prior Plan Actions**

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH-1 Integrate the goals and action items from the Plan into existing regulatory documents and programs, where appropriate. <ul style="list-style-type: none"> <li>The Joint Hazard Mitigation Plan and its contents are discussed in the 2018 update to the Safety Element of the City's General Plan.</li> </ul>	Completed/Ongoing	-	Yes	RPV-002
MH-2 Identify and pursue funding opportunities to develop and implement local mitigation activities. <ul style="list-style-type: none"> <li>Successful California Water Resources Storm Water / Flood Management Grant.</li> <li>Tiger 4 Federal Grant (San Ramon Stabilization)</li> <li>FEMA HMGP</li> </ul>	Completed/Ongoing	-	Yes	RPV-002
MH-3 HMS will continue to develop a sustainable process for implementing, monitoring, and evaluating regional mitigation activities. <ul style="list-style-type: none"> <li>The HMS will meet semi-annually to monitor and evaluate regional mitigation activities.</li> </ul>	Completed/Ongoing	-	Yes	RPV-002
MH-4 Identify, improve, and sustain collaborative programs focusing on public and private sector organizations, and individuals to avoid activity that increases risk to hazards.	Completed/Ongoing	-	Yes	RPV-002
MH-5 Develop inventories of critical facilities and infrastructure. <ul style="list-style-type: none"> <li>Assess deterioration, deficiencies, and vulnerability to the identified hazards and prioritize mitigation projects.</li> <li>Planning Division is working with the South Bay Cities Council of Governments on Adaptation Planning document, which identifies critical facilities throughout the City.</li> </ul>	In Progress	-	Yes	RPV-041
MH-6 Strengthen emergency management program with maintained plans, training, and exercises.	Emergency Operations Plan was updated in 2019, including EOC Section training. The City holds at least one annual emergency preparedness exercise activating the EOC at its highest level and utilizing the majority of staff in EOC positions.	-	Yes	RPV-009

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH-7 Use updated technical knowledge and tools to inform the public of hazard potential. <ul style="list-style-type: none"> <li>Provide a separate public GIS web service that can be linked from the City’s website to show hazard maps.</li> </ul>	In Progress through Genasys	-	Yes	RPV-059
MH-8 Maintain hazard warning systems to ensure effectiveness and efficiency and increase coordination between local jurisdictions and emergency service providers. <ul style="list-style-type: none"> <li>Alert LA, Los Angeles County Regional Interoperability Community System</li> <li>Breaking News System</li> <li>Twitter Network</li> </ul>	Completed/Ongoing	-	Yes	RPV-040
MH-10 Prepare a Pre-Disaster Recovery Plan including development of priorities for restoration of the community’s infrastructure and vital public facilities following a disaster. <ul style="list-style-type: none"> <li>Establish restoration implementation procedures for vital facilities and establish decision making tools framework in the event of multiple site losses.</li> </ul>	Ongoing	-	Yes	RPV-038 RPV-043 RPV-044
MH-11 Develop policy for government to determine what reconstruction criteria should be applied to structures damaged during a disaster. <ul style="list-style-type: none"> <li>Develop additional zoning, building and reconstruction policies and requirements for post-disaster situations.</li> </ul>	<ul style="list-style-type: none"> <li>Adopted Chapter 34 and new State Existing Buildings Code</li> <li>Adopted California Building Code in 2016</li> </ul>	Ongoing Capability	-	-
MH-12 Develop and implement programs to coordinate maintenance and mitigation activities to reduce risk to public infrastructure. <ul style="list-style-type: none"> <li>Continue Landslide Road Maintenance Program.</li> <li>Continue CIP program.</li> <li>Continue Pavement Management Program</li> <li>Continue Fuel Modification Program.</li> </ul>	Completed/Ongoing	-	Yes	RPV-102
MH-13 Place information on website and cable access channels to include information specific to residents, building code information, and educational information on damage prevention.	Completed task now maintaining	Removed – project has been completed.	-	-

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH-14 Incorporate the building inventory into the Mitigation Plan update	<ul style="list-style-type: none"> <li>Completed during 2014 update to the Mitigation Plan.</li> <li>Future changes to the building inventory will be incorporated into future updates to the Mitigation Plan.</li> </ul>	-	Yes	RPV-045
MH-15 Educate City staff on federal cost-share and grant programs, and other related federal programs so the full array of assistance available is understood. <ul style="list-style-type: none"> <li>Register appropriate staff for courses in the federal Public Assistance Reimbursement Process.</li> <li>Develop an internal process for tracking and preparing reimbursement requests following a disaster.</li> </ul>	Completed/Ongoing	-	Yes	RPV-021
MH-16 Developed a Climate Action Plan.	Completed through the South Bay Cities Council of Governments in 2017.	Removed – project has been completed.	-	-
MH-17 Installation of an Emergency Communications Center (ECC) trailer and communications antenna on Rancho Palos Verdes City Hall Campus.	City staff worked with outside vendors and members of the Palos Verdes Alert Network to install project in 2007.	Removed – project has been completed.	-	-
MH-18 Implementation of Emergency Preparedness Committee “Beauty and the Beast” emergency preparedness presentation for community education.	Initiated 2010-2011	Removed – project has been completed.	-	-
MH-19 Emergency Preparedness Committee emergency preparedness public service announcements program.	Program initiated in the FY 2010-11.	Removed – project has been completed.	-	-
MH-20 Implemented 3-day Emergency Personal Preparedness Kits City Council prize drawing program.	Program began in FY 2011-12. Ongoing	-	Yes	RPV-017
MH-21 Maintain Disaster Service Volunteer Program.	Implemented program in 2013. Plans to expand	-	Yes	RPV-024
MH-22 Conduct functional emergency preparedness exercise with a theme of mitigation or recovery. <ul style="list-style-type: none"> <li>At least one functional staff emergency preparedness exercise is held by the City each year as recommended by Cal OES and FEMA in order to received disaster reimbursement funds.</li> </ul>	Ongoing – but remove the theme of mitigation or recovery	-	Yes	RPV-009

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH-23 Implemented emergency cache supply system.	City staff and emergency preparedness consultant completed program and training of staff in 2011. Plans to restock.	-	Yes	RPV-037
MH-24 Explore possibility of purchasing a mobile EOC in case primary and secondary EOC's are rendered out of commission and/or another Peninsula City needs assistance.	In Progress	-	Yes	RPV-013
MH-25 Secure funding for seismic retrofit or reconstruction of the City Hall Campus with independent EOC.	Civic Center Master Plan approved for independent EOC. The City is seeking funding for this project. RPV needs to build that facility in 4 years on the Civic Center property designated for emergency management or risks the federal government repurposing that property.	-	Yes	RPV-013
MH-26 Secure funding for utility vehicles and earthmoving equipment - 4-wheel drive vehicles, ATV's and/or "Gator" utility vehicles.	Not yet started	Remove – no longer feasible	-	-
MH-27 Secure funding for an emergency management consultant to provide Memorandums of Understanding (MOUs) between the City and vendors for food, water, temporary housing, and heavy equipment. <ul style="list-style-type: none"> <li>Cal OES and FEMA recommend cities be prepared by having MOUs in place first available service, protection from price gouging practices, and to simplify business transactions.</li> </ul>	MOUs in place with ARC and Salvation Army. Signed in 2024, conducted by City staff, not consultant.	-	Yes	RPV-055
MH-28 Secure funding for consultant to update Joint Hazard Mitigation Plan. <ul style="list-style-type: none"> <li>Joint Hazard Mitigation Plans need to be updated every 5 years and a consultant with expertise in the subject matter is highly recommended.</li> </ul>	Completed	Removed – project has been completed.	-	-
MH-29 Secure funding for EOC Map Plotter. <ul style="list-style-type: none"> <li>Following an emergency, the ability to create and post maps would greatly enhance the City's ability to mitigate against additional damages.</li> </ul>	Completed. The City has two plotters, with CDD and Public Works, that can easily be used for EOC operations.	Removed – project has been completed.	-	-
MH-30 The City's EOC could use more equipment including computers and telecommunication upgrades.	In Progress	-	Yes	RPV-013
MH-31 Construction to stabilize San Ramon Canyon and roadways - Divert runoff to minimize Tarapaca landslide movement, mudslides, and flooding on PVDS/25th Street.	Completed	Removed – project has been completed.		
MH-32 Emergency Generator Upgrades.	<ul style="list-style-type: none"> <li>Installation of emergency generators and propane fuel</li> </ul>	-	Yes	RPV-043

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
	storage at City Hall (7-day supply), PVIC and Hesse Park (3-day fuel supply, each). <ul style="list-style-type: none"> <li>Completed in 2011.</li> <li>Consideration of additional generator purchases, including a stock of generator for sewer pump stations in Abalone Cove.</li> </ul>			
MH-33 Hazardous Waste Roundup - Hold free collection events for public drop off of hazardous waste.	Completed/ongoing	-	Yes	RPV-074
MH-34 Brush and Landscape Materials Collection. <ul style="list-style-type: none"> <li>Hold free collection events for public drop off of brush and vegetation waste.</li> </ul>	Completed/ongoing	-	Yes	RPV-100
MH-35 Heating System dedicated circuit at City Hall.	<ul style="list-style-type: none"> <li>Installed dedicated electrical circuit for space heaters to prevent overloading.</li> <li>Completed in 2010</li> </ul>	Removed – project has been completed.	-	-
MH-36 Urban Forest Maintenance <ul style="list-style-type: none"> <li>Continue regular trimming of urban street trees.</li> </ul>	Completed/ongoing	Ongoing Capability	-	-
MH-37 Update GIS system to assist staff and first responders with preparing, planning, response, and recovery operations.	Completed manually mapped incidents reported during EOC drill to assist staff in decision making.	Removed – project has been completed.	-	-
MH-38 Maintain an off-site backup computer server. <ul style="list-style-type: none"> <li>Backup server available in the event the main system is deemed inoperable.</li> </ul>	Ongoing. Just signed a contract to provide cloud disaster recovery services, and the implementation project is currently ongoing. The expected completion time is 3-4 months, at which point we should have a fully functional cloud infrastructure ready to be activated in case of a disaster affecting the City Hall.	-	Yes	RPV-023
MH-39 Establish Preserve Access Protocol to (1) identify and (2) establish maintenance criteria for vehicular access trails in the Preserve to serve public safety personnel and efforts. Will also establish protocols for entering/working in Preserve during hazardous weather (high fire danger, dangerous swell, etc.).	Ongoing. The Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) requires us to put together a Preserve Access Protocol. The City does not currently have a Preserve	-	Yes	RPV-048

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<ul style="list-style-type: none"> <li>This will be part of the Preserve Access Protocol required 90 days after NCCP/HCP approval.</li> <li>Expansion of fire roads</li> </ul>	<p>access protocol. The City, in coordination with PVPLC, USFWS, and CDFW can define maintenance criteria for fire roads, but has not yet. Periodically, Public Works gets a request from the Fire Department to maintain Fire Roads to make them wide enough for Fire Dept. access. The last request was in 2019, along PVDS near the southernmost portion of Ishibashi Trail before the reactivation of the slide area. City had discussions with LACFD and LASD on fire road expansion in 2024. Preserve closures are also noted in the fire weather protocol developed in 2025.</p>			
MH-40 Identify grant funding sources for public right of ways impacted by the Preserve Access Protocol.	Paused. Not yet started. No protocol currently. VPLC has received grant funding for trail maintenance, but not to get the trail to meet any sort of fire road maintenance standards. (Fire roads are all dirt trails, with the exception of Beach School Trail, which is partially paved).	-	Yes	RPV-060
MH-41 Additional equipment to communicate with residents both in events with and without power.	In progress – exploring the development of an emergency radio station	-	Yes	RPV-006
EQ-1 Integrate new earthquake hazard mapping data and improve technical analysis of earthquake hazards using GIS technology. <ul style="list-style-type: none"> <li>Incorporate Fault Lines layer from USGS for EOC 2011; Integrate GIS files produced by HAZUS analysis into City GIS system for future implementation.</li> </ul>	In progress	-	Yes	RPV-059
EQ-2 Identify funding sources for structural and nonstructural retrofitting of structures that are identified as seismically vulnerable for private property owners and businesses. <ul style="list-style-type: none"> <li>Started in 2008 with fee reductions and retrofit standard plans for residential structures.</li> </ul>	In progress	-	Yes	RPV-060

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<ul style="list-style-type: none"> <li>Seek grant funding</li> </ul>				
EQ-3 Encourage seismic strength evaluations of critical facilities and public infrastructure in the City to meet current seismic standards. <ul style="list-style-type: none"> <li>Started 2010: Completed for Administration, CDD and RPV TV buildings</li> </ul>	Completed/ongoing	-	Yes	RPV-058
EQ-4 Encourage reduction of nonstructural and structural earthquake hazards in homes, businesses, and government offices through public awareness.	Completed/ongoing	-	Yes	RPV-035
EQ-5 Hazard mitigation of seismic concerns, maintenance, and code related deficiencies at Ladera Linda. <ul style="list-style-type: none"> <li>Building assessment conducted</li> <li>Feasibility Evaluation began in 2011</li> <li>Facility built in accordance with relevant building codes at the time permits were issued, which includes conforming to zone-specific seismic design criteria.</li> </ul>	Completed	Removed – project has been completed.	-	-
EQ-6 Participate in the OES SAP evaluator program.	Building and Safety inspection staff members are now certified.	-	Yes	RPV-061
EQ-7 Ceiling Tile Seismic Retrofit in City Hall, PVIC and Hesse Park.	All three facilities completed in 2012.	Removed – project has been completed.	-	-
EQ-8 Funding for a seismically sound EOC.	In progress	-	Yes	RPV-013
WF-1 Encourage development and dissemination of information relating to the fire hazard to help educate and assist builders and homeowners in being engaged in wildfire mitigation activities, and to help guide emergency services during response.	Materials developed and being distributed on an ongoing basis.	-	Yes	RPV-101
WF-2 Increase communication, coordination and collaboration between wildland/urban interface property owners, local planners and fire prevention crews and officials to address risks, existing mitigation measures, and federal assistance programs. <ul style="list-style-type: none"> <li>City and LACoFD work together to manage, communicate, coordinate, and mitigate wildland interface projects within City boundaries.</li> </ul>	Completed/ongoing	-	Yes	RPV-107
WF-3 Encourage implementation of wildfire mitigation activities through enforcement in a manner consistent with the goals of promoting sustainable ecological management and community stability. <ul style="list-style-type: none"> <li>LACoFD and the City’s Planning Department continue to implement wildfire mitigation activities through community education programs and written policy.</li> </ul>	Completed/ongoing	-	Yes	RPV-101

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
WF-4 Conduct a Home Hardening Expo.	Conducted in 2009 by LACoFD. Businesses attended and provided information on products for retrofitting homes to protect them from wildfire (hardened homes). Conducting a home hardening expo in September 2025.	Ongoing Capability	No	-
WF-5 Establish and implement Weed Abatement Enforcement Program. <ul style="list-style-type: none"> <li>Weed abatement notices were mailed to residents annually with information as to what they need to comply with.</li> <li>Properties inspected annually.</li> </ul>	Completed/ongoing	-	Yes	RPV-106
WF-6 Defensible home and fuel modification model project that shows building changes residents can implement.	Shows landscape examples of what can be done to lower wildfire risk (defensible space). EPC is working on this project.	-	Yes	RPV-096
WF-7 Burma Road Maintenance Agreement <ul style="list-style-type: none"> <li>Partner with Edison, Cal Water, and LACoFD to maintain Burma Road by preserving for emergency access.</li> <li>Expansion of fire roads.</li> </ul>	Ongoing. Worked with Bellfree to install water control features on Fire Roads which are extremely important to keep them drivable. Currently working with Bellfree for more water control features on fire roads before the end of 2025.	-	Yes	RPV-099
WF-8 Fuel Modification Program <ul style="list-style-type: none"> <li>Remove brush and debris within defensible space of development using hand crews and goats.</li> <li>Annual maintenance program.</li> </ul>	Completed/ongoing	-	Yes	RPV-102
WF-9 GIS mapping of fuel modification defensible space areas - add new or updated Fuel Modification areas to layer on City GIS system.	Completed/ongoing	-	Yes	RPV-102
WF-10 Continue to contract for heat camera monitoring (Catalina). Completed installation of 4 wildfire smoke detection cameras.	Completed/ongoing.	Removed – project has been completed.	-	-
WF-11 Seek additional funding for undergrounding utilities outside of the landslide affected area.	Paused.	-	Yes	RPV-089
EM-1 Improve knowledge of landslide hazard areas and understanding of vulnerability and risk to life and property in hazard-prone areas. <ul style="list-style-type: none"> <li>Established two landslide abatement districts (Abalone Cove and Klondike Canyon).</li> <li>Published related information on website.</li> </ul>	Completed	Removed – project has been completed.	-	-

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<p>EM-2 Address construction and subdivision design within steep slopes to reduce the potential adverse impacts from development.</p> <ul style="list-style-type: none"> <li>Public awareness of landslides area is provided regularly.</li> <li>Geology/soils report required for review and approval by City Geologist prior to application completeness.</li> <li>Code prohibits most activity over extreme slope areas.</li> </ul>	Completed	-	Yes	RPV-064
<p>EM-3 Regulate activities and provide public outreach in identified potential and historical landslide areas.</p> <ul style="list-style-type: none"> <li>Information regarding location of landslide areas are provided on the City's website. All code/policy changes/ordinances are available online.</li> <li>Building and Safety regulates all activities after approval through Planning Department and City Geologist reviews.</li> </ul>	Completed	Removed – project has been completed	-	-
<p>EM-4 Develop public information programs regarding proper maintenance of steep slopes and surface drainage structures located on private property.</p> <ul style="list-style-type: none"> <li>Vegetation management and flood control brochures made available.</li> </ul>	Completed/ongoing	-	Yes	RPV-070
<p>EM-5 PVDS Shoulder Abutment</p>	<ul style="list-style-type: none"> <li>1,200-foot shoulder rebuild along south side of PVDS in landslide area to mitigate road movement -Completed 2010.</li> <li>Reestablish drainage through area, completed 2011.</li> <li>Ongoing maintenance.</li> </ul>	Removed – project has been completed	-	-
<p>EM-6 Install/maintain dewatering wells in landslide areas to mitigate land movement.</p>	Annually or as funds are available for these agencies.	-	Yes	RPV-076
<p>EM-7 Identify funding sources for sewer disruption and water quality issues resulting from landslides.</p>	Completed/ongoing	-	Yes	RPV-038
<p>TS-1 TsunamiReady: Pursue status as a TsunamiReady through the National Weather Service.</p>	-	-	Yes	RPV-087
<p>TS-2 Increase Tsunami awareness: Add tsunami awareness information to City's website. Add link to State of California's Tsunami Awareness resources.</p>	Completed	Removed – project has been completed	-	-
<p>HM-1 Continue to participate in household hazardous waste events and programs.</p> <ul style="list-style-type: none"> <li>Continue to publicize collection sites and periodic events for hazardous materials.</li> <li>Continue to participate in stormwater pollution programs (i.e., Clean Bay program).</li> </ul>	Completed/ongoing	-	Yes	RPV-074

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<p>HM-2 Continue to monitor lead contamination site at the Point Vicente Interpretive Center.</p> <ul style="list-style-type: none"> <li>Performed lead remediation work removing any hot spots, removing 1 foot of soil from the area around the Point Vicente Interpretive Center building and replacing it with clean fill.</li> <li>Prepared a Lead Contamination Work Plan in 2009, which contains a protocol for potential lead exposure.</li> </ul>	<p>Closed. Remediated and closed out. Note: There is a deed restriction recorded over the property that limits grading in certain hot spots to no more than 1 foot, which serves as the cap. The majority of the hot spot is under the paved parking lot and building addition.</p>	<p>Removed – project has been completed</p>	<p>-</p>	<p>-</p>
<p>HC-1 Cyberterrorism: Mitigation: Additional training for IT Staff especially and potentially regular staff; Additional security measures (security software, cloud, firewalls, etc.).</p>	<p>Ongoing. RPV uses Arctic Wolf's Managed Awareness program which delivers cyber awareness training sessions and quizzes to all City employees. IT also occasionally organizes workshops which cover various subjects relevant to cyber security and IT best practices.</p>	<p>-</p>	<p>Yes</p>	<p>RPV-085</p>
<p>HC-2 Establish trainings in response to active shooter incidents.</p> <ul style="list-style-type: none"> <li>The City has shared information with residents about numerous active shooter trainings over the years hosted by the Palos Verdes Estates Police Department and Palos Verdes Peninsula Unified School District.</li> <li>The City can work with the Los Angeles County Sheriff's Department to develop trainings for RPV residents.</li> </ul>	<p>Completed/ongoing</p>	<p>-</p>	<p>Yes</p>	<p>RPV-084</p>
<p>HC-3 Strengthen anti-cyber terrorism efforts to protect computer network, operations, and financial harm</p> <ul style="list-style-type: none"> <li>24/7 cybersecurity monitoring</li> <li>Multiple levels of data backups</li> <li>Advanced network and endpoints security features</li> <li>Ongoing end-user education and testing</li> <li>Continuous efforts to keep all software and hardware current and in a supportable state</li> <li>Threat intelligence subscriptions</li> <li>Cybersecurity incident tabletop exercise</li> <li>Disaster recovery and business continuity plans</li> </ul>	<p>RPV IT's adopted a layered approach to cybersecurity and since 2018 several major initiatives have been completed (the list below includes some of the bigger ones):</p> <ul style="list-style-type: none"> <li>An MDR (Managed Detection and Response) solution has been implemented.</li> <li>Firewalls have been updated to the new generation devices including advanced automated protection and limited access.</li> <li>A modern comprehensive endpoint security platform has been implemented.</li> <li>Advanced security features utilizing Microsoft solutions</li> </ul>	<p>-</p>	<p>Yes</p>	<p>RPV-085</p>

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
	<p>have been introduced to RPV's email and identity platforms (including MFA protected logins and remote access).</p> <ul style="list-style-type: none"> <li>A comprehensive multi-layer back strategy is in place including cloud replication and off-site air-gapped storage media.</li> </ul>			
<p>UR-1 Continue communication, coordination, and collaboration with Southern California Edison for the Public Safety Power Shutoff (PSPS) program</p> <ul style="list-style-type: none"> <li>Ongoing vegetation management, system hardening, and aerial inspections.</li> <li>Distributing public information to educate residents about the shutoffs and where they can find real-time information from SCE.</li> </ul>	Completed/ongoing	-	Yes	RPV-090
<p>UR-2 Development of white paper including all utility companies.</p> <ul style="list-style-type: none"> <li>Ongoing education efforts of utility company preparedness plan and customer contact updates.</li> <li>Collaborate with other Peninsula cities and all utility companies for the development of a white paper.</li> </ul>	Completed	Removed – project has been completed.	-	-

### 3.9 Hazard Mitigation Strategy

This section includes the following components of the mitigation strategy for this jurisdiction:

- Hazard Mitigation Action Plan Matrix
- Mitigation Action Prioritization
- Mitigation Action Classification and Natural Hazards Addressed

**Table 3-14 Hazard Mitigation Action Plan Matrix**

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-01	Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are in high- or medium-risk hazard areas.	Food, hydration, shelter; Energy; Communications; Transportation	Existing	1, 2	Lead: Public Works Support: City Management	Yes	Very High (\$1,000,000 and above)	FEMA HMGP and FEMA FMA, Staff Time, CIP Budget	Long-Term (5 years or more)
RPV-02	Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community.	Safety and Security; Communications; Transportation; and	Both	4	Lead: City Management Support: CDD Planning Division	Yes	Low (\$0-\$50,000)	Staff Time and Regular Budget	Short-Term (less than 5 years)
RPV-03	Identify and pursue strategies to increase adaptive capacity to climate change including public outreach and integration into appropriate plans and programs.	Communications; Safety and Security	Both	1, 2, 4	Lead: Planning Division Support: All Departments	Yes	Low (\$0-\$50,000)	Staff Time and Regular Budget	Short-Term (less than 5 years)
RPV-04	Actively participate in the plan maintenance protocols outlined in Volume 1 of this Hazard Mitigation Plan.	N/A	N/A	2, 4	Lead: City Management Support: All Departments	Yes	Low (\$0-\$50,000)	Staff Time and Regular Budget	Short-Term (less than 5 years)
RPV-05	Develop an emergency radio station. Provide A proposal will be provided to City Council with more details regarding the radio station in early 2026, with the goal of installing the radio station, if approved, in May 2026.	Communications; Safety and Security	Both	1 and 2	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-06	Distribute NOAA weather radios to City staff and committee members	Communications; Safety and Security	Existing Assets	1 and 2	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-07	Complete City accessibility improvements including compliant curb ramps and associated improvements at existing sidewalk areas. Three active projects running from 2022-2027.	Health and Medical; Safety and Security	Existing Assets	1 and 4	Lead: Public Works	Yes - Disabled	High (\$250,001 - \$1 million)	Community Development Block Grant	Less than 5 years
RPV-08	Strengthen the City emergency management program with routine training, and exercises, including: <ul style="list-style-type: none"> <li>• 2-3 annual EOC exercises ranging from drills to full scale exercises</li> <li>• Annual EOC staff training schedule</li> </ul>	Safety and Security	Existing Assets	4	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-09	Review and update EOP Annex and EOC position binders every 3 years.	Safety and Security	Existing Assets	1, 3, and 4	Lead: City Management	Yes - Disabled	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-10	Incorporation of DLAN software into City regional emergency coordination.	Communications	N/A	3	Lead: City Management	No	Low (less than \$50,000)	County provided	Less than 5 years
RPV-11	RICs Incorporation - Incorporation of 23 radios and associated accessories that are compatible with the Los Angeles Regional Interoperable Communications System (LA-RICS) Land Mobile Radio network from Mobile Relay Associates - Raycom (MRA-Raycom) for use by public safety liaisons (to communicate with LASD) and rangers.	Communications	Existing Assets	1 and 4	Lead: City Management and Recs and Parks	No	Low (less than \$50,000)	Regular Budget	Less than 5 years
RPV-12	Secure funding for construction of an independent active EOC to strengthen training, response, and regional coordination capabilities. Through the Civic Center Master Plan, the City approved construction of an independent EOC. The City is seeking funding for this project, with a deadline to complete construction of the EOC within 4 years to prevent potential repurposing of the federal government property.	Safety and Security	New Asset	1, 3, and 4	Lead: Public Works; Support: City Management	No	Very High (more than \$1 million)	Staff Time and Regular Budget	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-13	Maintain amateur radio capabilities via maintenance of the Emergency Communications Center (ECC) trailer and communications antenna at the Ken Dyda Civic Center; in coordination with PVAN, the volunteer group managing the ECC.	Communications; Safety and Security	Existing Assets	1, 2 and 3	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time, CIP Fund	Less than 5 years
RPV-14	Community Organization Support – 1. Neighborhood and HOA Presentations 2. CERT coordination with first responder agencies	Safety and Security	Existing Assets	2 and 3	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-15	Emergency Preparedness Committee Work 1. Monthly EPC Message and Meeting focused on emergency management 2. EPC Booth at events (on average 1-2 per month) sharing emergency management information 3. City Liaison collects EPC advice on all matters pertaining to emergency management	Safety and Security	Existing Assets	2 and 3	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-16	Monthly raffle providing a 3-day Emergency Personal Preparedness Kits via a City Council prize drawing program for those participating in the recycling program.	Safety and Security	Existing Assets	2 and 5	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-17	CWRIS Radio Testing and Utilization for regional communication during emergencies, particularly when cell and data services are impacted. CWRIS radios are lent out by the County. RPV participates in a monthly radio test with the other Area G Cities and DMAC.	Communications	Existing Assets	3	Lead: City Management	No	Low (less than \$50,000)	County provided	More than 5 years
RPV-18	Adopt and update municipal codes to manage hazard risk - Municipal codes aligns with State and County Buildings Codes (CA Chapter 34) and	Safety and Security	N/A	1	Lead: CDD	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	will be routinely updated to maintain this alignment.								
RPV-19	Integrate the hazard mitigation plan into relevant plans, ordinances and programs, including hazard related ordinances and codes, emergency and safety plans, and programs, plans, and regulations that dictate land use decisions in the community.	Safety and Security	N/A	4	Lead: City Management; Support: CDD	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-20	Educate City staff on federal cost-share and grant programs, and other related federal programs so the full array of assistance available is understood.  1. Register appropriate staff for courses in the federal Public Assistance Reimbursement Process. 2. Maintain the internal process for tracking and preparing reimbursement requests following a disaster.	Safety and Security	N/A	4	Lead: Finance	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-21	Update the Continuity of Operations Plan that outlines the plans for continuity of City services during emergencies (aligned with 2026 HMGP).	Safety and Security	Existing Assets	4	Lead: City Management; Support: All Depts	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-22	Maintain an off-site backup computer server, in the event the main system is deemed inoperable. Implementation is currently ongoing to create a fully functional cloud infrastructure ready to be activated in case of a disaster affecting the City Hall.	Safety and Security	Existing Assets	4	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-23	Maintain and expand the Disaster Service Volunteer Program. - California's state-wide initiative for volunteers to assist during emergencies, offering training and legal protections (worker's comp) for registered volunteers activated by authorized agencies like cities or	Safety and Security	Existing Assets	2 and 3	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	counties. Implemented program in 2013. Plans to expand.								
RPV-24	Debris Management EOP Annex - This plan will provide the procedures and roles for managing debris after an emergency.	Safety and Security; Hazardous Materials	N/A	1 and 4	Lead: City Management; Support: Public Works	Yes - Disabled	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-25	Equine Evacuation Drill - Collaboration between City, County Sheriff's Department, and County Animal Care and Control to test alternative options for evacuating horse trailers near the Greater Portuguese Bend Landslide Area.	Safety and Security; Transportation	N/A	1 and 3	Lead: City Management; Support: Public Works	Yes - Disabled and Isolated	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-26	Implementation of sound the alarm events, in coordination with the Red Cross to ensure residents have working fire alarms.	Safety and Security	Existing Assets	1, 2 and 3	Lead: City Management	Yes - Disabled	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-27	Cooling/Warming center protocol - Develop protocol for implementation to develop cooling/warming centers within the City during extreme temperatures; incorporate in climate emergency annex.	Food, Hydration, Shelter; Safety and Security	Existing Assets	1	Lead: City Management; Support: Recs and Parks	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-28	Identify and pursue strategies to increase adaptive capacity to climate change, including, but not limited, to: 1. Implementation and Maintenance of the RPV Emission Reduction Action Plan (2017). 2. Implementation of the South Bay Cities Council of Governments Climate Action Plan 2017.	Safety and Security; Transportation	Both	1, 4 and 5	Lead: CDD; Support: All Depts	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-29	Development of a Regional Mass Care and Evacuation Plan - This plan will be developed by the four peninsula cities in 2026 to provide the procedures for coordination and response during emergencies needing mass care or evacuation.	Safety and Security; Transportation	Existing Assets	1 and 3	Lead: City Management	Yes - Disabled and Isolated	Moderate (\$50,001 - \$250,000)	Cal Fire Grant (applied and denied)	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-30	Enhance current EOC technological capabilities - The City EOC could use more equipment including computers and telecommunication upgrades.	Safety and Security; Communications	Existing Assets	1, 2, 3 and 4	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-31	Reduce congestion and strengthen the capacity of egress routes within the City through Right-of-Way Improvements.	Safety and Security; Transportation	Existing Assets	1 and 4	Lead: Public Works	No	Very High (more than \$1 million)	Measure M and R; CIP Funds; Proposition C; CDBG; ARPA; Gas Tax	More than 5 years
RPV-32	Annual Prepared Peninsula Expo - Expo providing emergency preparedness information to Palos Verdes Peninsula residents. Held each October.	Safety and Security	Existing Assets	2	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-33	Equine Readiness Annual Event – Collaboration between the four Palos Verdes Peninsula Cities to provide an equine readiness educational event for all peninsula residents. It started 2025.	Safety and Security	Both	2	Lead: City Management	Yes - Limited Access	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-34	Encourage residents to engage in mitigation projects – 1. Encourage reduction of nonstructural and structural earthquake hazards in homes, businesses, and government offices through public awareness. 2. Conduct a Wildfire Resource Fair annually, in partnership with local community organizations) that provides booths, demonstrations, and/or presentations on wildfire preparedness, mitigation, and response.	Safety and Security	Existing Assets	1 and 2	Lead: City Management; Support: Public Works	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-35	Development of educational videos - Routine development and distribution of emergency preparedness, public safety and hazard mitigation educational videos for the public.	Safety and Security	Existing Assets	2	Lead: City Management	Yes - Seniors and Disabled	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-36	Update City Emergency Supply Cache - the City has three trailers with emergency supplies for the City needing inventory and updates.	Food, Hydration, Shelter; Safety and Security	Existing Assets	3	Lead: City Management	No	Moderate (\$50,001 - \$250,000)	Staff Time and Regular Budget	Less than 5 years
RPV-37	Reduce risk to public infrastructure. - 1. Develop and implement programs to coordinate maintenance and mitigation activities to reduce risk to public infrastructure.	Safety and Security	Existing Assets	1	Lead: Public Works	No	Moderate (\$50,001 - \$250,000)	Staff Time; CIP Funds	More than 5 years
RPV-38	Inform the public of emergency management updates and education information; including hazard mitigation information and programs - Updates provided regularly and as needed via 1. Listserv 2. RPVtv 3. EPC 4. MyRPV App 5. Rpvca.gov 6. Pvpready.gov 7. RPV Social Media (X, IG, FB, ND) 8. Seasonal Newsletter	Safety and Security	Existing Assets	2	Lead: City Management	No	Moderate (\$50,001 - \$250,000)	Staff Time; Regular Budget	More than 5 years
RPV-39	Inform the public of potential and current hazards using updated technical knowledge and tools - 1. Pre-load key emergency facilities onto the Genasys map to help share emergency information with the public during an active disaster. 2. Maintain PVP Ready Site Hosting the Genasys Map and other emergency information. 3. Maintain and Utilize Alert South Bay for public alerts and warning.	Safety and Security	Both	2	Lead: City Management	No	Moderate (\$50,001 - \$250,000)	Staff Time; County funding	More than 5 years
RPV-40	Routine Hazard Mitigation Assessment - Assess deterioration, deficiencies, and vulnerability to the identified hazards and prioritize mitigation projects.	Safety and Security	Both	4	Lead: City Management; Support: Public Works	No	Moderate (\$50,001 - \$250,000)	FEMA HMGP	More than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-41	Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are in high- or medium-risk hazard areas.	Safety and Security	Both	1 and 4	Lead: Public Works; Support: City Management	No	High (\$250,001 - \$1 million)	FEMA HMGP	More than 5 years
RPV-42	Ensure City facilities are ready to be used in emergencies, by conducting: 1. EOC Maintenance annually (including generator). 2. Shelter Site Survey for PVIC, Hesse Park, and Ladera Linda every 3 years (last complete 2024). 3. Exploration of generators for additional City facilities and infrastructure. 4. Maintenance of emergency generators and propane fuel storage at City Hall , PVIC and Hesse Park.	Safety and Security	Both	3 and 4	Lead: City Management; Support: Public Works; Recs and Park	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-43	Identify and strengthen critical facilities and infrastructure in the City  1. Work with South Bay Cities Council of Governments on Adaptation Planning documents to identify critical facilities throughout the City. 2. Conduct an analysis of building resilience to earthquakes. 3. Maintain an up-to-date GIS map with City vulnerabilities and emergency response assets for City Staff use throughout the disaster cycle. 4. Work with communication providers to strengthen cell service in the City and explore options for reducing the impact of power outages on communication capabilities. 5. Explore back up power options for traffic lights to maintain functionality during power outages.	Safety and Security	Both	1	Lead: CDD and Public Works; Support: City Management	No	Low (less than \$50,000)	CIP Funds	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-44	Building Inventory incorporation - Incorporate future changes to building inventory into Mitigation Plan updates.	Safety and Security	Existing Assets	4	Lead: City Management; Support: CDD	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-45	General Plan Safety Element 2026 Update - City general plan section providing an overview of safety policies and hazards. Aligned with the 2026 HMGP.	Safety and Security	Both	1, 2 and 4	Lead: CDD; Support: City Management	No	Moderate (\$50,001 - \$250,000)	Staff Time and Regular Budget	Less than 5 years
RPV-46	Pavement Management Program - 1. Roadway rehabilitation in Areas 1, 2, 5, 6 and 9 ongoing (Areas 3 and 4 scheduled for FY28-29, Area 7 scheduled for FY26-27, Area 8 scheduled for FY27-28). 2. Arterial Roadway pavement management on Silver Spur Rd, Palos Verdes Drive South, Palos Verdes Drive East, and Indian Peak.	Safety and Security; Transportation	Existing Assets	1	Lead: Public Works	No	Very High (more than \$1 million)	Measure R; CIP Funds	Less than 5 years
RPV-47	Establish Preserve Access – 1. Complete routine fire access tours with first responders in canyons within the landslide impact area (Last discussion 2024). 2. Preserve Protocol to identify and establish maintenance criteria for vehicular access trails in the Preserve to serve public safety personnel and efforts; along with establishing protocols for entering/working in Preserve during hazardous weather (high fire danger, dangerous swell, etc.). 3. Expansion of fire roads as needed and periodic maintenance of fire roads, per the Fire Department's request. (Last request 2019).	Safety and Security; Transportation	Existing Assets	1 and 3	Lead: Public Works; Support: City Management	No	Low (less than \$50,000)	FEMA HMGP; Staff Time	Less than 5 years
RPV-48	Communication and Warning Plan - Provides the procedures and roles for managing public information and alerts during emergencies.	Communications; Safety and Security	Both	1, 2 and 4	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-49	Recovery Annex to EOP - Provides the procedures and roles for repopulation, reconstruction, and recovery after a disaster.	Safety and Security	N/A	2 and 4	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-50	Climate Emergency Annex to EOP – Includes response procedures for drought, winter storms, extreme temperatures, wind, floods, and landslides.	Safety and Security	N/A	2, 4 and 5	Lead: City Management; Support: Public Works	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-51	Wildfire EOP Annex – Provides wildfire management guidance.	Safety and Security	N/A	2 and 4	Lead: City Management	Yes - Disabled and Isolated	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-52	The City will support and encourage community groups to engage in the Firewise program.	Safety and Security	Both	2	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-53	Identify grant funding sources for public rights impacted by the Preserve Access Protocol. VPLC has received grant funding for trail maintenance, but none to ensure trail meets Fire Road maintenance standards. Fire roads are all dirt trails, with the exception of Beach School Trail, which is partially paved.	Safety and Security	Both	1	Lead: Public Works	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-54	Expand MOUs to support emergency response to ensure protection from price gouging practices, and to simplify business transactions. <ul style="list-style-type: none"> <li>MOUs are currently in place with ARC and Salvation Army.</li> <li>The City plans to secure funding for an emergency management consultant to provide Memorandum of Understanding's (MOU's) between the City and vendors for food, water, temporary housing, and heavy equipment.</li> <li>The City will develop a regional MOU and inventory list once State Homeland Security Grant</li> </ul>	Safety and Security	Both	3	Lead: City Management	No	Moderate (\$50,001 - \$250,000)	Staff Time; SHSGP	Less than 5 years

Palos Verde Peninsula, California | Multi-Jurisdictional Local Hazard Mitigation Plan

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	funding is awarded to hire a consultant.								
RPV-55	Exploration into the development of a community volunteer brigade to support emergency response efforts.	Safety and Security	Both	1, 2 and 3	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-56	Secure funding for utility vehicles and earthmoving equipment - Equipment: Front Loader, Haul Truck, 4-wheel drive vehicles, ATVs and/or "Gator" utility vehicles.	Safety and Security; Transportation	Both	1 and 3	Lead: Recs and Park	No	Moderate (\$50,001 - \$250,000)	Staff Time and Regular Budget	Less than 5 years
RPV-57	Strengthen City building seismic resilience - Started 2010: Completed for Administration, CDD and RPV TV buildings in 2010. The City will consider evaluations of additional City facilities (Hesse Park, PVIC).	Safety and Security	Both	1	Lead: Public Works; Support: City Management	No	Low (less than \$50,000)	CIP Funds	Less than 5 years
RPV-58	Integrate new earthquake hazard mapping data and improve technical analysis of earthquake hazards using GIS technology. - Incorporate Fault Lines layer from USGS for EOC 2011; Integrate GIS files produced by HAZUS analysis into City GIS system for future implementation.	Communications	Both	2 and 4	Lead: CDD; Support: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-59	Identify funding sources for structural and nonstructural retrofitting of structures that are identified as seismically vulnerable for private property owners and businesses. - Started in 2008 with fee reductions and retrofit standard plans for residential structures. The City will seek additional grant funding.	Safety and Security	N/A	1 and 4	Lead: Public Works; Support: City Management	No	Low (less than \$50,000)	CIP Funds	More than 5 years
RPV-60	Participate in the OES SAP evaluator program - Building and Safety inspection staff members are now certified; new staff will be required to obtain certification.	Safety and Security	Existing Assets	4	Lead: Public Works	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years

Palos Verde Peninsula, California | Multi-Jurisdictional Local Hazard Mitigation Plan

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-61	Earthquake EOP Annex – Provides procedures for response to earthquakes.	Safety and Security	N/A	2 and 4	Lead: City Management	Yes - Disabled	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-62	Early Earthquake Warning System Pilot Program - State program allowing local jurisdictions to test out their early earthquake warning systems; the City signed up to participate.	Safety and Security	New Asset	1 and 4	Lead: City Management	No	Low (less than \$50,000)	State funded through Cal OES	Less than 5 years
RPV-63	The City addresses construction and subdivision design within steep slopes to reduce the potential adverse impacts from development through codes that prohibit most activity over extreme slope areas.	Safety and Security	Both	1, 4 and 5	Lead: Public Works; Support: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-64	Flood Control Management – 1. LA County Flood control funding. Awarded 2,000,000 2. Lift Station Improvement at Lower Point Vicente	Safety and Security	Existing Assets	1 and 5	Lead: Public Works; Support: Finance	No	Very High (more than \$1 million)	LA County Flood control funding; CIP Funds	More than 5 years
RPV-65	Sand Bag Distribution – The City offers free sand and sand bags to residents before storms.	Safety and Security	Existing Assets	1 and 2	Lead: Public Works	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-66	Storm Drain Asset Mgmt. Program and Master Plan Update - Master Plan of Drainage (MPD) was developed to identify deficiencies with maintenance, upgrades, and capital improvements, to ensure flood protection, especially important due to RPV's landslide-prone geology.	Safety and Security	Existing Assets	1 and 5	Lead: Public Works	No	Very High (more than \$1 million)	CIP Funds; FEMA FMA, FEMA HMGP	Less than 5 years
RPV-67	Maintain Stormwater Management Program through: 1. Successful California Water Resources Storm Water / Flood Management Grant. 2. RPV Storm Water Management Plan implementation. 3. Stormwater quality management program.	Safety and Security	Existing Assets	1 and 5	Lead: Public Works; Support: City Management	No	High (\$250,001 - \$1 million)	Regular Budget; FEMA FMA, FEMA HMGP; California Flood Management Grant	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	4. Compliance with federal and state requirements including 60 miles of storm sewer pipes and 1,500 catch basins.								
RPV-68	A vegetation management and flood control brochures have been developed and shared with the public to provide education on proper maintenance of steep slopes and surface drainage structures located on private property.	Safety and Security	Existing Assets	1, 2 and 4	Lead: City Management; Support: Public Works	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-69	Continue CIP Program projects for stormwater and drainage improvements.	Safety and Security	Existing Assets	1 and 5	Lead: Public Works	No	Very High (more than \$1 million)	CIP Funds; FEMA FMA, FEMA HMGP	Less than 5 years
RPV-70	Ensure NFIP Compliance – RPV was participating in the NFIP, per RPV ordinance 645, which was adopted on 4/21/21. As part of the NFIP, the City will ensure compliance through implementing a floodplain management program that, at a minimum, meets the NFIP requirements: <ul style="list-style-type: none"> <li>Evaluate the current floodplain ordinance to determine if updates are needed.</li> <li>Upon FEMA flood map revisions, update and adopt the City's floodplain ordinance.</li> </ul>	Safety and Security	Both	1	Lead: Public Works; Support: City Management	No	Low (less than \$50,000)	Staff Time, General Fund	Less than 5 years
RPV-71	Enhance stormwater drainage projects <ol style="list-style-type: none"> <li>Bayend drive catch basin inlets and storm drain lateral (200k)</li> <li>Upper point Vicente storm water runoff control project - underground drainage systems around the helipad at upper point Vicente near the Civic Center (335k)</li> <li>Crest Rd. to Crest Ridge Canyon stormwater drainage improvement (\$1.365 million)</li> </ol>	Safety and Security	Both	1 and 5	Lead: Public Works	No	Very High (more than \$1 million)	CIP Funds; FEMA FMA, FEMA HMGP	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	4. Corsini Place stormwater drainage improvement (960k) 5. Hawthorne Blvd. at Hawkhurst drive stormwater drainage improvement (3.925 million) 6. Stormwater drainage improvement on also Verdes Dr. S at Pepper Tree Drive (1.195 million)								
RPV-72	The City supports proper disposal of hazardous material by: a. Participating in household hazardous waste events and programs. b. Publicizing collection sites and periodic events for hazardous materials. b. Participating in stormwater pollution programs (i.e., Clean Bay program).	Hazardous Materials	Existing Assets	1 and 2	Lead: Public Works; Support: Recs and Park	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-73	PVDS Landslide Area Management - 1. Debris Clearance 2. Resurfacing Program - this project repairs and maintains PVDS through the PB Landslide area, repairing and maintaining asphalt roadway, storm drain lines, curbs, gutters, signs, and roadway stripping.	Safety and Security	Existing Assets	1	Lead: Public Works	No	High (\$250,001 - \$1 million)	CIP and Proposition Funds	More than 5 years
RPV-74	The City continues Landslide Remediation projects including: 1. Installation and maintenance of dewatering wells 2. Canyon lining 3. Infilling fractures Note: FEMA Public Assistance reimbursement denied.	Safety and Security	Existing Assets	1	Lead: Public Works	No	Very High (more than \$1 million)	CIP Funds; FEMA HMGP	More than 5 years
RPV-75	The City winterizes its property each year prior to the rainy season by: 1. Preparing facilities for rain. 2. Checking City-wide drainage "hotspots" where the potential for	Safety and Security	Existing Assets	1	Lead: Public Works	No	Very High (more than \$1 million)	LA County Flood control funding; CIP Funds	More than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	issues has been identified. 3. Winterization grading, checking pumps, sand bagging, sealing cracks in roads, and draining areas with ponding in landslide area.								
RPV-76	Landslide Buyout Program - FEMA HMGP Funded program to buy property in the landslide area and turn it into open space in perpetuity.	Safety and Security	Both	1 and 4	Lead: Public Works	No	Very High (more than \$1 million)	FEMA HMGP	Less than 5 years
RPV-77	Moratorium in landslide zone - No new construction in the landslide area, and limited permitting for re-construction purposes.	Safety and Security	N/A	1 and 4	Lead: Public Works; Support: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-78	Creation of a Portuguese Bend Abatement District - Two abatement districts currently in operation to manage landslide impacts in the Abalone Cove and Klondike Canyon areas of the landslide complex. City is in the process to form a third and separate district to cover the Portuguese Bend Landslide sub-area that is not already managed by a district.	Safety and Security	New Asset	1	Lead: City Management; Support: Public Works	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-79	Public Health EOP Annex – Provides procedures for City emergency response to Public Health Emergencies.	Health and Medical	N/A	2 and 4	Lead: City Management	Yes - Disabled and Senior	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-80	Flock camera program - The City provides reimbursement for half of the cost of flock and security cameras, up to \$2,500 for neighborhoods and up to \$100 for individuals.	Safety and Security	Existing Assets	1	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-81	The City's Public Safety Division aims to enhance public safety through increased coordination with the Sherriff's department and the deployment of public safety liaisons. The Division implements a public	Safety and Security	Both	1	Lead: City Management	Yes - All	High (\$250,001 - \$1 million)	Staff Time and Regular Budget	More than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	safety program consisting of public education, liaison training, and equipment, including, but not limited to, Radar, ALPR Cameras, Radios, and Vehicles with haul equipment to support LASD.								
RPV-82	Active shooter training and education a. The City has shared information with residents about numerous active shooter training over the years. Hosted by the Palos Verdes Estates Police Department and Palos Verdes Peninsula Unified School District. b. The City will work with Los Angeles County Sheriff's Department to support active shooter training for RPV residents.	Safety and Security	Existing Assets	1 and 2	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-83	Strengthen anti-cyber terrorism efforts to protect the City's computer network and operations, through: a. 24/7 cybersecurity monitoring b. Multiple levels of data backups c. Advanced network and endpoints security features d. Ongoing end-user education and testing e. Continuous efforts to keep all software and hardware current and in a supportable state f. Threat intelligence subscriptions g. Enhance cybersecurity incident exercise and training h. Incorporation of cybersecurity into Public Safety Annex. i. Firewalls updated to the new generation devices including advanced automated protection and limited access k. A comprehensive multi-layer back strategy that includes cloud	Safety and Security	Both	1	Lead: City Management	No	High (\$250,001 - \$1 million)	Staff Time and Regular Budget	More than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	replication and off-site air-gapped storage media								
RPV-84	Public Safety EOP Annex – Provides procedures for City response to public safety emergencies.	Safety and Security	N/A	2 and 4	Lead: City Management	Yes - All	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-85	Pursue status as a TsunamiReady Community through the National Weather Service.	Safety and Security	Both	1 and 2	Lead: City Management	Yes - Seniors and Disabled	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-86	Tsunami EOP Annex - Provides procedures for City response to tsunamis.	Safety and Security	N/A	2 and 4	Lead: City Management	Yes - Disabled	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-87	Explore undergrounding of electric lines within the City, particularly in areas with high fire risk.	Safety and Security; Energy	Both	1 and 5	Lead: Public Works; Support: City Management	No	Very High (more than \$1 million)	SCE	More than 5 years
RPV-88	Continue communication, coordination, and collaboration with SCE for the Public Safety Power Shutoff (PSPS) program and strengthening of infrastructure, including: a. Ongoing vegetation management, system hardening, and aerial inspections. b. Distributing public information to educate residents about the shutoffs and where they can find real-time information from SCE.	Safety and Security; Energy	Existing Assets	1, 2 and 5	Lead: SCE; Support: Public Works	Yes - Disabled	High (\$250,001 - \$1 million)	SCE budget	More than 5 years
RPV-89	Strengthen City run utility infrastructure. City sanitation maintenance is ongoing.	Safety and Security; Water Systems	Existing Assets	1 and 4	Lead: Public Works	No	Very High (more than \$1 million)	CIP Funds	More than 5 years
RPV-90	Expand on utility infrastructure interdependency white paper - Regional Utility Disruption Plan – This plan will be developed by the four peninsula cities to expand on the current utility white paper and provide coordination and response procedures for significant utility disruptions.	Safety and Security; Energy; Water Systems	N/A	1	Lead: City Management; Support: Public Works	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-91	Explore and implement projects that reduce wildfire spread, such as 1. Reducing non-native plants in the City. 2. Volunteer Vegetation Management Program - A cleanup day program where residents could gather and work with a professional crew of volunteers to remove brush. Could be done through a sign up system where senior and disabled people can apply for assistance with defensible space on their properties.	Safety and Security	New Asset	1, 2, 4, and 5	Lead: Public Works; Support: City Management	No	Moderate (\$50,001 - \$250,000)	CIP Funds; FEMA HMGP; Cal Fire	More than 5 years
RPV-92	Wildfire mitigation match program - Research on the feasibility of implementing a citywide wildfire mitigation match program to help offset the cost of resident's home hardening and/or defensible space projects.	Safety and Security	New Asset	1, 2 and 4	Lead: City Management	No	Moderate (\$50,001 - \$250,000)	Cal Fire	More than 5 years
RPV-93	Support, where needed the maintenance and installation of Helopods throughout the peninsula. There are currently two Helopods installed, at the RPC Civic Center and RHE Reservoir. A third helopod is planned for installation in PVE.	Safety and Security	Both	1	Lead: LACoFD; Support: City Management	No	Moderate (\$50,001 - \$250,000)	County funds	Less than 5 years
RPV-94	With support from the City, the EPC is working on a project that provides a model demonstration of how to reduce wildfire risk through home hardening and defensible space.	Safety and Security	Both	2	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-95	The City Completed an application to be added to the Board of Forestry's Fire Risk Reduction Community List; which will help the City be more competitive for grant funds. Waiting on response.	Safety and Security	N/A	4	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RPV-96	Pano AI Camera Installation – Four wildfire smoke detection cameras installed to monitor the peninsula for smoke to alert and address fires more quickly.	Safety and Security; Communications	Existing Assets	1, 2 and 3	Lead: City Management; Support: CDD	No	High (\$250,001 - \$1 million)	FEMA HMGP; State Funding	Less than 5 years
RPV-97	Burma Road Maintenance Agreement to: a. Partner with Edison, Cal Water, and LACoFD to maintain Burma Road for emergency access. b. Expand fire roads. Working with Bellfree to install water control features on Fire Roads to keep them drivable and on increasing water control features on fire roads in early 2026.	Transportation	Existing Assets		Lead: Recs and Park; Support: Public Works	No	Moderate (\$50,001 - \$250,000)	CIP Funds, FEMA HMGP	Less than 5 years
RPV-98	Brush and Landscape Materials Collection – The City holds free collection events for public drop off of brush and vegetation waste.	Safety and Security	Existing Assets	1, 2, and 5	Lead: Public Works	Yes - Disabled	Low (less than \$50,000)	Regular Budget	More than 5 years
RPV-99	Encourage development and dissemination of information relating to fire hazard to help educate and assist builders and homeowners in wildfire mitigation activities, and to help guide emergency services during response. Materials developed and distributed on an ongoing basis.	Safety and Security	N/A	1 and 2	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-100	The City's Fuel Modification Program includes: a. Removal of brush and debris following defensible space guidelines using hand crews and goats. b. Annual maintenance program. c. GIS map updates/maintenance of fuel modification areas	Safety and Security	Both	1 and 5	Lead: Public Works; Support: CDD	No	High (\$250,001 - \$1 million)	CIP Funds; FEMA HMGP	More than 5 years
RPV-101	Maintenance and implementation of the newly developed fire weather protocol.	Safety and Security	Both	1, 2 and 3	Lead: City Management; Support: Public	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
					Works; Recs and Park				
RPV-102	Support ongoing wildfire mitigation activities 1. LACoFD and the City's Planning Department continue to implement wildfire mitigation activities through community education programs and written policy. 2. Updated Fire Hazard Severity Zones were adopted by the City in 2025 and will be enforced by the fire department during 2026 inspections.	Safety and Security	N/A	1, 2 and 3	Lead: CDD; Support: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years
RPV-103	Distribution of pool signs for residents to display to indicate to fire fighters that they have a pool that can be used as an emergency water source.	Safety and Security	New Asset	1 and 2	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	Less than 5 years
RPV-104	Establish and implement Weed Abatement Enforcement Program - a. Weed abatement notices were mailed to residents annually with information as to what they need to comply with. b. Properties inspected annually.	Safety and Security	Both	1, 2 and 4	Lead: Public Works	No	High (\$250,001 - \$1 million)	CIP Funds; FEMA HMGP	Less than 5 years
RPV-105	Increase communication, coordination and collaboration between wildland/urban interface property owners, local planners and fire prevention crews and officials to address risks, existing mitigation measures, and federal assistance programs. City and LACoFD work together to manage, communicate, coordinate, and mitigate wildland interface projects within City boundaries.	Safety and Security; Communications	Both	1, 2, 3 and 4	Lead: City Management	No	Low (less than \$50,000)	Staff Time and Regular Budget	More than 5 years

Table 3-15 Mitigation Action Prioritization

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
RPV-01	3	3	3	3	3	1	3	1	3	3	1	1	1	1	1	31	High
RPV-02	3	3	3	3	3	1	0	1	1	3	3	1	3	3	1	32	High
RPV-03	3	3	3	3	3	1	0	1	3	3	3	3	3	3	1	36	High
RPV-04	3	3	3	3	3	1	0	1	1	3	3	3	3	1	1	32	High
RPV-05	3	0	3	3	3	3	1	0	0	3	3	3	3	3	3	34	High
RPV-06	3	0	3	3	3	3	1	0	0	3	3	3	3	3	3	34	High
RPV-07	3	0	3	3	3	3	1	0	0	3	3	3	3	3	0	31	High
RPV-08	3	0	3	3	3	3	1	0	0	3	3	3	0	3	3	31	High
RPV-09	3	0	3	3	3	3	1	0	0	3	3	3	3	3	0	31	High
RPV-10	3	0	3	3	3	3	1	0	0	3	3	1	3	3	0	29	Medium
RPV-11	3	0	3	3	3	3	1	0	0	0	3	3	3	3	0	28	Medium
RPV-12	3	3	3	3	3	3	1	0	0	0	3	3	3	3	0	31	High
RPV-13	3	0	3	3	3	3	1	0	0	3	3	3	3	3	3	34	High
RPV-14	3	0	3	3	3	3	1	0	0	3	3	3	0	3	3	31	High
RPV-15	3	0	3	3	3	3	1	0	0	3	3	3	0	3	3	31	High
RPV-16	3	0	3	3	3	3	1	0	0	3	3	3	3	3	3	34	High
RPV-17	3	0	3	3	3	3	1	0	0	0	3	1	0	3	0	23	Medium
RPV-18	3	3	3	3	3	3	1	0	3	1	3	3	3	3	0	35	High
RPV-19	3	0	3	3	3	3	1	0	3	1	3	3	3	3	0	32	High
RPV-20	3	0	3	3	3	3	1	0	0	0	3	0	3	3	0	25	Medium
RPV-21	3	0	3	3	3	3	1	0	0	0	3	3	3	3	0	28	Medium
RPV-22	3	0	3	3	3	3	1	0	0	0	3	3	3	3	0	28	Medium
RPV-23	3	0	3	3	3	3	1	0	0	0	3	1	3	3	3	29	Medium
RPV-24	3	0	3	3	3	1	1	3	3	3	3	3	3	3	0	35	High
RPV-25	3	0	3	3	3	3	1	0	0	1	3	3	3	3	0	29	Medium
RPV-26	3	0	3	3	3	3	1	0	0	3	3	0	3	3	3	31	High
RPV-27	3	0	3	3	3	1	0	0	3	3	3	0	3	3	3	31	High
RPV-28	3	3	3	3	3	1	3	3	3	3	1	3	0	3	1	36	High
RPV-29	3	0	3	3	3	1	3	0	0	3	3	1	3	3	3	32	High
RPV-30	3	0	3	3	3	3	3	0	0	3	3	3	3	3	0	33	High

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
RPV-31	3	0	3	3	3	3	3	0	0	3	3	3	0	3	0	30	Medium
RPV-32	3	0	3	3	3	3	3	0	0	3	3	3	0	3	3	33	High
RPV-33	3	0	3	3	3	3	3	0	0	3	3	3	0	3	3	33	High
RPV-34	3	0	3	3	3	3	3	0	3	3	3	3	0	3	3	36	High
RPV-35	3	0	3	3	3	3	3	0	0	3	3	3	3	3	3	36	High
RPV-36	3	0	3	3	3	3	3	0	0	0	3	3	3	3	0	30	Medium
RPV-37	3	3	3	3	3	3	3	0	3	3	3	3	0	3	0	36	High
RPV-38	3	0	3	3	3	3	3	0	0	3	3	3	0	3	3	33	High
RPV-39	3	0	3	3	3	3	3	0	0	3	3	3	0	3	3	33	High
RPV-40	3	0	3	3	3	3	3	0	3	3	3	3	0	3	0	33	High
RPV-41	3	3	3	3	3	3	3	3	0	3	3	3	0	3	1	37	High
RPV-42	3	3	3	3	3	3	3	0	0	0	3	3	0	3	0	30	Medium
RPV-43	3	3	3	3	3	3	3	0	3	0	3	3	3	3	0	36	High
RPV-44	3	3	3	3	3	3	3	0	0	0	3	3	3	3	0	33	High
RPV-45	3	3	3	3	3	1	3	0	1	0	3	1	3	3	1	31	High
RPV-46	3	3	3	3	3	3	3	0	3	1	3	3	3	3	0	37	High
RPV-47	3	0	3	3	3	3	3	1	0	0	3	3	3	3	0	31	High
RPV-48	3	0	3	3	3	1	3	0	0	3	3	3	3	3	3	34	High
RPV-49	3	3	3	3	3	1	3	0	0	3	3	1	3	3	3	35	High
RPV-50	3	0	3	3	3	1	3	1	3	3	3	3	3	3	3	38	High
RPV-51	3	0	3	3	3	1	3	1	3	3	3	0	3	3	3	35	High
RPV-52	3	3	3	3	3	0	3	1	3	3	3	0	0	3	3	34	High
RPV-53	3	0	3	3	3	3	1	0	0	0	3	3	3	3	0	28	Medium
RPV-54	3	0	3	3	3	1	3	0	0	1	3	3	3	3	0	29	Medium
RPV-55	3	0	3	3	3	0	1	0	3	3	1	3	3	3	3	32	High
RPV-56	3	0	3	3	3	1	3	0	0	0	3	0	3	3	0	25	Medium
RPV-57	3	3	3	3	3	0	3	0	0	0	1	0	3	3	0	25	Medium
RPV-58	3	0	3	3	3	3	3	0	0	3	3	0	3	3	0	30	Medium
RPV-59	3	3	3	3	3	3	1	0	0	0	3	0	0	3	0	25	Medium
RPV-60	3	0	3	3	3	3	1	0	0	0	3	0	3	3	0	25	Medium
RPV-61	3	0	3	3	3	1	1	0	0	0	3	0	3	3	3	26	Medium

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
RPV-62	3	0	3	3	3	3	1	0	0	0	3	0	3	3	0	25	Medium
RPV-63	3	3	3	3	3	3	3	1	3	1	3	0	3	3	0	35	High
RPV-64	3	3	3	3	3	3	3	0	3	1	3	0	0	3	0	31	High
RPV-65	3	3	3	3	3	3	1	3	3	3	3	0	0	3	3	37	High
RPV-66	3	3	3	3	3	3	3	1	3	1	3	0	3	3	0	35	High
RPV-67	3	3	3	3	3	3	3	1	3	1	3	0	3	3	0	35	High
RPV-68	3	3	3	3	3	3	1	0	3	3	3	0	3	3	3	37	High
RPV-69	3	3	3	3	3	3	1	0	3	0	3	0	3	3	0	31	High
RPV-70	3	3	3	3	3	1	1	1	3	3	1	0	3	3	0	31	High
RPV-71	3	3	3	3	3	1	3	1	3	1	3	0	3	3	0	33	High
RPV-72	3	0	3	3	3	3	1	1	3	3	3	0	0	3	3	32	High
RPV-73	3	3	3	3	3	3	3	0	3	1	3	0	0	3	0	31	High
RPV-74	3	3	3	3	3	3	3	0	3	1	3	0	0	3	0	31	High
RPV-75	3	3	3	3	3	3	3	1	3	1	3	0	0	3	0	32	High
RPV-76	3	3	3	3	3	3	3	3	3	1	3	0	3	3	0	37	High
RPV-77	3	3	3	3	3	3	0	3	3	0	3	0	3	3	0	33	High
RPV-78	3	0	3	3	3	3	1	1	3	0	3	0	3	3	0	29	Medium
RPV-79	3	0	3	3	3	1	1	0	0	3	3	0	3	3	3	29	Medium
RPV-80	3	0	3	3	3	3	1	0	0	3	3	0	0	3	3	28	Medium
RPV-81	3	0	3	3	3	3	1	0	0	3	3	0	0	3	1	26	Medium
RPV-82	3	0	3	3	3	3	3	0	0	3	3	0	3	3	1	31	High
RPV-83	3	0	3	3	3	3	3	0	0	0	3	0	0	3	0	24	Medium
RPV-84	3	0	3	3	3	1	3	0	0	3	3	0	3	3	3	31	High
RPV-85	3	0	3	3	3	1	3	0	0	3	3	0	3	3	3	31	High
RPV-86	3	0	3	3	3	1	3	0	0	3	3	0	3	3	3	31	High
RPV-87	3	3	3	3	3	0	3	0	1	1	1	0	0	3	0	24	Medium
RPV-88	3	0	3	3	3	3	1	0	0	1	3	0	0	3	3	26	Medium
RPV-89	3	3	3	3	3	3	3	0	1	3	3	0	0	3	0	31	High
RPV-90	3	3	3	3	3	1	3	0	1	3	3	0	3	3	0	32	High
RPV-91	3	3	3	3	3	0	3	3	3	3	1	0	0	3	3	34	High
RPV-92	3	0	3	3	3	3	3	1	3	3	3	0	0	3	3	34	High

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
RPV-93	3	0	3	3	3	3	1	0	0	1	3	0	3	3	0	26	Medium
RPV-94	3	0	3	3	3	3	1	0	0	1	3	0	3	3	3	29	Medium
RPV-95	3	0	3	3	3	3	0	0	0	1	3	0	3	3	0	25	Medium
RPV-96	3	0	3	3	3	3	3	0	3	1	3	0	3	3	0	31	High
RPV-97	3	0	3	3	3	3	3	0	0	1	3	0	3	3	0	28	Medium
RPV-98	3	0	3	3	3	3	1	0	3	3	3	0	0	3	0	28	Medium
RPV-99	3	0	3	3	3	3	3	0	3	3	3	0	0	3	3	33	High
RPV-100	3	3	3	3	3	3	3	3	3	1	3	0	0	3	0	34	High
RPV-101	3	0	3	3	3	3	0	1	0	1	3	0	0	3	0	23	Medium
RPV-102	3	3	3	3	3	3	3	0	0	1	3	0	0	3	0	28	Medium
RPV-103	3	0	3	3	3	3	1	0	0	1	3	0	3	3	3	29	Medium
RPV-104	3	3	3	3	3	3	3	0	3	1	3	0	3	3	0	34	High
RPV-105	3	0	3	3	3	3	1	0	3	3	3	0	0	3	3	31	High

Note: 31 or more = High Priority  
 15 to 30 = Medium Priority  
 0 to 14 = Low Priority

Table 3-16 Mitigation Action Classification and Natural Hazards Addressed

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RPV-001	■	■	■						■						
RPV-002	■						■	■	■	■	■	■	■	■	■
RPV-003	■		■		■	■	■	■	■	■	■	■	■	■	■
RPV-004	■					■	■	■	■	■	■	■	■	■	■
RPV-005			■			■	■	■	■	■	■	■	■	■	■
RPV-006			■				■	■	■	■	■	■	■	■	■
RPV-007		■					■	■	■	■	■	■	■	■	■

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RPV-008	■					■	■	■	■	■	■	■	■	■	■
RPV-009						■	■	■	■	■	■	■	■	■	■
RPV-010						■	■	■	■	■	■	■	■	■	■
RPV-011						■	■	■	■	■	■	■	■	■	■
RPV-012						■	■	■	■	■	■	■	■	■	■
RPV-013						■	■	■	■	■	■	■	■	■	■
RPV-014			■				■	■	■	■	■	■	■	■	■
RPV-015	■		■				■	■	■	■	■	■	■	■	■
RPV-016			■				■	■	■	■	■	■	■	■	■
RPV-017						■	■	■	■	■	■	■	■	■	■
RPV-018	■						■	■	■	■	■	■	■	■	■
RPV-019	■					■	■	■	■	■	■	■	■	■	■
RPV-020						■	■	■	■	■	■	■	■	■	■
RPV-021	■					■	■	■	■	■	■	■	■	■	■
RPV-022						■	■	■	■	■	■	■	■	■	■
RPV-023						■	■	■	■	■	■	■	■	■	■
RPV-024	■					■	■	■	■	■	■	■	■	■	■
RPV-025							■	■	■	■	■	■	■	■	■
RPV-026	■														■
RPV-027	■											■			
RPV-028	■			■	■		■	■	■	■	■	■	■	■	■
RPV-029	■					■	■	■	■	■	■	■	■	■	■
RPV-030						■	■	■	■	■	■	■	■	■	■
RPV-031		■				■	■	■	■	■	■	■	■	■	■
RPV-032			■				■	■	■	■	■	■	■	■	■
RPV-033			■				■	■	■	■	■	■	■	■	■
RPV-034			■				■	■	■	■	■	■	■	■	■
RPV-035			■				■	■	■	■	■	■	■	■	■
RPV-036						■	■	■	■	■	■	■	■	■	■
RPV-037		■				■	■	■	■	■	■	■	■	■	■

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RPV-038			■				■	■	■	■	■	■	■	■	■
RPV-039			■				■	■	■	■	■	■	■	■	■
RPV-040	■					■	■	■	■	■	■	■	■	■	■
RPV-041							■	■	■	■	■	■	■	■	■
RPV-042		■				■	■	■	■	■	■	■	■	■	■
RPV-043	■					■	■	■	■	■	■	■	■	■	■
RPV-044	■					■	■	■	■	■	■	■	■	■	■
RPV-045	■					■	■	■	■	■	■	■	■	■	■
RPV-046		■					■	■	■	■	■	■	■	■	■
RPV-047							■	■	■	■	■	■	■	■	■
RPV-048	■		■			■	■	■	■	■	■	■	■	■	■
RPV-049	■					■	■	■	■	■	■	■	■	■	■
RPV-050	■				■	■	■	■	■	■	■	■	■	■	■
RPV-051	■					■									■
RPV-052			■												■
RPV-053						■	■	■	■	■	■	■	■	■	■
RPV-054						■	■	■	■	■	■	■	■	■	■
RPV-055			■			■	■	■	■	■	■	■	■	■	■
RPV-056						■	■	■	■	■	■	■	■	■	■
RPV-057							■	■	■	■	■	■	■	■	■
RPV-058						■	■	■	■	■	■	■	■	■	■
RPV-059		■	■				■	■	■	■	■	■	■	■	■
RPV-060						■	■	■	■	■	■	■	■	■	■
RPV-061	■					■	■	■	■	■	■	■	■	■	■
RPV-062						■	■	■	■	■	■	■	■	■	■
RPV-063	■	■							■						
RPV-064	■	■		■					■						
RPV-065	■		■			■			■						
RPV-066	■	■		■					■						
RPV-067			■						■						

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RPV-068	■	■							■						
RPV-069	■								■						
RPV-070	■	■		■					■						
RPV-071	■		■			■	■	■	■	■	■	■	■	■	■
RPV-072	■		■						■						
RPV-073	■	■							■						
RPV-074	■	■							■						
RPV-075	■	■							■						
RPV-076	■								■						
RPV-077	■	■							■						
RPV-078						■			■						
RPV-079	■					■	■	■	■	■	■	■	■	■	■
RPV-080	■						■	■	■	■	■	■	■	■	■
RPV-081	■		■				■	■	■	■	■	■	■	■	■
RPV-082			■				■	■	■	■	■	■	■	■	■
RPV-083							■	■	■	■	■	■	■	■	■
RPV-084	■					■	■	■	■	■	■	■	■	■	■
RPV-085			■			■	■	■	■	■	■	■	■	■	■
RPV-086	■					■	■	■	■	■	■	■	■	■	■
RPV-087				■			■	■	■	■		■	■		
RPV-088			■	■			■	■	■	■		■	■		
RPV-089		■					■	■	■	■		■	■		
RPV-090	■					■	■	■	■	■		■	■		
RPV-091	■			■											■
RPV-092	■			■											■
RPV-093															■
RPV-094	■		■												■
RPV-095						■									■
RPV-096						■									■
RPV-097															■

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RPV-098	■			■											■
RPV-099	■		■	■											■
RPV-100	■			■											■
RPV-101	■														■
RPV-102	■														■
RPV-103															■
RPV-104	■		■												■
RPV-105			■												■

### 3.10 Public Outreach

**Table 3-17 Public Outreach**

Local Outreach Activity	Date	Number of People Involved
City Council Meeting	9/15/25	20-40 people on average per meeting.
Shared with Community Partners (CHOA, chamber of commerce, neighborhood watch, rotary foundation, library district and school district)	Shared in September and December 2025	6 organizations reaching thousands of residents.
Posted at City facilities (City Hall, Ladera Linda and Hesse Park)	Posted since Fall 2025	Reached dozens to hundreds of visitors to these facilities.
Emergency Preparedness Committee Meeting	Updates provided at all monthly meetings since plan development began	5-10 people per meeting, including members.
Social Media Outreach (Instagram, Nextdoor, X, Facebook)	Routine posts from September 2025	Over 44,000 accounts follow RPV social media across platforms.
Breaking News ListServ	Routine posts from September 2025	1,528 subscribers to this listserv.
Weekly City Manager’s Report	Included since September 2025	159 subscribers to this listserv, not including those who access through the website.
Seasonal Quarterly Newsletter	December 2025	Shared throughout the City to approximately 15,000 households.
Website post	Posted since September 2025	Thousands of people view the rpvca.gov website.
EPC Monthly Message	Included since September 2025	413 subscribers for the EPC List Serv, not including those who access the message online.
RPVtv PSA	1/7/2026	Several hundred people.
EPC Booth	Home Hardening Expo 9/26/25 Prep. Peninsula Expo 10/26/25	500-700 people between both events.

**HELP SHAPE OUR  
COMMUNITY'S  
RESILIENCE PLAN**

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**PALOS VERDES PENINSULA  
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

To learn more about the planning process:  
<https://www.pvpready.gov>

**TAKE OUR  
SURVEY**



**RESPOND BY JANUARY 15, 2026**

The infographic features a background image of a paved road winding through a wooded area. At the bottom left, there is a row of four logos: City of Palos Verde, Rancho Palos Verdes (RPV), City of Rancho Palos Verdes, and City of Rancho Palos Verdes. An orange arrow points from the 'TAKE OUR SURVEY' text to the QR code.

**Figure 3-2** RPV Virtual Outreach Infographic for the MJLHMP Community Survey

Source: RPV social media, website, and weekly report

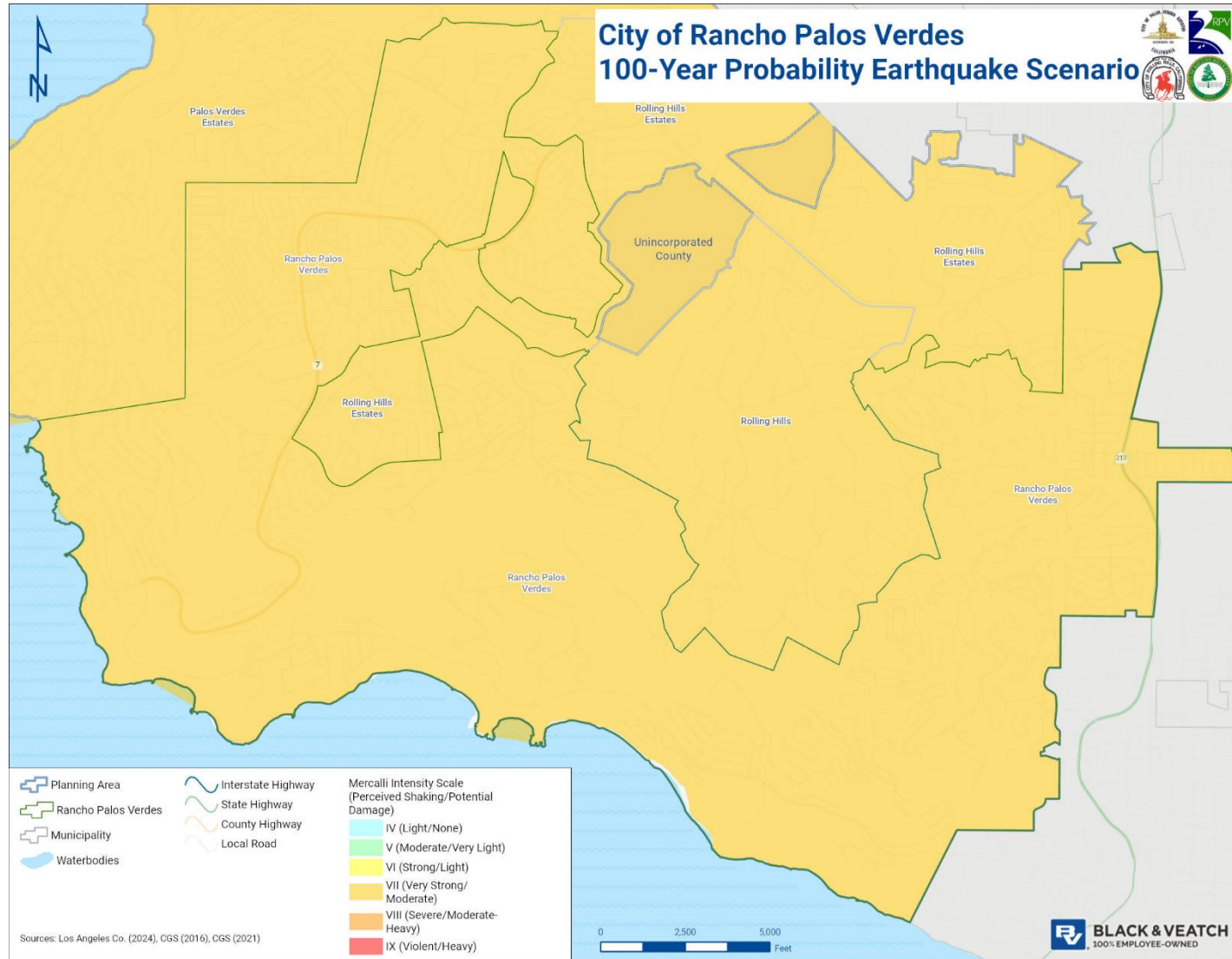


Figure 3-3 Earthquake Hazard Map – 100-Year Probability Scenario

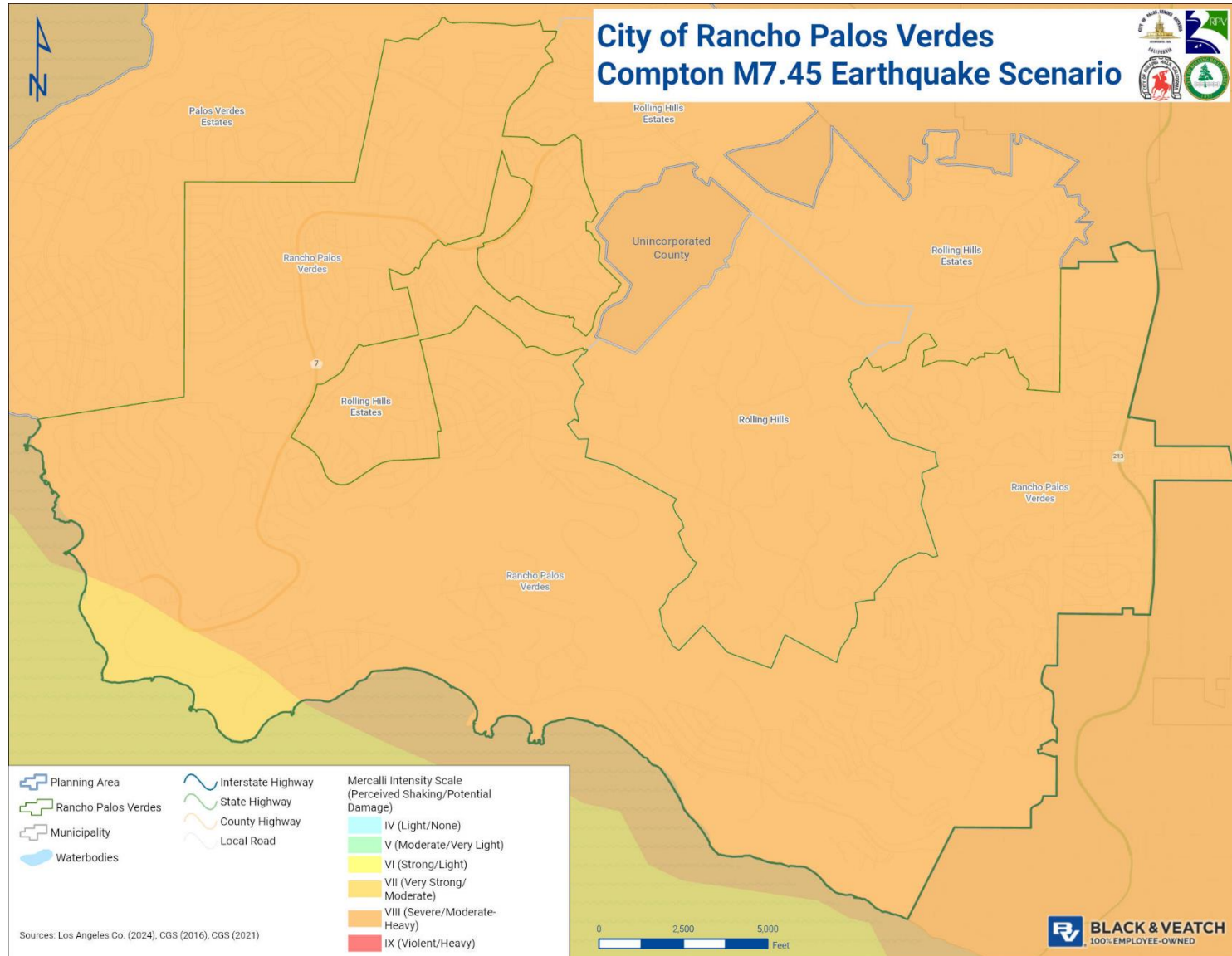


Figure 3-4 Earthquake Hazard Map – Compton M7.45 Scenario

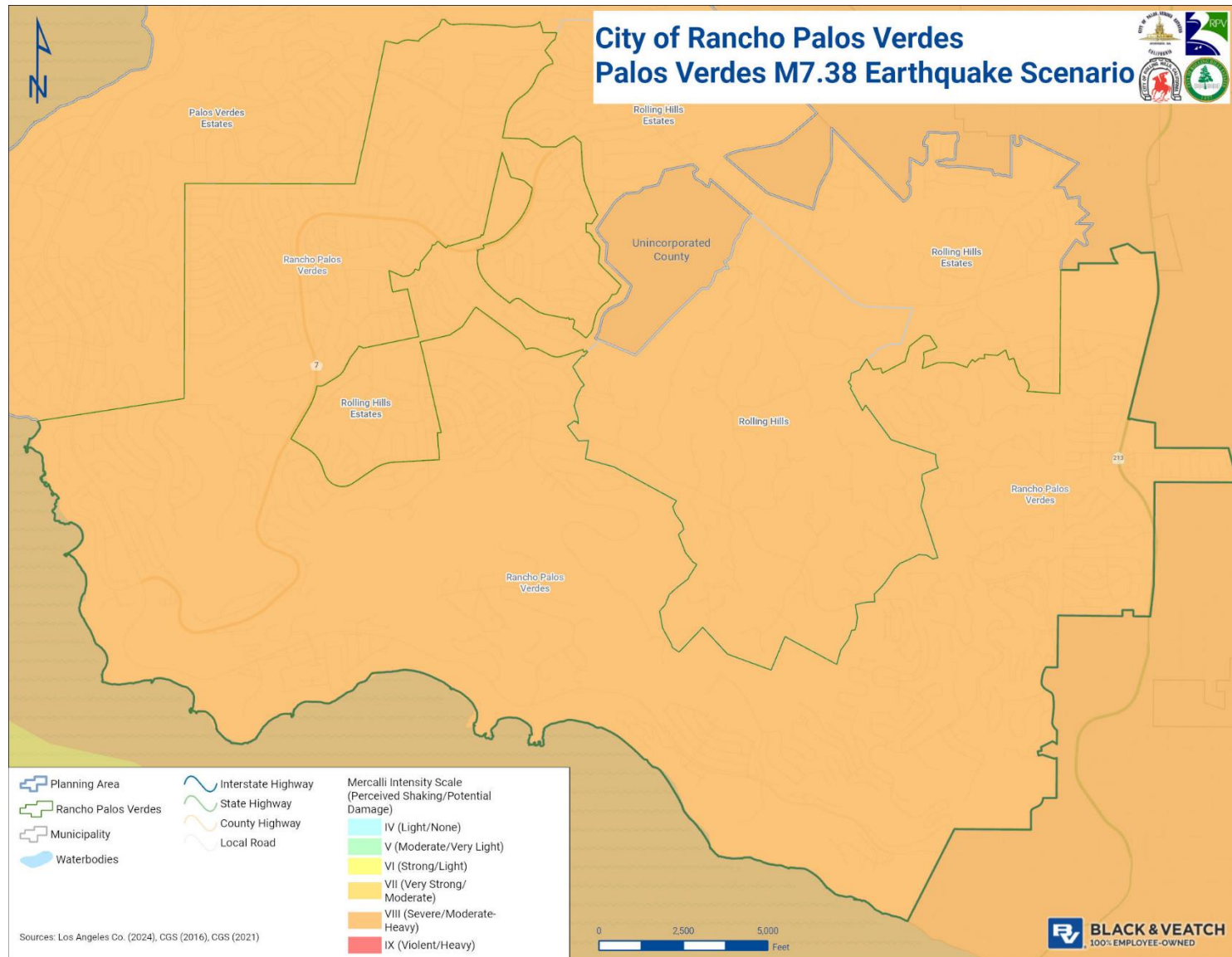


Figure 3-5 Earthquake Hazard Map – Palos Verdes M7.78 Scenario

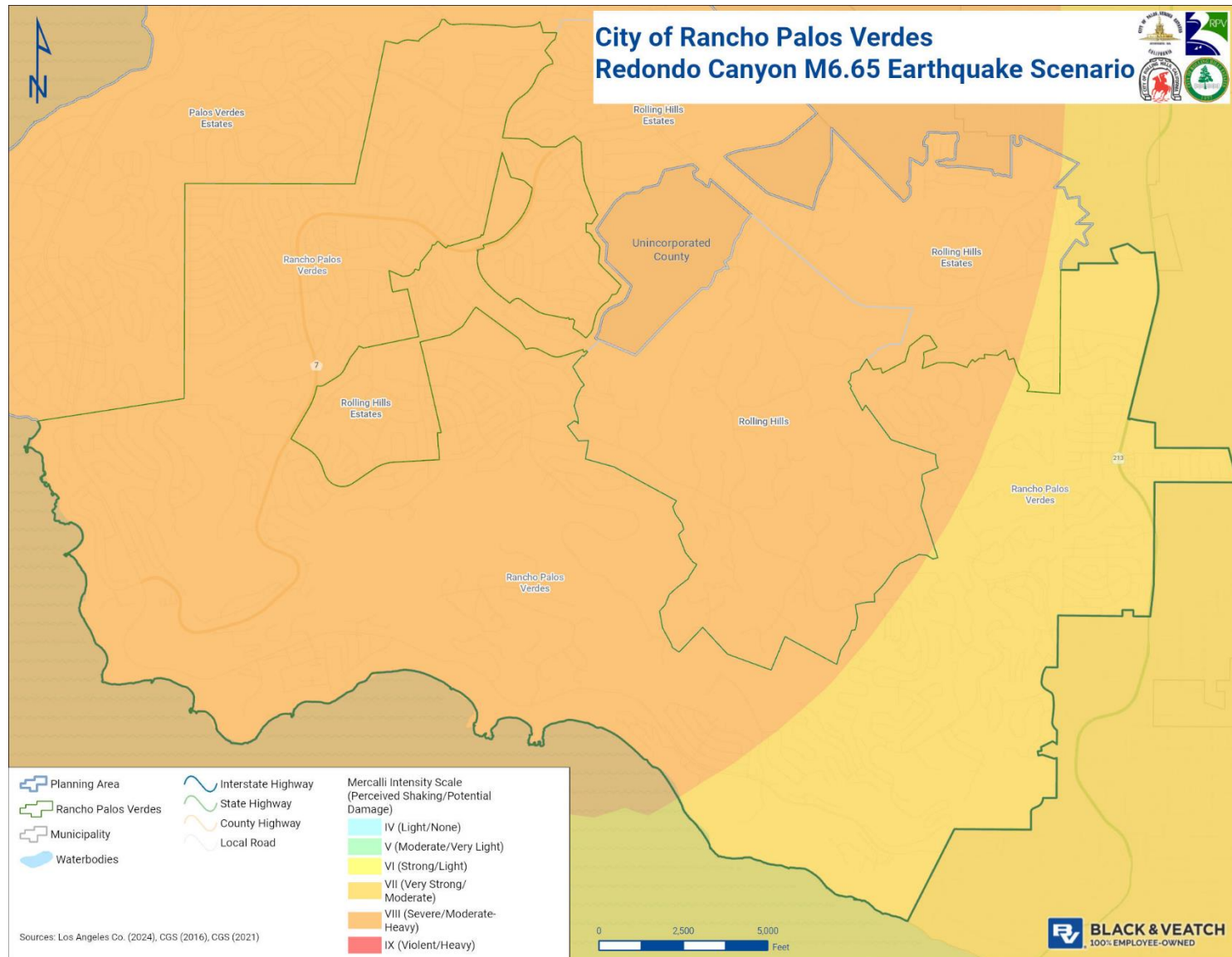


Figure 3-6 Earthquake Hazard Map – Redondo Canyon M6.65 Scenario

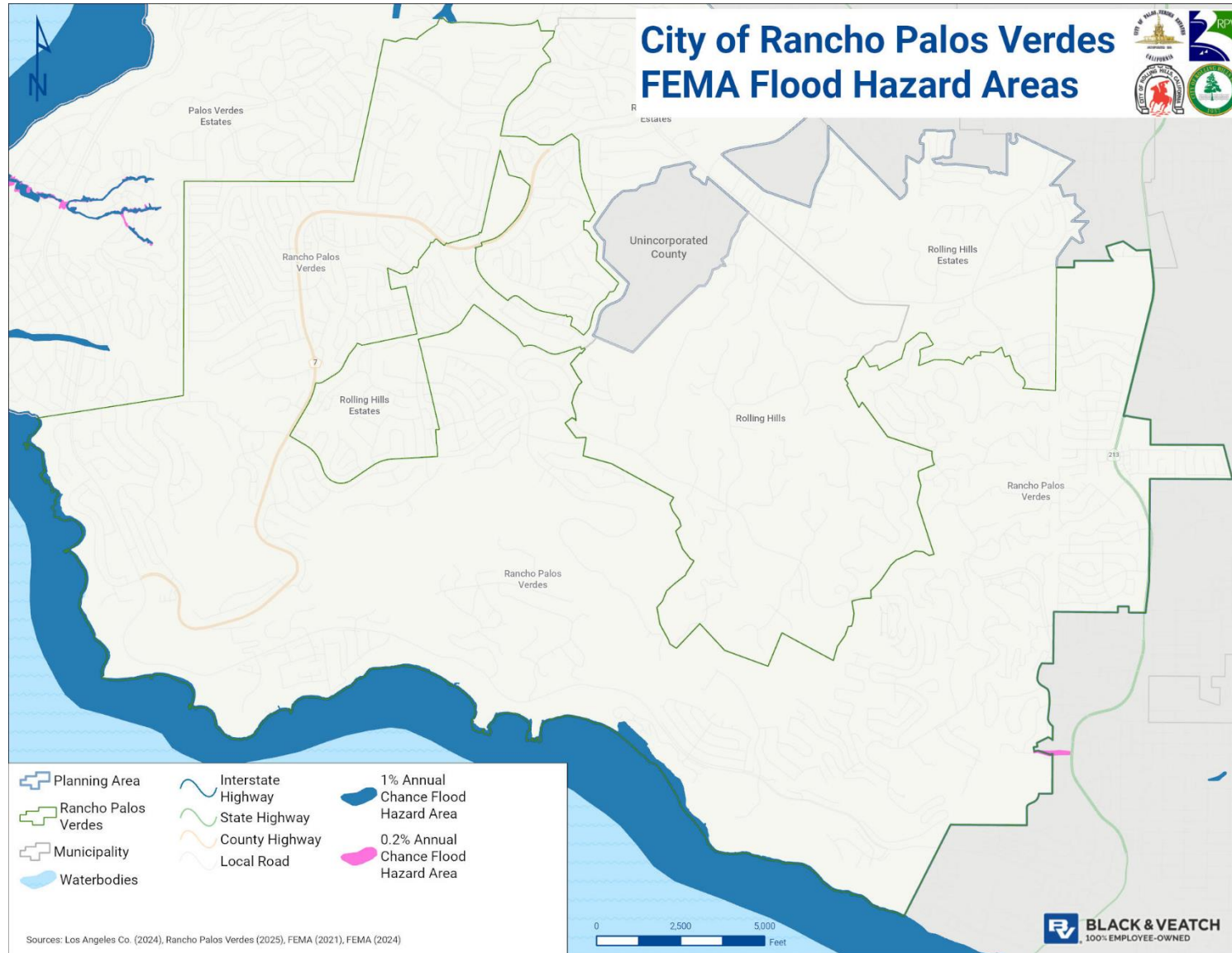


Figure 3-7 Flood Hazard Map – FEMA Flood Hazard Areas

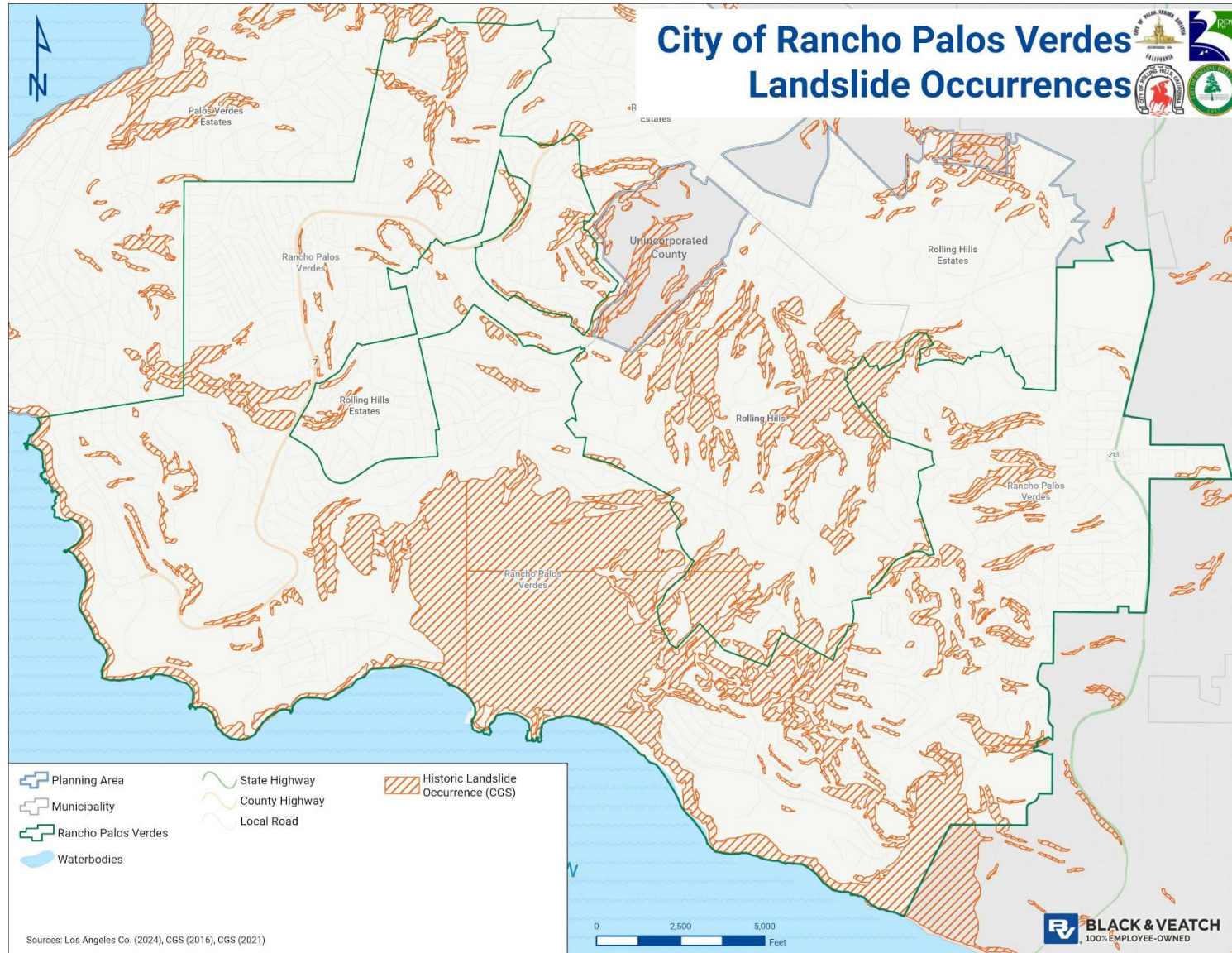


Figure 3-8 Landslide Hazard Map – Landslide Occurrences

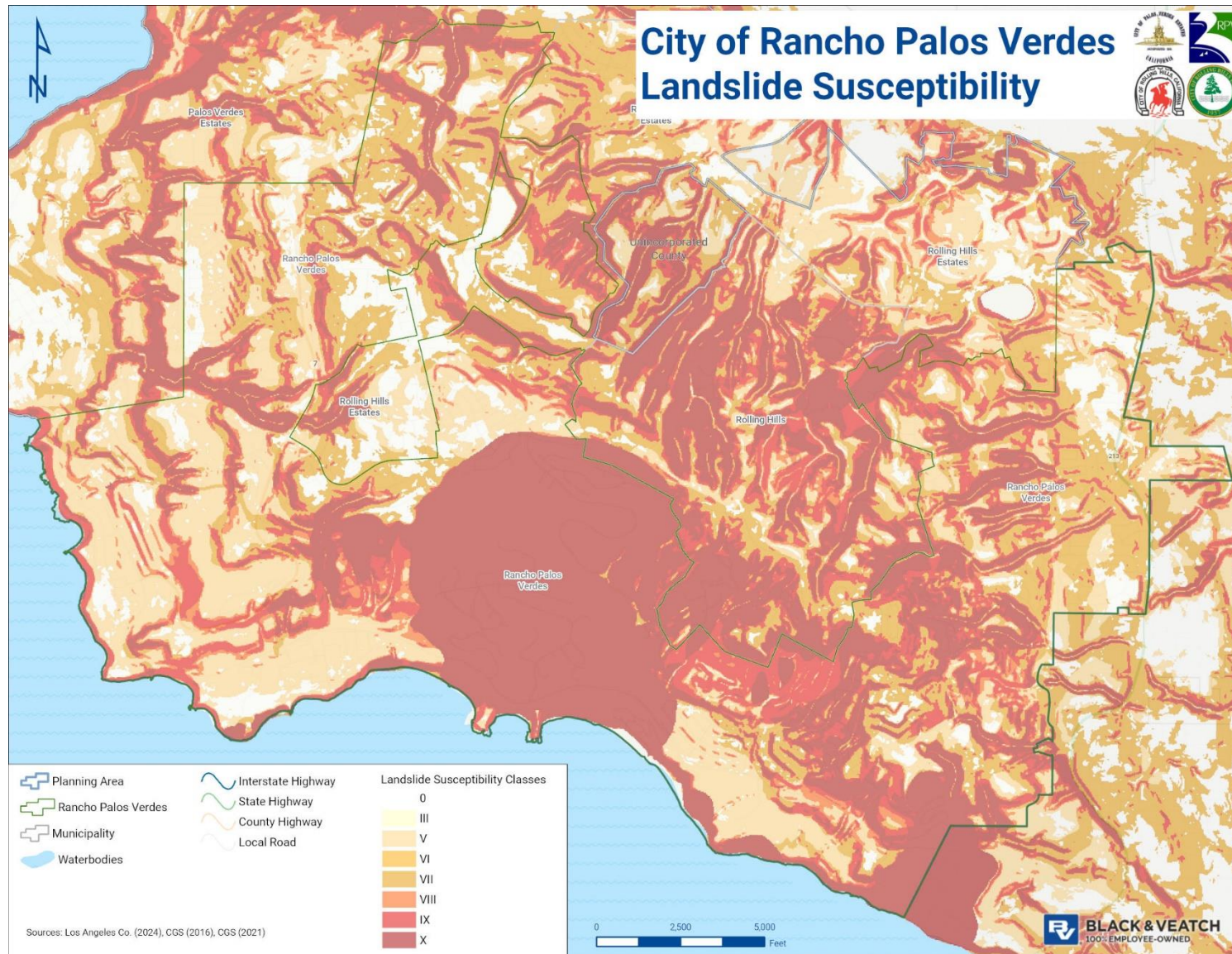


Figure 3-9 Landslide Hazard Map – Landslide Susceptibility

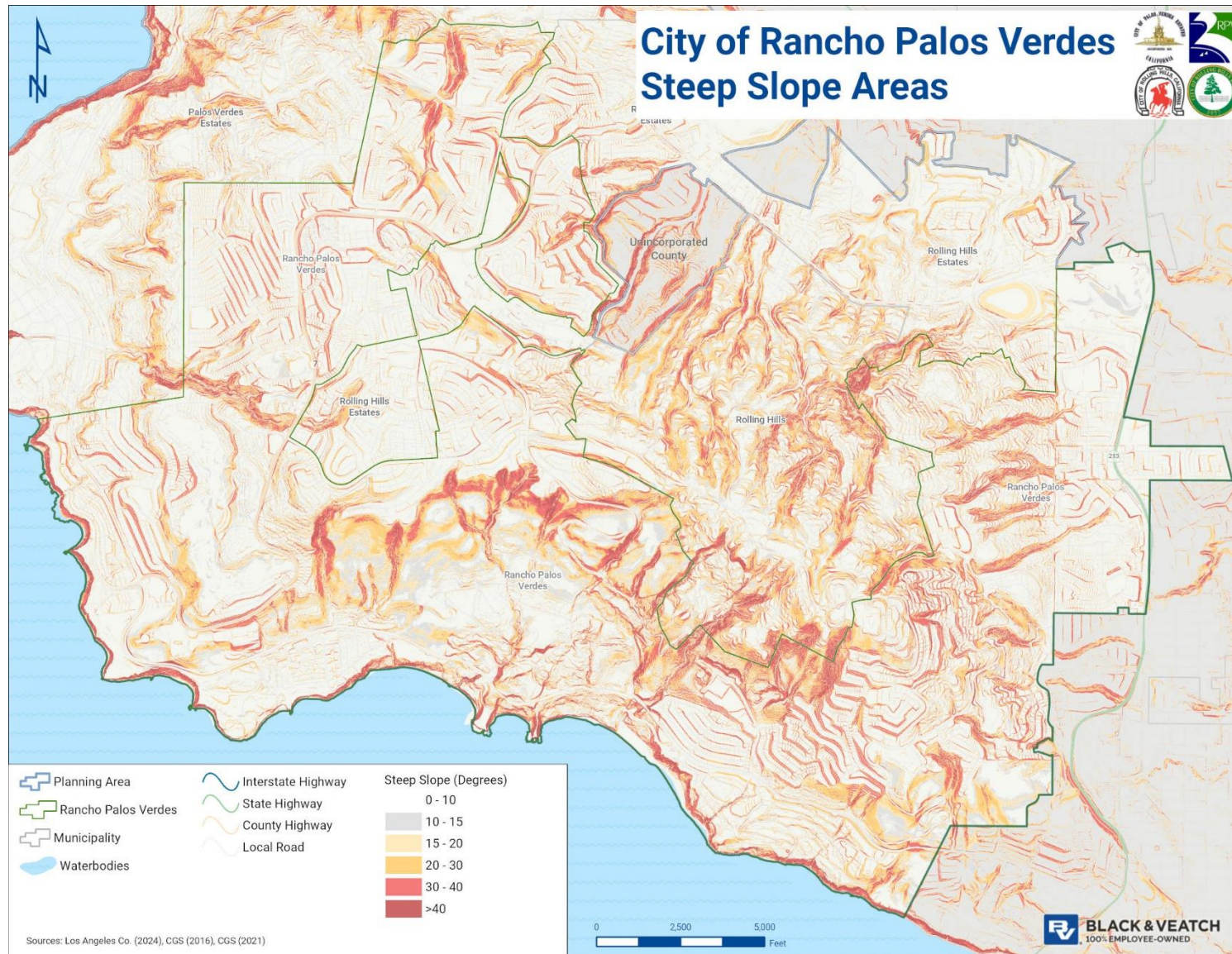


Figure 3-10 Landslide Hazard Map – Steep Slope Areas

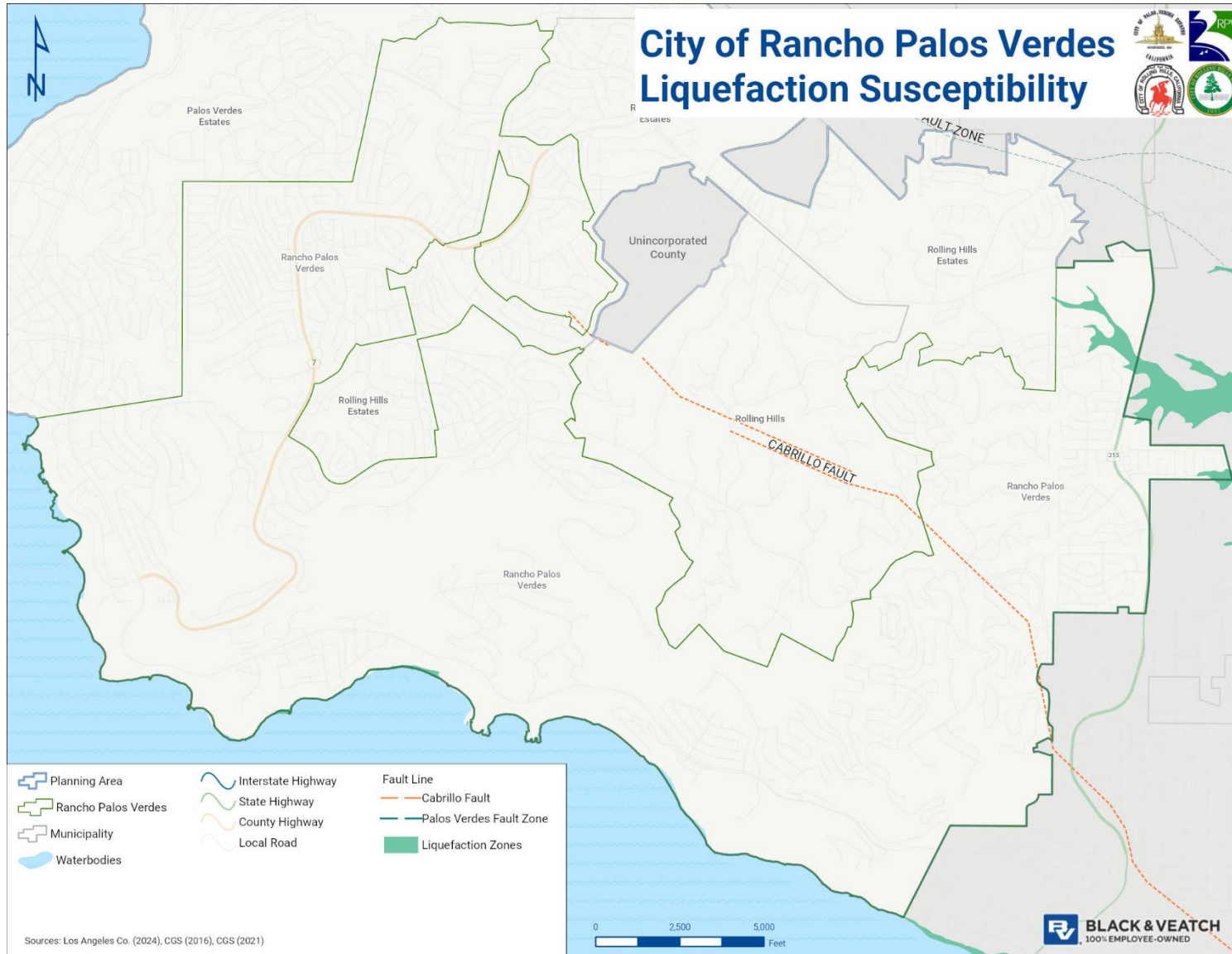


Figure 3-11 Liquefaction Hazard Map – Liquefaction Susceptibility

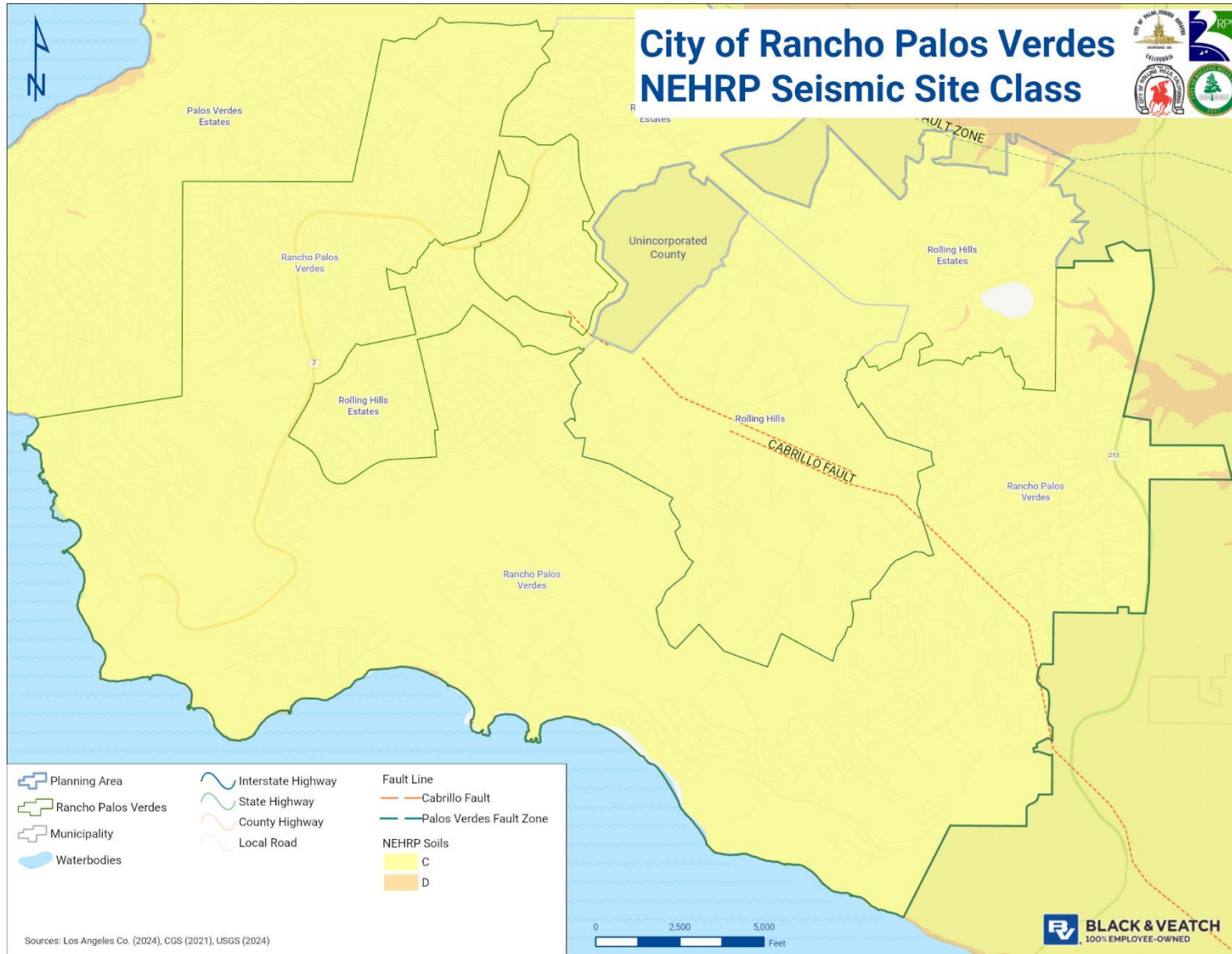


Figure 3-12 Liquefaction Hazard Map – NEHRP Seismic Site Class

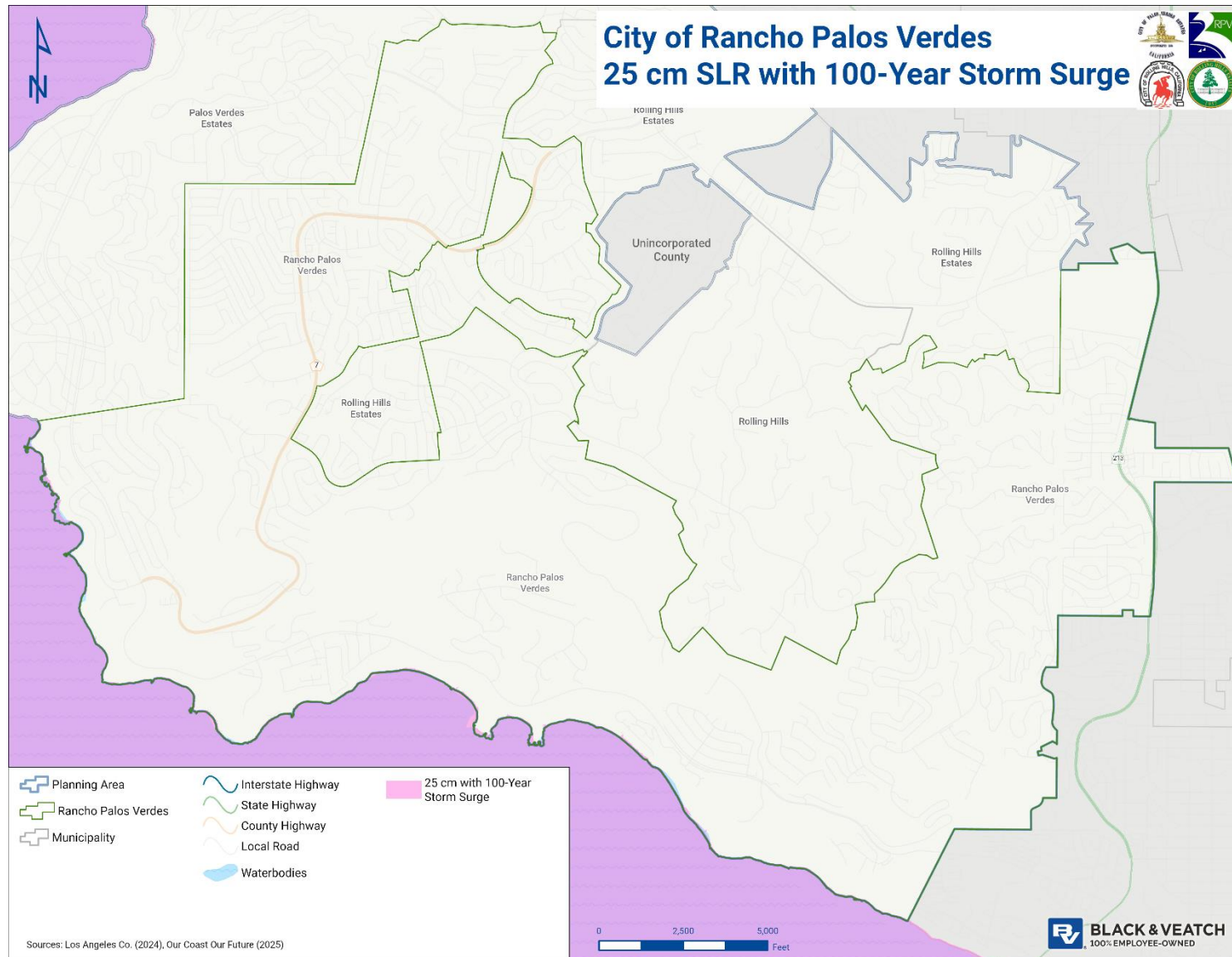


Figure 3-13 Sea Level Rise Hazard Map – 25 cm with 100-Year Storm Surge

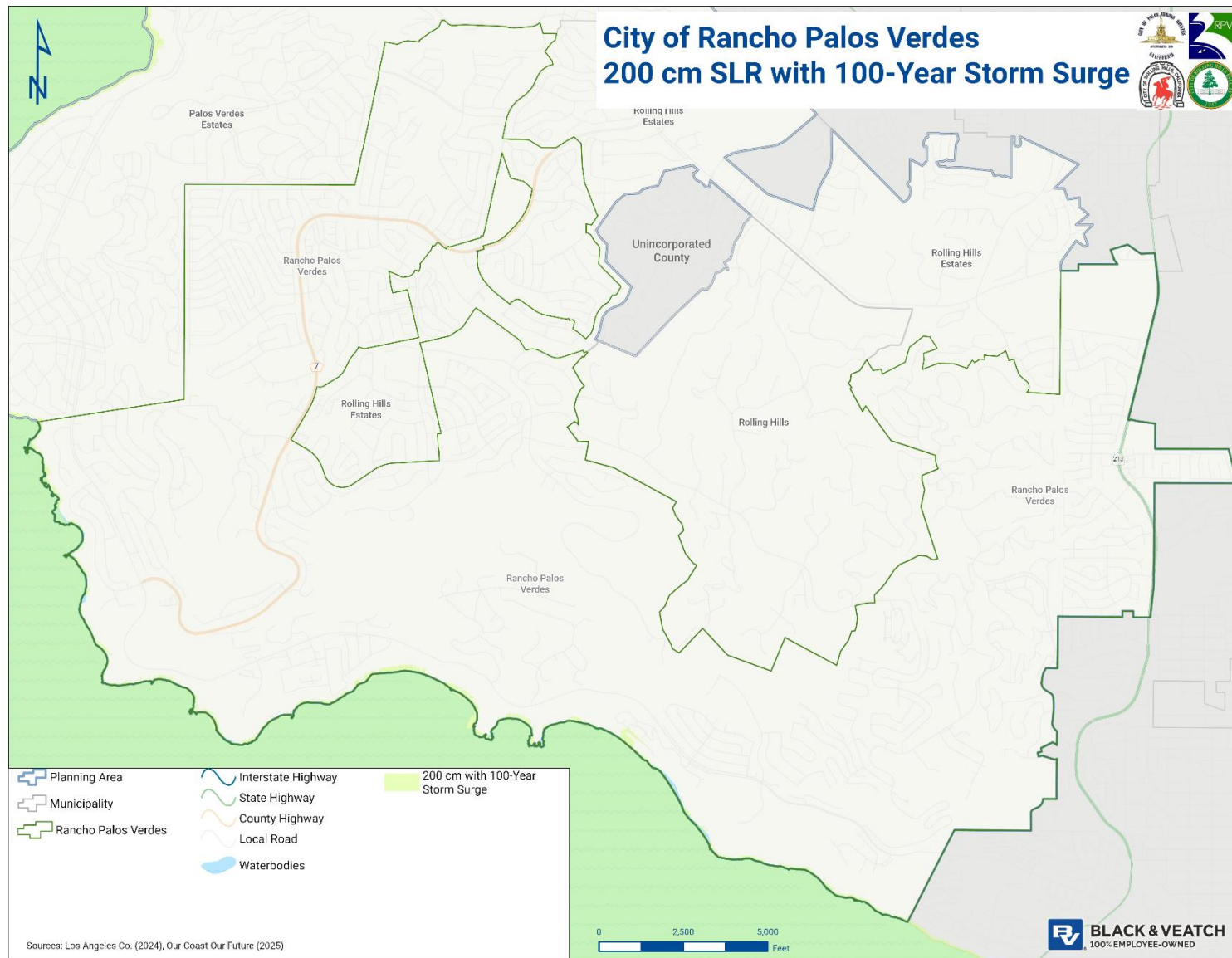


Figure 3-14 Sea Level Rise Hazard Map – 200 cm with 100-Year Storm Surge

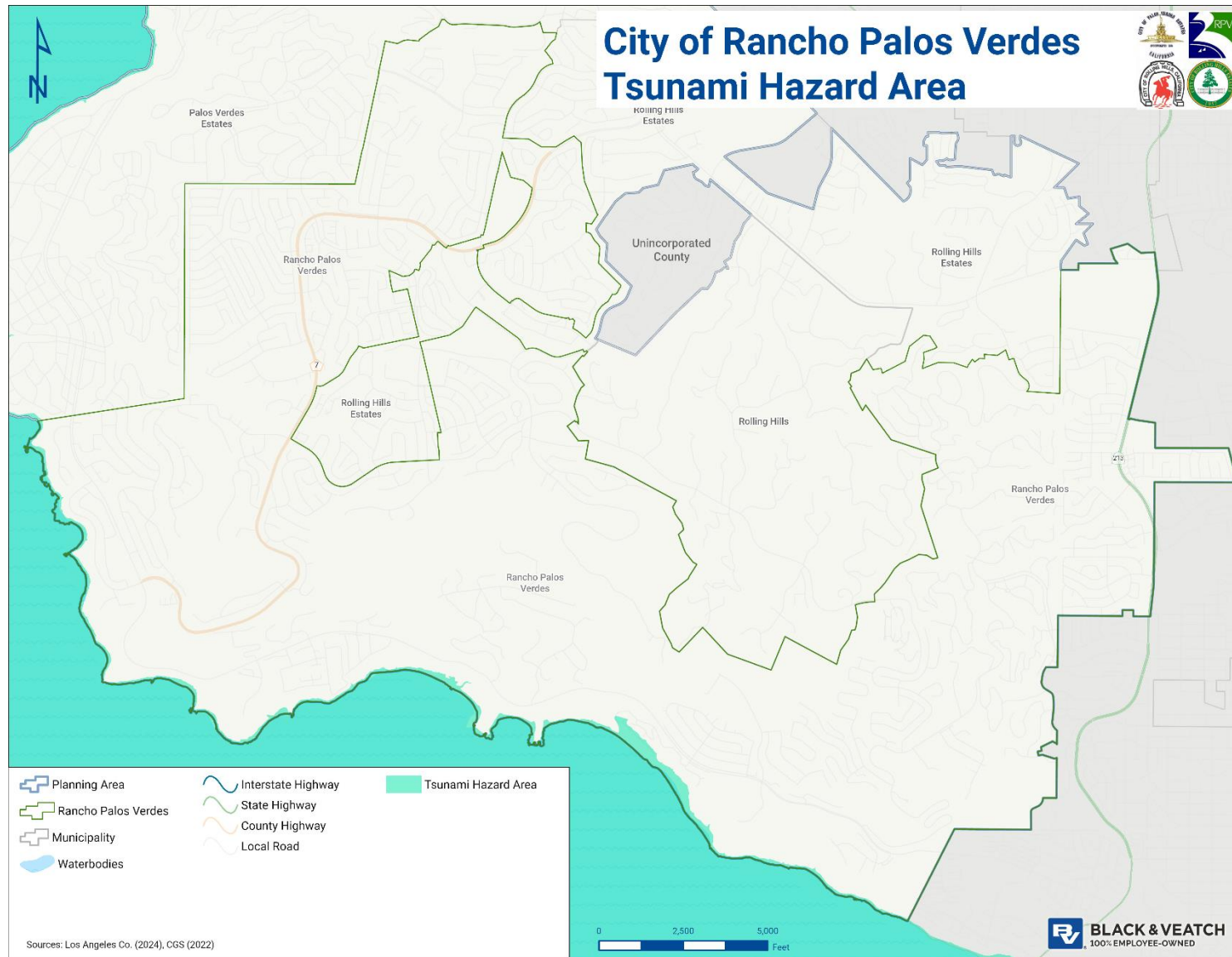


Figure 3-15 Tsunami Hazard Map – Tsunami Hazard Area

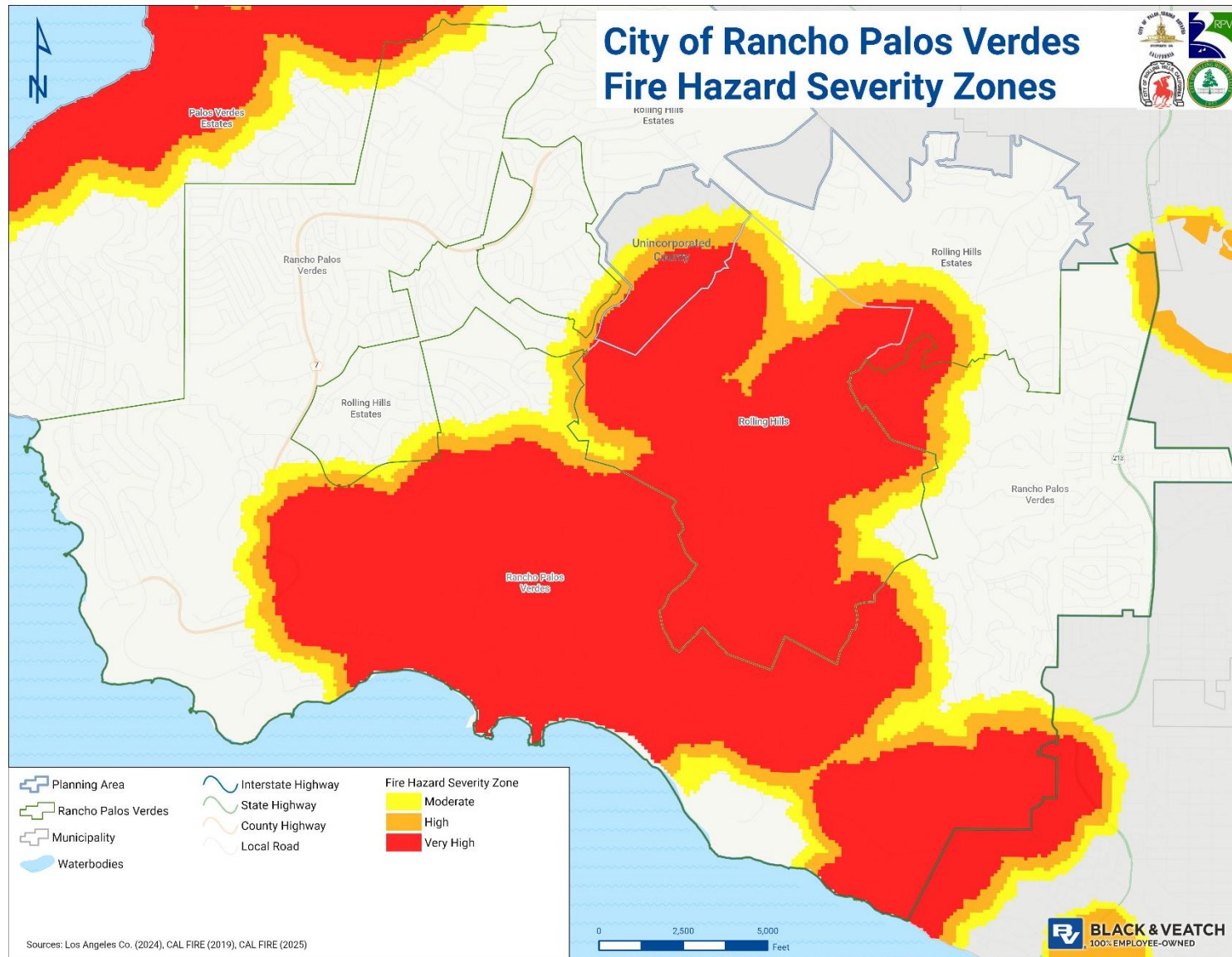


Figure 3-16 Wildfire Hazard Map – Fire Hazard Severity Zones

## 4. ROLLING HILLS



**Figure 4-1**      **Rolling Hills**

Source: Samantha Crew

### 4.1 Local Hazard Mitigation Planning Team

**Table 4-1**      **Local Planning Team**

	Primary Point of Contact	Alternate Point of Contact
Name and Title:	Samantha Crew – Management Analyst	Karina Banales – City Manager
Address:	2 Portuguese Bend Road Rolling Hills, CA 90274	2 Portuguese Bend Road Rolling Hills, CA 90274
Phone Number:	310 377-1521	310 377-1521
Email:	Sjcrew@CityofRH.net	Kbanales@CityofRH.net
<b>Contributors:</b>		
Name and Title:	Samantha Crew – Management Analyst	
Method of Participation:	Primary point of contact for the City’s annex; participated on the Steering Committee; attended meeting; provided input throughout the planning process; identified mitigation actions; reviewed documents	
Name and Title:	Stephanie Grant – Assistant Planner	

Method of Participation:	Attended meetings; provided input; reviewed documents
Name and Title:	Reina Schaetzl – Contract Senior Planner, Willdan
Method of Participation:	Attended meetings; provided input; reviewed documents
Name and Title:	Kristen Raig, RHCA Manager
Method of Participation:	Provided input and reviewed the City annex

## 4.2 Jurisdictional Profile

### 4.2.1 Location and Features

The City of Rolling Hills is characterized by its wooded, deep canyons and steep hilly terrain, situated within the San Pedro Hills of the Palos Verdes Peninsula in Southern California. Encompassing approximately 3 square miles, Rolling Hills is entirely residential and preserves its unique identity as a private, gated equestrian community.

Located in the northwestern portion of Los Angeles County, Rolling Hills is bordered on three sides by the City of Rancho Palos Verdes and on the north and northeast by the City of Rolling Hills Estates. Adjoining neighborhoods include Miraleste (east/southeast) and Portuguese Bend (south/southeast) in Rancho Palos Verdes, as well as Westfield to the northeast/east-northeast in the unincorporated Palos Verdes Peninsula.

Rolling Hills is known for its semi-rural environment, equestrian lifestyle, and strict residential land-use policies. The City’s private roadways, large residential lots, and scenic canyon and ridgeline ocean views reinforce its rural atmosphere, setting it apart from the more urbanized communities surrounding it.

The Rolling Hills Community Association (RHCA) plays a central role in preserving the unique character and quality of life within the City of Rolling Hills. As the homeowners’ association for all properties in the City, RHCA is responsible for maintaining the community’s private roadways, security gates, equestrian trails, and common areas, as well as overseeing the architectural review process to ensure that development is consistent with the City’s rural, equestrian, and residential character. The Association works in close partnership with the City of Rolling Hills to support public safety, emergency preparedness, and community standards.

While the terrain defines Rolling Hills’ rural character, it also introduces hazard risks. The steep canyons and ridgelines make the community susceptible to landslides, wildfires, and drainage-related hazards. Prior to incorporation, Los Angeles County soil and geology studies in 1948 identified the “Flying Triangle” as a landslide area. Despite these findings, development occurred due to limited regulations and scientific understanding at the time. When the City incorporated in 1957, it adopted the Los Angeles County Building Code, which still guides local development. In 1973, a large wildfire swept through the Flying Triangle, destroying homes, stables, and other structures.

Land-use decisions made before incorporation continue to affect the community today. Development in geologically unstable areas, combined with the aging of private infrastructure, has created ongoing and future vulnerabilities. Beginning in the 1980s, building permits were issued under waivers requiring property owners to acknowledge landslide risks and indemnify the City and County of liability. These risks became evident in September 2024, when the City of Rolling Hills experienced prolonged utility shutoffs that left some residents without electricity and gas service. The outages had a significant impact on daily life and placed a financial burden on affected households. While the disruptions were tied to ongoing land movement in the area of the Flying Triangle, they also extended into previously stable ground, including streets east of the Flying Triangle such as Quail Ridge and Cinchring. This event underscored both the long-standing challenges of building in geologically sensitive terrain and the emerging risks to newer areas of the City.

Rolling Hills experienced a significant fire in 2009. On March 24, 2025, the California Office of the State Fire Marshal released its 2025 Recommended Fire Hazard Severity Zone maps for Local Responsibility Areas (LRA) in Los Angeles County, including Rolling Hills.

Today, Rolling Hills’ jurisdictional profile highlights both its distinctive community identity, private, equestrian-oriented, and strictly residential and its vulnerabilities, particularly to natural hazards shaped by the hilly terrain, the legacy of past land-use decisions, and its designation within a Very High Fire Hazard Severity Zone.

### 4.2.2 History

From its inception in 1936, the community of Rolling Hills was guided by a set of deed restrictions established by its original developer, A. E. Hanson, who envisioned a private, gated equestrian community characterized by large lots, open space, and a rural ranch-style environment. These deed restrictions shaped the community’s unique character, ensuring the preservation of horse trails, limited residential density, and architectural consistency. Building upon this foundation, the City was formally incorporated on January 24, 1957, to provide a stronger governmental structure while continuing to uphold the principles established by its founding documents.

### 4.2.3 Governance

The City of Rolling Hills is governed by a five-member City Council, including a Mayor selected by the Council on a rotating basis. As a contract city, Rolling Hills provides most municipal services through agreements with Los Angeles County and other agencies, while retaining direct responsibility for core functions such as planning, permitting, and local ordinances. The City assumes responsibility for the adoption of this plan and will oversee its implementation in coordination with partner agencies and stakeholders.

## 4.3 Current Trends

### 4.3.1 Population

According to the California Department of Finance, the population of City of Rolling Hills as of May 2025 was 1,677. Since 1970, the population has decreased by at an average annual rate of 2.8 percent.

### 4.3.2 Development

Table 4-2 Recent and Expected Future Development Trends

Criterion	Response
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan?	No
Is your jurisdiction expected to annex any areas during the performance period of this plan?	No
Provide the number of new construction permits for each hazard area or provide a qualitative description of where development has occurred.	-

Criterion	Response					
Are any areas targeted for development or major redevelopment in the next 5 years?	Case by case – development is ongoing and reviewed on a site by site submittal; no major redevelopment is targeted in the next 5 years.					
<ul style="list-style-type: none"> <li>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</li> </ul>	See above.					
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?		2020	2021	2022	2023	2024
	Single Family	1	1	1	0	0
	Multi-Family	0	0	0	0	0
	Other (accessory dwellings, mixed use, etc.)	0	1	0	2	3
	Commercial	0	0	0	0	0
	<b>Total</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	The City is essentially fully built out, with nearly all of its 3 square miles developed as large-lot residential properties. Rolling Hills was designed from the outset as a strictly residential, equestrian-oriented community, and its land use is governed by deed restrictions that prohibit commercial or industrial development. Lots are generally 2 to 5 acres in size, with homes, stables, and equestrian facilities spread across the hillside terrain. What remains in terms of “buildable” land is primarily tied to reconstruction, remodels, or limited infill on existing lots rather than the creation of new housing tracts.					

## 4.4 Capability Assessment

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

Findings of the capability assessment were reviewed to identify opportunities to expand or improve upon capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan.

### 4.4.1 Planning and Regulatory Capabilities

Jurisdictions have the ability to develop policies and programs and to implement rules and regulations to protect and serve residents. Local policies are typically identified in community plans, implemented through local ordinance, and enforced through a governing body. An assessment of planning and regulatory capabilities is presented in Table 4-3.

Table 4-3 Planning and Regulatory Capabilities

		Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Codes, Ordinances, &amp; Requirements</b>					
<b>Building Code</b>		Yes	No	Yes	Yes
<b>Comment:</b>	Chapter 15 (Buildings and Construction) specifies how new structures can be built. It includes the California Building Code, in addition to any amendments made by the City. Mitigation actions may involve amending the Building Code to improve a building's safety or structural stability.				
<b>Zoning Code</b>		Yes	No	Yes	Yes
<b>Comment:</b>	Chapter 17 (Zoning) was adopted and established in order to provide the economic and social advantages resulting from an orderly and planned use of land resources; to conserve and promote the public interest, health, comfort, and convenience of the City and its inhabitants; and to preserve the public peace, safety, morals, order and general welfare of the City and its inhabitants.				
<b>Subdivisions</b>		Yes	No	Yes	Yes
<b>Comment:</b>	Chapter 16 (Subdivision) promotes the conservation, stabilization and protection of property values through orderly growth and development, the provisions of necessary public and private facilities, and generally, the public health, safety and general welfare within the corporate boundaries of the City. Rolling Hills Community Association (RHCA) has jurisdictional authority related to subdivision approvals within the City.				
<b>Stormwater Management</b>		Yes	No	Yes	Yes
<b>Comment:</b>	Chapter 8.32 (Stormwater Management and Pollution Control) is set to comply with the Federal Clean Water Act, the California Porter-Cologne Water Quality Control Act, and the Municipal NPDES Permit				
<b>Post-Disaster Recovery</b>		No	No	No	No
<b>Comment:</b>	-				
<b>Real Estate Disclosure</b>		No	Yes	Yes	No
<b>Comment:</b>	California Civil Code 1102				
<b>Growth Management</b>		No	No	No	No
<b>Comment:</b>					
<b>Site Plan Review</b>		Yes	No	No	Yes
<b>Comment:</b>	Chapter 17.46 (Site Plan Review) is established to provide discretionary review of certain development projects in the City for the purposes of ensuring that the proposed project is consistent with the City's General Plan; incorporates environmentally and aesthetically sensitive grading practices; preserves existing mature vegetation; is compatible and consistent with the scale, massing and development pattern in the immediate project vicinity; and otherwise preserves and protects the health, safety and welfare of the citizens of Rolling Hills.				
<b>Environmental Protection</b>		Yes	No	Yes	Yes
<b>Comment:</b>	General Plan Open Space/Conservation Element outlines long-term direction for development and environmental protection policy in Rolling Hills. There are opportunities to coordinate environmental protection actions with policies governed by the General Plan. Next update to General Plan Open Space/Conservation Element should include integration with the Hazard Mitigation Plan. Also, General Plan is an excellent resource to assist with implementing many of the mitigation action items identified in the Hazard Mitigation Plan.				
<b>Flood Damage Prevention</b>		Yes	Yes	Yes	Yes
<b>Comment:</b>	Chapter 8.36 (Floodplain Management Regulations) promotes the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. The City requires a flood damage prevention permit for all proposed construction or other development in the community, including substantial damage, and the placement of manufactured homes, so that it may be determined whether such construction or other development is within flood-prone areas.				
<b>Emergency Management</b>		Yes	No	Yes	Yes
<b>Comment:</b>	General Plan Safety Element outlines long-term direction for safety measures and emergency response preparedness and recovery policy in Rolling Hills. There are opportunities to mitigate the impacts of natural				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<i>disasters governed by the General Plan. Next update to General Plan Safety Element should include integration with the Hazard Mitigation Plan. Also, General Plan is an excellent resource to assist with implementing many of the mitigation action items identified in the Hazard Mitigation Plan.</i>				
<b>Climate Change</b>	Yes	No	Yes	Yes
<b>Comment:</b>	<i>General Plan Open Space/Conservation Element outlines long-term direction for air quality and climate change policy in Rolling Hills. There are opportunities to mitigate the impacts of climate change with policies governed by the General Plan. Next update to General Plan Open Space/Conservation Element should include integration with the Hazard Mitigation Plan. Also, General Plan is an excellent resource to assist with implementing many of the mitigation action items identified in the Hazard Mitigation Plan.</i>			
<b>Planning Documents</b>				
<b>General Plan</b>	Yes	No	Yes	Yes
<b>Is the General Plan compliant with Assembly Bill 2140?</b> Yes				
<b>Comment:</b>	<i>General Plan outlines long-term direction for development and policy in Rolling Hills. The LHMP or HMP is a separate document adopted into the Safety Element of the General Plan by Resolution No. 1314 in compliance with AB 2140. It is available electronically at <a href="https://www.rolling-hills.org/government/planning_and_community_services/index.php">https://www.rolling-hills.org/government/planning_and_community_services/index.php</a></i>			
<b>Capital Improvement Plan</b>	No	No	No	Yes
<b>How often is the plan updated?</b>	<i>The City of Rolling Hills adopts a 3-year CIP as part of its annual budget process, and that CIP is updated every fiscal year to provide a forward-looking multi-year project outlook.</i>			
<b>Comment:</b>	<i>The Capital Improvement Program directs construction activities for City-owned facilities and infrastructure for the next 3 years. Mitigation actions may involve construction of new or upgraded facilities and infrastructure.</i>			
<b>Disaster Debris Management Plan</b>	No	No	No	No
<b>Comment:</b>	<i>The City does not maintain a stand-alone debris removal plan; however, debris management is addressed in the Hazard Mitigation Plan. Debris clearance is coordinated through the Los Angeles County Department of Public Works, while the Rolling Hills Community Association is responsible for ongoing road maintenance.</i>			
<b>Floodplain or Watershed Plan</b>	No	No	No	No
<b>Comment:</b>	<i>The City does not maintain its own standalone floodplain management plan; however, it is included in regional efforts such as the Los Angeles County Comprehensive Floodplain Management Plan, which references Rolling Hills.</i>			
<b>Stormwater Plan</b>	No	No	Yes	No
<b>Comment:</b>	<i>Rolling Hills participates in stormwater and watershed management through regional collaboration as part of the Coordinated Integrated Monitoring Program (CIMP) under the NPDES municipal stormwater permit, in coordination with other Palos Verdes Peninsula agencies.</i>			
<b>Urban Water Management Plan</b>	No	No	No	No
<b>Comment:</b>	<i>California Water Service is the water utility operator.</i>			
<b>Habitat Conservation Plan</b>	No	No	No	No
<b>Comment:</b>	<i>The General Plan includes elements like Land Use, Housing, Conservation, Safety, and Open Space.</i>			
<b>Economic Development Plan</b>	No	No	No	No
<b>Comment:</b>	<i>None – all residential</i>			
<b>Community Wildfire Protection Plan</b>	No	No	No	No
<b>Comment:</b>	<i>The General Plan includes elements like Land Use, Housing, Conservation, Safety, and Open Space.</i>			
<b>Forest Management Plan</b>	No	No	No	No
<b>Comment:</b>	<i>The General Plan includes elements like Land Use, Housing, Conservation, Safety, and Open Space.</i>			
<b>Climate Action Plan</b>	Yes	No	Yes	No
<b>Comment:</b>	<i>A CAP was developed and adopted in 2018, outlining GHG reduction targets, strategies, and implementation measures tailored to the City's circumstances.</i>			

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Threat &amp; Hazard Identification &amp; Risk Assessment (THIRA)</b>	No	Yes	No	No
<b>Comment:</b>	<i>Rolling Hills is a small rural City and relies on its HMP, from 2019, for hazard identification and risk assessment. That plan covers earthquakes, land movement, wildfire, and drought as the City's highest-risk hazards.</i>			
<b>Post-Disaster Recovery Plan</b>	No	No	No	No
<b>Comment:</b>	<i>No standalone plan. The City's HMP, most recently adopted in January 2019, includes elements related to recovery.</i>			
<b>Continuity of Operations Plan</b>	No	Yes	No	No
<b>Comment:</b>	<i>No standalone plan. However, broader continuity planning responsibilities fall under the County of Los Angeles Emergency Operations Plan (EOP).</i>			
<b>Public Health Plan</b>	No	Yes	No	No
<b>Comment:</b>	<i>Rolling Hills relies on Los Angeles County's public health efforts, such as health oversight, environmental health services, and planning, rather than having its own city-specific plan.</i>			
<b>Other</b>	Yes	No	No	No
<b>Comment:</b>	<i>Emergency Operations Plan is a reference and guidebook to operations during a major emergency impacting Rolling Hills. The Plan includes a discussion on a wide range of hazards, organization and staffing of the Emergency Operations Center, and connectivity with field responders and external agencies. The Emergency Operations Plan is an excellent source of hazard information for the Hazard Mitigation Plan.</i>			

### Opportunities to Expand Planning and Regulatory Capabilities

As the City updates its plans, codes, and ordinances, there are opportunities to expand current planning and regulatory capabilities that can better address hazard mitigation. This can be done by adopting hazard-resilient policies and implementing local ordinances that protect residents, properties, and community lifelines. Strengthening these tools helps the City with integrated mitigation into land use decisions, development standards, and long-range planning efforts.

#### 4.4.2 Development and Permitting Capabilities

Jurisdictions regulate land use through the adoption and enforcement of zoning, subdivision and land development ordinances, building codes, building permit ordinances, floodplain, and stormwater management ordinances. When effectively prepared and administered, these regulations can lead to hazard mitigation. Development and permitting capabilities are presented in Table 4-4.

**Table 4-4 Development and Permitting Capabilities**

Criterion	Response
<b>Does your jurisdiction issue development permits?</b>	Yes
<b>If no, who does? If yes, which department?</b>	Planning and Community Services
<b>Does your jurisdiction track permits by hazard area?</b>	No (in process to create new maps via new GIS program recently purchased)
<b>Does your jurisdiction have a buildable lands inventory?</b>	No (in process to create new maps via new GIS program recently purchased)

#### 4.4.3 Fiscal Capabilities

Assessing a jurisdiction's fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant

funding eligibility, and local jurisdictional authority to generate internal financial capability, such as through impact fees. An assessment of fiscal capabilities is presented in Table 4-5.

**Table 4-5 Fiscal Capabilities**

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	No
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No

### Opportunities to Expand Fiscal Capabilities

The City can strengthen its fiscal capabilities for hazard mitigation by integrating mitigation priorities into its Capital Improvement Plan and by assessing and enhancing financial resources available to support reducing hazard risk, including federal and state grant programs (e.g., FEMA HMA).

#### 4.4.4 Administrative and Technical Capabilities

Planning regulatory and fiscal capabilities provide the backbone for successfully developing a mitigation strategy; however, without the appropriate personnel, the strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard mitigation. These resources include technical experts, such as engineers and scientists, as well as personnel with capabilities that may be found in multiple departments, such as grant writers. An assessment of administrative and technical capabilities is presented in Table 4-6.

**Table 4-6 Administrative and Technical Capabilities**

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	Yes
<i>If Yes, Department /Position:</i>	Stephanie Grant/Assistant Planner
Engineers or professionals trained in building or infrastructure construction practices	Yes
<i>If Yes, Department /Position:</i>	Contract with LA County and Willdan
Planners or engineers with an understanding of natural hazards	Yes
<i>If Yes, Department /Position:</i>	Contract with LA County and Willdan
Staff with training in benefit-cost analysis	Yes
<i>If Yes, Department /Position:</i>	Samantha Crew/Management Analyst
Surveyors	Yes
<i>If Yes, Department /Position:</i>	Contract with LA County and Willdan
Personnel skilled or trained in GIS applications	Yes
<i>If Yes, Department /Position:</i>	Stephanie Grant/Assistant Planner

Staff/Personnel Resource	Available?
Scientist familiar with natural hazards in local area	Yes
<i>If Yes, Department /Position:</i>	Contract with LA County and Willdan
Emergency manager	Yes
<i>If Yes, Department /Position:</i>	Samantha Crew/Management Analyst
Grant writers	No
<i>If Yes, Department /Position:</i>	-
Procurement Services and Management	Yes
<i>If Yes, Department /Position:</i>	Christian Horvath/Assistant to the City Manager / City Clerk

### Opportunities to Expand Administrative and Technical Capabilities

The City can expand its administrative and technical capabilities for hazard mitigation by strengthening internal coordination, expanding staff expertise, and improving systems that support planning and project implementation. This can include providing training for municipal personnel on hazard mitigation programs, regulations, and tools, as well as establishing contracts to increase staff capacity as needed.

#### 4.4.5 Education and Outreach Capabilities

Regular engagement with the public on issues regarding hazard mitigation provides an opportunity to directly interface with community members. Assessing the education and outreach capability illustrates the connection between the government and community members, which opens a two-way dialogue that can result in a more resilient community, based on awareness and engagement. An assessment of education and outreach capabilities is presented in Table 4-7.

**Table 4-7 Education and Outreach Capabilities**

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website?	Yes
<i>If yes, briefly describe:</i>	Please see Hazard Mitigation Plan posted here: <a href="#">City of Rolling Hills</a>
Do you use social media for hazard mitigation education and outreach?	No
<i>If yes, briefly describe:</i>	
Do you have any citizen boards or commissions that address issues related to hazard mitigation?	Yes
<i>If yes, briefly describe:</i>	<i>The Rolling Hills Community Association post hazard mitigation items for the city through their community outreach platform, Dwelling Live.</i>
Do you have any other programs in place that could be used to communicate hazard-related information?	Yes
<i>If yes, briefly describe:</i>	<i>Blue Newsletter mail out (twice a month); Block Captain Program – an emergency preparedness volunteer group (emails and meetings).</i>
Do you have any established warning systems for hazard events?	Yes
<i>If yes, briefly describe:</i>	<i>Emergency Outdoor Sirens and Alert Notifications through Alert SouthBay.</i>

### Opportunities to Expand Education and Outreach Capabilities

The City can expand current education and outreach capabilities through broadening outreach efforts on the City’s website and newsletter. This may include sharing progress on mitigation projects, developing clear and accessible

educational materials, and creating opportunities for residents to learn more about disaster preparedness and actions they can take to reduce their risk of hazards. Strengthening and expanding these efforts can help build a more resilient community.

### 4.4.6 Community Classifications

Table 4-8 Community Classifications

	Participating?	Classification or Number	Date Classified
FIPS Code	Yes	037-60602	N/A
UEI#	Yes	018945170	N/A
Community Rating System	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Generally score in the 1–4 range on BCEGS.	N/A
Public Protection (ISO for Fire)	Yes	PPC Class 2 or 3	N/A
StormReady	No	-	-
TsunamiReady	No	-	-
Firewise	No	-	-

### 4.4.7 Adaptive Capacity for Climate Change

Table 4-9 Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating <sup>a</sup>
<b>Technical Capacity</b>	
Jurisdiction-level understanding of potential climate change impacts	Low
Jurisdiction-level monitoring of climate change impacts	Low
Technical resources to assess proposed strategies for feasibility and externalities	Low
Jurisdiction-level capacity for development of GHG emissions inventory	Low
Capital planning and land use decisions informed by potential climate impacts	Medium
Participation in regional groups addressing climate risks	Medium
<i>Comment:</i>	<i>Yes, Rolling Hills is a member of the South Bay Cities Council Of Government, a Joint Powers Authority comprising 16 South Bay cities plus unincorporated LA County areas.</i>
<b>Implementation Capacity</b>	
Clear authority/mandate to consider climate change impacts during public decision-making processes	Medium
Identified strategies for GHG mitigation efforts	Medium
Identified strategies for adaptation to impacts	Low
Champions for climate action in local government departments	Low
Political support for implementing climate change adaptation strategies	Medium
Financial resources devoted to climate change adaptation	Low
Local authority over sectors likely to be negative impacted	Medium
<b>Public Capacity</b>	
Residents’ knowledge of and understanding of climate risk	High
Residents’ support of adaptation efforts	High
Residents’ capacity to adapt to climate impacts	High
Local economy current capacity to adapt to climate impacts	High
Local ecosystems capacity to adapt to climate impacts	High

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

## 4.5 National Flood Insurance Program Compliance

**Table 4-10 National Flood Insurance Program Compliance**

Criterion	Response
<b>Flood Risk Summary</b>	
Please describe areas of the jurisdiction prone to flooding, specifically those outside of the mapped floodplain.	Flooding outside of FEMA-designated floodplains in Rolling Hills is primarily linked to canyon drainage systems, slope runoff, and roadway depressions. These risks are often compounded by the City’s steep terrain and limited formal drainage infrastructure, meaning that even outside mapped flood zones, localized flooding and debris-laden flows can occur during significant storm events.
Do FEMA flood maps adequately address flood risk in the jurisdiction?	Flood risk extends beyond FEMA-designated areas. Localized flooding, debris-laden flows, and erosion can occur outside of mapped zones.
How many structures in the jurisdictions SFHA have been determined to be substantially damaged from any hazard event?	None
Additional comments on flood risk	None at this time
<b>Staff Resources</b>	
Provide an explanation of the jurisdiction’s NFIP administration services (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	No dedicated NFIP staffing or standalone floodplain management program exists. Only a small portion of the City is mapped within a FEMA-designated SFHA. As such, NFIP administration is integrated into the City’s broader development review and stormwater compliance processes rather than maintained as a stand-alone program.
What local department is responsible for floodplain management?	The Planning Department oversees floodplain management as part of its development review and permitting process. The City contracts with the Los Angeles County Department of Public Works (LACDPW) for engineering review, drainage analysis, and flood-related technical expertise. The Rolling Hills Community Association (RHCA) is responsible for private road and natural drainage corridor maintenance, which indirectly supports stormwater and flood management.
Who is your floodplain administrator? (department/position)	City Managers Office/Management Analyst
Are any staff certified floodplain managers (CFMs)?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program?	No. Staff receive training related to stormwater monitoring, water quality standards, and drainage best practices through a consultant.
<i>If yes, what type of assistance/training is needed?</i>	-
<b>Insurance Summary <sup>a</sup></b>	
How many flood insurance policies are in force in your jurisdiction?	19

Criterion	Response
What is the insurance in force?	\$6,650,000
What is the premium in force?	\$10,916
How many total loss claims have been filed in your jurisdiction?	1
What were the total payments for losses?	\$0.00
Does the jurisdiction maintain a list of properties that have been damaged by flooding?	No
Does the jurisdiction maintain a list of property owners interested in flood mitigation?	No
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	None
How many properties have been mitigated (elevation or acquisition)?	None
<b>Compliance History</b>	
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No
Does your jurisdiction have a Substantial Damage Response Plan?	No
Summarize the jurisdiction's Substantial Damage determination procedures.	The City of Rolling Hills Planning Department would conduct reviews for substantial damage, with technical engineering support from Los Angeles County Department of Public Works (LACDPW). There would be an Initial Damage Assessment by City staff or a contracted building official to perform site inspections to evaluate structural damage. The City would compare repair costs to pre-damage market value of the structure with $\geq 50\%$ triggering "substantial damage". The City would keep determination records to comply with NFIP and FEMA guidance.
Summarize the jurisdiction's Substantial Improvement procedures.	Rolling Hills requires that any substantial improvement ( $\geq 50\%$ of value) in mapped flood hazard areas meet current NFIP floodplain regulations. The City's Planning Department manages the process, with LACDPW support, ensuring compliance through the building permit system.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	The City has not had a recent CAV or CAC on record.
Are any RiskMAP projects currently underway in your jurisdiction?	No
<b>Regulation</b>	
What is the date that your flood damage prevention ordinance was last amended?	The ordinance was last updated in 2008, when the City adopted the Los Angeles County Building Code amendments (which include NFIP-compliant floodplain management provisions) to remain in good standing with FEMA's National Flood Insurance Program (NFIP).

Criterion	Response
Does the jurisdiction’s administration of the floodplain exceed NFIP requirements? (freeboard, mapping, etc.)	Rolling Hills’ floodplain administration meets but does not exceed NFIP minimum requirements.
<b>Community Rating System</b>	
Does your jurisdiction participate in the Community Rating System (CRS)?	No

a. According to FEMA statistics as of (08/31/2025)

## 4.6 Integration

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

### 4.6.1 Existing Integration

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

- **Site Plan Review** – Chapter 17.46 (Site Plan Review) is established to provide discretionary review of certain development projects in the City for the purposes of ensuring that the proposed project is consistent with the City’s General Plan; incorporates environmentally and aesthetically sensitive grading practices; preserves existing mature vegetation; is compatible and consistent with the scale, massing and development pattern in the immediate project vicinity; and otherwise preserves and protects the health, safety and welfare of the citizens of Rolling Hills.
- **General Plan** – The City’s General Plan outlines long-term direction for development and policy in Rolling Hills. The LHMP or HMP is a separate document adopted into the Safety Element of the General Plan by Resolution No. 1314 in compliance with AB 2140. It is available electronically at [https://www.rolling-hills.org/government/planning\\_and\\_community\\_services/index.php](https://www.rolling-hills.org/government/planning_and_community_services/index.php)

### 4.6.2 Opportunities for Future Integration

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

- **Municipal Codes** – During revisions or updates to the local codes, the City can integrate aspects of mitigation to improve structural safety and stability, prevent construction in hazard-prone areas, and create a more resilient community.
- **General Plan** – There are opportunities to coordinate environmental protection actions with policies governed by the General Plan. Next update to General Plan Open Space/Conservation Element should

include integration with the Hazard Mitigation Plan. Also, General Plan is an excellent resource to assist with implementing many of the mitigation action items identified in the Hazard Mitigation Plan.

- **Capital Improvement Plan** – The City can review the LHMP prior to the update of the next CIP to identify any mitigation projects that can be funding and implemented through the CIP.

## 4.7 Risk Assessment

### 4.7.1 Jurisdiction-Specific Natural Hazard Event History

Table 4-11 lists past occurrences of natural hazards, resulting in a disaster declaration, for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

**Table 4-11 Past Natural Hazard Events**

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Fire	Woolsey Fire	FM-5280-CA	November 9, 2018	Reduced air quality
Fire	Wildfires	EM-3409-CA	November 9, 2018	Reduced air quality
Fire	Wildfires	DR-4407-CA	November 12, 2018	Reduced air quality
Biological	Covid-19 Pandemic	EM-3428-CA DR-4482-CA CA20-01	March 13, 2020 March 22, 2020 March 4, 2020	Temporary Prohibition of Group Events and Gatherings
Flood	Severe Winter Storms, Flooding, and Mudslides	EM-3591-CA	January 9, 2023	Localized flooding
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	DR-4683-CA CA23-1	January 14, 2023 January 4, 2023	Localized flooding
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	EM-3592-CA CA23-3	March 10, 2023 March 1, 2023	Localized flooding
Severe Storm	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4699-CA	April 3, 2023	Localized flooding
Severe Storm	Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides	DR-4769-CA	April 13, 2024	Localized flooding
Fire	Palisades Fire	FM-5549-CA	January 7, 2025	Reduced air quality
Fire	Eaton Fire	FM-5550-CA	January 8, 2025	Reduced air quality
Fire	Wildfires And Straight-Line Winds	DR-4856-CA	January 8, 2025	Reduced air quality

In addition to the recent events listed in the table above, the City identified the following events that caused significant impacts in the City.

- **1980 Flying Triangle Landslide** - The Flying Triangle landslide, a subslide of the Greater Portuguese Bend Landslide Complex, occupies an area of approximately 70 acres on the south side of the crest of the Palos Verdes Hills overlooking Portuguese Bend. Movement was first formally observed in March 1980, though displacement may have begun as early as 1974. The landslide represents the reactivation of a relatively large, complex compound ancient landslide of probable Pleistocene age that is unrelated to the main Portuguese Bend landslide. The reactivation is directly attributed to a period of unusually heavy precipitation during the early 1980s. As ground movement intensified, residential structures within the

affected area were threatened; some homes were demolished, while others were retrofitted and supported on steel I-beam systems to accommodate continued movement. During this period, gas and water utilities were relocated above ground to reduce the risk of rupture and to maintain service continuity.

- 2005 Poppy Trail Landslide** - On March 5, 2005, a 300-foot-long portion of a steep hillside at No. 1 Poppy Trail Road in Rolling Hills sheared off and slid downhill, terminating just below the roadway easement for Poppy Trail Road. The slide buried a portion of the road, temporarily eliminating ingress and egress for nine residential lots. In response, the affected area was stabilized through emergency grading and other temporary protective measures to reduce erosion and further movement. The slide mass was subsequently reshaped, the roadway was rebuilt, and full ingress and egress were restored to the impacted homes.

### 4.7.2 Hazard Ranking

The prioritization and categorization of identified hazards for the City of Rolling Hills is based principally on the Priority Risk Index (PRI), a tool used to measure the degree of risk for identified hazards in a particular planning area. The PRI was used to assist the City in identifying hazards that pose the most significant threat. Table 4-12 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy.

**Table 4-12 Hazard Risk Ranking Summary**

Hazard	Weighted Risk Factors					PRI	Risk Ranking
	Probability	Impact	Spatial Extent	Warning Time	Climate Change		
Drought	1.2	0.3	0.8	0.1	0.4	2.8	Medium
Earthquake	0.9	0.9	0.8	0.4	0.2	3.2	High
Flood	0	0	0	0	0	0	No Risk
Landslide	1.2	0.6	0.6	0.4	0.4	3.2	High
Sea Level Rise	0	0	0	0	0	0	No Risk
Severe Weather - Heat Wave	0.9	0.6	0.8	0.1	0.4	2.8	Medium
Severe Weather - Strong Wind	1.2	0.6	0.8	0.1	0.4	3.1	High
Tsunami	0	0	0	0	0	0	No Risk
Wildfire	0.9	0.9	0.6	0.4	0.4	3.2	High

Note: PRI Value 1 to 1.9 = Low Hazard Risk Ranking  
 PRI Value 2.0 to 2.9 = Medium Hazard Risk Ranking  
 PRI Value 3.0 to 4.0 = High Hazard Risk Ranking

### 4.7.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

### ***Repetitive Loss Properties***

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: 0

### ***Other Noted Vulnerabilities***

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- No additional vulnerabilities noted.

## 4.8 Status of Previous Plan Mitigation Actions

Table 4-13 summarizes the mitigation actions that were recommended in the prior plan and their implementation status at the time this update was prepared.

**Table 4-13 Status of Prior Plan Actions**

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH 1 - Continue policy to ensure mitigation measures are in place to safeguard critical facilities located in Rolling Hills.	In Progress	-	Yes	RH-06
MH 2 - Adopt and enforce updates to the Los Angeles County Building Code and Fire Code.	In Progress	-	Yes	RH-06
MH 3 - Develop additional building and reconstruction policies and requirements in the Building and Fire Code for post-disaster situations	Ongoing Capability	Identified as a Current Capability and updated as necessary	-	-
MH 4 - Ensure compliance to rebuilding in conformance with applicable codes, specifications and standards.	Ongoing Capability	Identified as a Current Capability and updated as necessary	-	-
MH 5 - Develop training and information program for actions to take to mitigate against hazards on individual properties.	Ongoing Capability	Identified as a Current Capability and completed as necessary	-	-
MH 6 - Integrate and coordinate with adjoining cities and providers to develop Hazard Mitigation Plans that are consistent with the goals and framework of the City's Hazard Mitigation Plan.	In Progress	-	Yes	RH-02
MH 7 - Underground communications and electric utility lines to reduce risk of arcing line in high winds, earthquake, and fire.	In Progress	-	Yes	RH-22
MH 8 - Review existing regulations to ensure adequacy in reducing the amount of future development in identified hazard areas.	In Progress	-	Yes	RH-08
MH 9 - Provide adequate and consistent enforcement of ordinances and codes within and between jurisdictions.	Ongoing Capability	Identified as a Current Capability and completed as necessary	-	-
MH 10 - Integrate the goals and action items from the City's Hazard Mitigation Plan into existing regulatory documents and programs, where appropriate.	In Progress	-	Yes	RH-09 RH-10

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH 11 - Coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.	In Progress	-	Yes	RH-09
MH 12 - Identify critical facilities at risk from hazard events.	Complete	Remove – this was completed as part of the 2026 LHMP update	-	-
MH 13 - Enforce construction and subdivision design that can be applied to steep slopes to reduce the potential adverse impacts from development	Ongoing Capability	Identified as a Current Capability and part of the City's day-to-day operations	-	-
MH 14 - Develop public and private partnerships to foster hazard mitigation program coordination and collaboration in the city.	Ongoing Capability	Identified as a Current Capability and conducted where feasible	Yes	RH-02
MH 15 - Encourage the development of unifying organizations to ensure communication and dissemination of hazard mitigation information.	In Progress	-	Yes	RH-17
MH 16 - Provide new home and property buyers with information on quality redevelopment and safe housing development. The information is probably most efficiently dispersed through city bi-weekly newsletter	In Progress	-	Yes	RH-01
MH 17 - Minimize the risk of erosion through development of a Hillside Review Ordinance	Ongoing enforcement of grading, drainage, and development standards in the Municipal Code to reduce erosion and slope instability.	-	Yes	RH-08
MH 18 - Install and improve backup power in critical facilities	In Progress	-	Yes	RH-04
MH 19 - Following an emergency, examine damage and update codes to mitigate against future disasters.	In Progress	-	Yes	RH-26
MH 20 - Bury utility lines on Crest Road. Assist with funding as possible and revise Code Regulations in an effort to spearhead utility line burial projects.	In Progress	-	Yes	RH-22
MH 21 - Minimize suffering and disruption caused by disasters.	In Progress	-	Yes	RH-03
MH 22 - Provide technical assistance to help the community develop disaster management operations capabilities	Ongoing Capability	Identified as a Current Capability and conducted where feasible	-	-

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH 23 -Determine temporary protection measures; install plastic sheeting on roofs, cover exterior openings such as windows or doors, draining trapped water in ceilings or draining accumulated flood waters, temporary shoring to avoid imminent building collapse or damage	In Progress	-	Yes	RH-07
MH 24 -Partner with other organizations and agencies in the community to identify grant programs and foundations that may support mitigation activities.	In Progress	-	Yes	RH-11
MH-25 - Allocate city resources and assistance to mitigation projects when possible.	Ongoing Capability	Identified as a Current Capability and conducted where feasible	-	-
MH 26 -Identify and pursue funding opportunities to develop and implement local mitigation activities	Ongoing Capability	Identified as a Current Capability and conducted where feasible	-	-
MH 27 Following a disaster, determine which costs will be reimbursed to government for the demolition of government buildings	Complete	Identified as a Current Capability and conducted where feasible	-	-
MH 28 -Ensure repairs or construction funded by Federal disaster assistance conforms to applicable codes and standards	Ongoing Capability	Identified as a Current Capability and conducted where feasible	-	-
MH 29 -Promote hazard mitigation as a public value in recognition of its importance to the health, safety, and welfare of the population.	In Progress	-	Yes	RH-01 RH-13
MH 30 -Identify opportunities for partnering with citizens, private contractors, and other jurisdictions to increase availability of equipment and manpower for efficiency of response efforts	In Progress	-	Yes	RH-13
MH 31 -Enhance outreach and education programs aimed at mitigating wildfire hazards and reducing or preventing the exposure of citizens, public agencies, private property owners, and businesses to other hazards	In Progress	-	Yes	RH-01 RH-13 RH-19 RH-18
MH 32 -Encourage implementation of wildfire mitigation activities in a manner consistent with the goals of promoting sustainable ecological management and community stability	In Progress	-	Yes	RH-19

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH 33 -Conduct a full review and update of the Hazard Mitigation Plan every 5 years by evaluating mitigation successes, failures, and updated hazard information	In Progress	-	Yes	RH-01 RH-12
MH 34 During next update to the EOP, establish a committee representative of all areas of the City and surrounding areas that will include vets, pet store owners, the Humane Society, animal shelters, the Extension Office and other interested parties to work on animal-specific evacuation and sheltering needs	In Progress	-	Yes	RH-26
MH 35 -Coordinate public education to increase awareness of hazards and opportunities for mitigation.	In Progress	-	Yes	RH-01 RH-13
MH 36 -Encourage interested individuals to participate in hazard mitigation planning and training activities.	In Progress	-	Yes	RH-01 RH-13
MH 37 -Educate the public about procedures for reporting human-caused incidents	Ongoing Capability	Identified as a Current Capability and part of the City's outreach procedures	-	-
MH 38 -Educate the public about emergency sheltering and evacuation procedures.	In Progress	-	Yes	RH-15
MH 39 -Educate the public about hazards prevalent to their geographic location.	In Progress	-	Yes	RH-01 RH-13
MH 40 -Publicize the documents associated with emergency response and mitigation.	Ongoing Capability	Identified as a Current Capability and part of the City's outreach procedures	-	-
MH 41 Develop and distribute maps of evacuation routes that will facilitate the evacuation.	Ongoing Capability	Identified as a Current Capability and conducted where feasible	Yes	RH-15
MH 42 -Develop informational literature on animal (including livestock) disaster plans and supply kits and have them available at City Hall.	In Progress	-	Yes	RH-16
MH 43 -Distribute packets of information to all property owners of the city including the following information of property protection measures: Maintenance for Fire and Watershed Safety, Do It Yourself Planning for Emergency Supplies, Emergency Numbers, List of Roofers, and List of Retail/Wholesale Supply Vendors.	In Progress	-	Yes	RH-01

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH 44 -Maintain materials at City Hall on disaster supplies kits and plans, etc.	In Progress	-	Yes	RH-01
MH 45 -Work with the County Office of Emergency Services, the American Red Cross, the Board of Education, County Fire Department, churches and Social Services to hold work session to share information about local shelters. Information to include the site of each shelter, how many people it can house and feed, if it has backup power available on site, completed site survey forms and types of resources that they have or that they need. This will benefit all areas of the City in the need to open shelters.	In Progress	-	Yes	RH-15
MH 46 -Encourage residents to participate in existing LA County CERT Program in coordination with the Community Association.	In Progress	-	Yes	RH-14
MH 47 -Conduct occasional tabletop disaster exercises with local law enforcement, emergency managers, town and county officials, the LEPC and other disaster response agencies.	In Progress	-	Yes	RH-02
MH 48 -Conduct a detailed vulnerability assessment in the future in order to accurately identify the extent of damages to vulnerable buildings, infrastructure, and critical facilities.	Ongoing Capability	Identified as a Current Capability and conducted where feasible	Yes	RH-13
MH 49 Seek funding to update the General Plan Safety Element in advance of the next Mitigation Plan update. (Note: as required in Senate Bill 1241, 2012)	In Progress	-	Yes	RH-25 RH-26
MH 50 Seek funding to update the City's Emergency Operations Plan	In Progress	-	Yes	RH-25 RH-26
MH 51 Work with residents to establish a volunteer City HAM radio operator program utilizing City equipment.	Ongoing Capability	Identified as a Current Capability and conducted where feasible	Yes	RH-13
EQ 1 -Adopt County of Los Angeles earthquake Building Codes.	In Progress	-	Yes	RH-20
EQ 2 -Minimize earthquake damage risk by retrofitting critical facilities owned by City as needed.	In Progress	-	Yes	RH-25 RH-26
EQ 3 -Integrate new earthquake hazard mapping data for the city and improve technical analysis of earthquake hazards as they become available.	In Progress	-	Yes	RH-21

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
EQ 4 -Allocate City resources and assistance to mitigation projects when possible.	In Progress	-	Yes	RH-25 RH-26
EQ 5 -Encourage reduction of non-structural and structural earthquake hazards in homes, school, and government offices.	In Progress	-	Yes	RH-20
LM 1 -Improve knowledge of landslide hazard areas and understanding of vulnerability and risk to life and property in hazard-prone areas.	In Progress	-	Yes	RH-21
LM 2 -Identify safe evacuation routes in high-risk debris flow and landslide areas.	Ongoing Capability	Identified as a Current Capability and conducted where feasible	Yes	RH-15
LM 3 -Limit activities in identified potential and historical landslide areas through regulation and public outreach.	In Progress	-	Yes	RH-21
LM 4 -Improve data and mapping on specific landslide risks by: <ul style="list-style-type: none"> <li>• Location where riparian landslides may occur.</li> <li>• Creating an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.</li> <li>• Using GIS to identify and map landslide hazard areas.</li> <li>• Creating and maintaining a database to track community vulnerability to landslides.</li> <li>• Showing vegetation in wildfire-prone areas to prevent landslides after fires (e.g., encourage plants with strong root systems).</li> </ul>	In Progress	-	Yes	RH-21
WF 1 -Continue to require Class A roofing standards and “draft hydrants” for new pools per Building and Fire Codes	In Progress	-	Yes	RH-18
WF 2 -Improve water systems to assist with wildfire and drought conditions	In Progress	-	Yes	RH-19 RH-18
WF 3 -Inventory alternative firefighting water sources and encourage the development of additional sources.	In Progress	-	Yes	RH-18
WF 4 -Enhance emergency services to increase the efficiency of wildfire response and recovery activities.	In Progress	-	Yes	RH-19 RH-18
WF 5 -Increase communication, coordination, and collaboration between wildland/urban interface property owners, local and	In Progress	-	Yes	RH-19 RH-18

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
county planners, and fire prevention crews and officials to address risks, existing mitigation measures, and federal assistance programs				
WF 6 -Work with LACoFD to seek funding and develop a Community Wildfire Protection Plan (CWPP). The Plan must include certain components: Collaboration -must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties; Prioritized Fuel Reduction -must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure; Treatment of Structural Ignitability -must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.	In Progress	-	Yes	RH-19 RH-18
WF 7 -Work with Southern California Edison and LACoFD to seek funding for undergrounding of utility lines.	In Progress	-	Yes	RH-22
WF 8 Provide fuel reduction/fire prevention training for Rolling Hills Community Association landscaping staff and homeowners	In Progress	-	Yes	RH-19 RH-18
WF 9 -Distribution of wildfire safety and prevention information to residents and businesses residing within identified forested land.	In Progress	-	Yes	RH-19 RH-18
WF 10 Publicize and Enforce Ordinance 345 (Abatement of Fire Fuel Hazards)	Ongoing public outreach and enforcement of Chapter 8.30 (Fire Fuel Abatement) of the Rolling Hills Municipal Code, in coordination with the adopted California Fire Code, to reduce wildfire risk through vegetation management and hazardous plant restrictions.	Identified as a Current Capability and conducted where feasible	Yes	RH-01 & RH-05
DR 1 Inform residents of Landscape Efficiency Ordinance applicability and requirements and other water conservation methods	In Progress	-	Yes	RH-23

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
DR 2 Enforce Landscape Efficiency Ordinance city-wide	In Progress	-	Yes	RH-23
DR 3 -Replace existing landscaping and watering systems at City Hall with water saving materials and watering schedule/system	Complete	Identified as a Current Capability and conducted where feasible	-	-
DR 4 -Provide information regarding drought status and water saving mandates and requirements established by local water purveyor to city residents	In Progress	-	Yes	RH-23

## 4.9 Hazard Mitigation Strategy

This section includes the following components of the mitigation strategy for this jurisdiction:

- Hazard Mitigation Action Plan Matrix
- Mitigation Action Prioritization
- Mitigation Action Classification and Natural Hazards Addressed

**Table 4-14 Hazard Mitigation Action Plan Matrix**

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RH-01	<b>Community-Based Mitigation Education and Engagement</b> - Promote hazard mitigation as a shared community value through coordinated public education, outreach, and engagement focused on locally relevant hazards. Implement these efforts by producing, maintaining, and distributing preparedness materials through City Hall, the City website, the bi-weekly newsletter, and the Rolling Hills Community Association (RHCA). Conduct workshops and educational events to increase awareness of mitigation actions, personal responsibility, and opportunities to reduce risk to life, property, and the environment.	Safety and Security; Health and Medical; Communications; Transportation	Both	1, 2, 3	Lead: City of Rolling Hills Support: RHCA; Block Captains; LA County Fire (LACoFD); Los Angeles Sheriff's Department (LASD); Peninsula cities; American Red Cross; Community groups	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	Staff Time, LA County/ Cal OES outreach resources; sponsorships	Short-Term (less than 5 years)
RH-02	<b>Interagency and Partner Coordination for Mitigation and Response Capacity</b> - Actively engage, expand, and coordinate with existing and emerging public agencies, private-sector partners, non-governmental organizations, contractors, and neighboring jurisdictions to strengthen hazard-	Safety and Security; Energy; Communications; Transportation	N/A	1, 3	Lead: City of Rolling Hills Support: LACoFD; LASD; Peninsula cities; Area G; Cal OES; utilities; NGOs; contractors	Yes – isolated or limited access	Low (less than \$50,000)	Staff Time, Mutual-Aid Programs	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	mitigation collaboration, improve preparedness, and increase the availability of shared equipment, expertise, and manpower to support efficient and effective response efforts.								
RH-03	<b>Utility Coordination, System Resilience, and Continuity of Service</b> - Coordinate with utility providers to support public safety, system reliability, and continuity of essential services for all Rolling Hills properties. Foster collaborative long-term infrastructure planning, communication, information sharing, and emergency response and recovery. Support ongoing system upgrades, modernization, and innovative mitigation strategies that reduce vulnerability to hazards, minimize service interruptions, and improve the overall safety and reliability of utility systems.	Safety and Security; Energy; Communications; Water Systems	Existing	1, 3, 4	Lead: City of Rolling Hills Support: California Water Service (Cal Water); Southern California Edison (SCE); Southern California Gas Company; Communication providers; RHCA; Peninsula cities; Area G	Yes – older adults; disabled or mobility impaired	Low to Moderate (up to \$250,000)	Staff Time; CIP Budget; Utility Capital Programs; Cal OES; CPUC-related programs	Long-Term (5 or more years)
RH-04	<b>Critical Facilities Backup Power and Continuity of Operations Enhancement</b> - Install, upgrade, safeguard and maintain reliable backup power systems at critical facilities, including the City's EOC, to ensure continuity of operations and communications during power outages caused by hazardous events.	Safety and Security; Communications; Energy	New	1, 4	Lead: City of Rolling Hills Support: SCE; communication vendors; generator vendors; LACoFD; LASD	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Moderate to High (\$50,001 - \$1 million)	FEMA HMGP; FEMA HHPD; Staff Time; CIP Budget	Short-Term (less than 5 years)
RH-05	<b>Hazard Mitigation Ordinance Enforcement, Defensible Space, and Public Compliance Education</b> - Provide consistent enforcement of applicable hazard-mitigation ordinances and codes, including	Safety and Security	Both	1, 2, 4	Lead: City of Rolling Hills Support: LACoFD; RHCA; Block Captains	Yes – older adults/ seniors	Low (less than \$50,000)	Staff Time; County Fire Prevention Resources	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	vegetation management requirements, and coordinate with Los Angeles County Fire to support defensible space standards, while concurrently educating the public on regulatory requirements, compliance responsibilities, and the role these measures play in reducing risks to life, property, and the environment.								
RH-06	<b>Adoption and Enforcement of Updated Building and Fire Codes</b> - Adopt, implement, and enforce updates to the Los Angeles County Building Code and Fire Code to ensure that new development, redevelopment, and building modifications incorporate current hazard-resistant standards that reduce vulnerability to locally identified hazards.	Safety and Security; Food, Hydration, Shelter	Both	1, 4	Lead: City of Rolling Hills Support: LA County Building & Safety; LACoFD; planning consultants	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	Staff Time; General Fund	Short-Term (less than 5 years)
RH-07	<b>Temporary Protective Measures and Emergency Stabilization Planning</b> - Identify and evaluate appropriate temporary protective measures, such as plastic sheeting, temporary weatherproofing materials, sandbags, shoring, and other interim stabilization methods, to reduce the risk of imminent structural damage or collapse during or following hazard events. Establish general procedures for the timely procurement, staging, and deployment of such measures, as feasible.	Safety and Security; Communications; Transportation	Existing	1, 4	Lead: City of Rolling Hills Support: Contractors; LA County; vendors; LACoFD (as applicable)	Yes – older adults/ seniors; disabled or mobility impaired	Moderate (\$50,001 - \$250,000)	FEMA HMGP; Staff Time; CIP Budget	Short-Term (less than 5 years)
RH-08	<b>Land Use Review and Development Oversight in Hazard Areas</b> - Review existing land use regulations and development standards to assess	Safety and Security; Transportation	New	1, 4	Lead: City of Rolling Hills Support:	No	Low (less than \$50,000)	Staff Time; General Fund	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	their adequacy in limiting future development within identified hazard areas. Maintain and periodically evaluate enhanced plan-check requirements to reduce hazard exposure and ensure new development incorporates appropriate mitigation measures. Following emergency events, evaluate observed damage and the performance of existing standards to inform potential updates or refinements that further reduce vulnerability to future hazards.								
RH-09	<b>Integration of Hazard Mitigation into City Planning and Emergency Management</b> - Integrate applicable goals and action items from the City's Hazard Mitigation Plan into existing regulatory documents and City programs where appropriate. Coordinate hazard mitigation activities with the City's Emergency Operations Plan, procedures, and emergency management practices. Update the Emergency Operations Plan and advance development of a Disaster Recovery Plan to support coordinated response, continuity of operations, and long-term recovery.	Safety and Security; Energy; Communications; Transportation; Water Systems	N/A	1, 3, 4	Lead: City of Rolling Hills Support: LA County; Peninsula cities; Area G; EOP stakeholders	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	Staff Time; Cal OES Planning Support	Short-Term (less than 5 years)
RH-10	<b>Post-Adoption Update of the General Plan Safety Element</b> - Following adoption and FEMA approval of the City's Hazard Mitigation Plan, review and update the General Plan Safety Element, as necessary, to reflect updated hazard data, risk assessments, and	Safety and Security	Both	1, 4	Lead: City of Rolling Hills Support: Planning consultants; Cal OES; (as needed) LA County	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Moderate (\$50,001 - \$250,000)	Staff Time; General Fund; Planning Budget	Long-Term (5 years or more)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	mitigation strategies, consistent with applicable state requirements.								
RH-11	<b>Grant Identification and Partnership Development for Hazard Mitigation</b> - Monitor applicable state, federal, and private funding sources and pursue opportunities, where feasible, to advance mitigation projects and initiatives.	Safety and Security; Food, Hydration, Shelter; Health and Medical; Energy; Communications; Hazardous Materials; Water Systems	N/A	1, 3	Lead: City of Rolling Hills Support: Cal OES; FEMA (program interface); LA County; NGOs; Peninsula partners	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	FEMA HMGP, FMA, and HHPD; Staff Time; CIP Budget	Short-Term (less than 5 years)
RH-12	<b>Periodic Review and Evaluation of the Hazard Mitigation Plan</b> - Conduct a comprehensive review of the City’s Hazard Mitigation Plan on a 5-year cycle to evaluate mitigation accomplishments, challenges, and lessons learned, and to incorporate updated hazard data, risk assessments, and regulatory guidance. As part of this process, assess the effectiveness of the current planning approach and determine the most appropriate framework for future plan updates.	Safety and Security; Food, Hydration, Shelter; Health and Medical; Energy; Communications; Hazardous Materials; Water Systems	N/A	1, 4	Lead: City of Rolling Hills Support: Cal OES; FEMA; plan consultant; stakeholders	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Moderate (\$50,001 - \$250,000)	FEMA HHPD; Staff Time; General Fund	Long-Term (5 or more years)
RH-13	<b>Emergency Preparedness Training, Exercises, and Community Participation</b> - Conduct tabletop and functional exercises with City staff and first responders to strengthen preparedness, response, and recovery capabilities. Maintain ongoing training to ensure staff are EOC-ready and familiar with emergency operations, coordination procedures, and recovery roles across a range of hazards. Where appropriate, include the City’s emergency preparedness volunteers	Safety and Security; Communications	N/A	1, 2, 3	Lead: City of Rolling Hills Support: LACoFD; LASD; Area G; Peninsula cities; RHCA; Block Captains	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	FEMA HHPD; Staff Time; LA County Training	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	(Block Captains) and the Rolling Hills Community Association in training and exercise activities to promote coordinated response, situational awareness, and community resilience.								
RH-14	<b>Community Emergency Response Training and Participation</b> - Encourage resident participation in Community Emergency Response Team (CERT) training to strengthen community preparedness and response capabilities. Provide information, logistical support, and resources, where feasible, to assist in hosting CERT training and related educational opportunities in coordination with appropriate partners.	Safety and Security; Communications; Health and Medical	N/A	1, 2, 3	Lead: City of Rolling Hills Support: LACoFD; CERT providers; community groups; RHCA	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	FEMA HHPD; Staff Time; LA County CERT Resources	Short-Term (less than 5 years)
RH-15	<b>Evacuation Preparedness, and Emergency Sheltering Coordination</b> - Enhance community readiness and life safety by educating the public on evacuation procedures and emergency sheltering options before, during, and after hazard events. Work with the Los Angeles County Sheriff's Department (LASD) and the Los Angeles County Fire Department (LACoFD) to support clear and consistent evacuation communication and preparedness. Partner with the Palos Verdes Peninsula Unified School District, local faith-based organizations, the American Red Cross, and neighboring Peninsula cities to establish a sheltering strategy that includes backup power and	Safety and Security; Food, Hydration, Shelter; Health and Medical; Communications	N/A	1, 2, 3	Lead: City of Rolling Hills Support: LASD; LACoFD; American Red Cross; PVPUSD; faith-based orgs; Peninsula cities; Area G	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Moderate (\$50,001 - \$250,000)	FEMA HHPD; Staff Time; Red Cross support; LA County	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	supports continuity of operations during extended incidents. Train staff and educate residents on the use of the Genasys evacuation zone system to improve situational awareness and compliance during emergencies.								
RH-16	<b>Animal Evacuation, Shelter Planning, and Emergency Management Integration</b> - Coordinate with County agencies, local non-profit organizations, and community groups to support education, planning, and preparedness for equine, large animal, and pet evacuation, identification, sheltering, and biosecurity needs. Address both animal welfare and the health and well-being of owners and caregivers responsible for their care. Integrate applicable animal-related evacuation and sheltering considerations into the City's Emergency Operations Plan and incorporate relevant recovery-related information into the forthcoming Disaster Recovery Plan to support coordinated response and long-term recovery.	Safety and Security; Food, Hydration, Shelter; Health and Medical	N/A	1, 3, 4	Lead: City of Rolling Hills Support: LA County Animal Care & Control; equine groups; nonprofits; RHCA; PVPUSD/partner sites; Peninsula cities	Yes – isolated or limited access	Low (less than \$50,000)	FEMA HHPD; Staff Time; General Fund; Non-Profits	Short-Term (less than 5 years)
RH-17	<b>Public Safety Communications and Alerting Systems</b> - Strengthen public safety communications through coordination with private communications and technology partners to support reliable service delivery and targeted, innovative improvements. Maintain and enhance the City's emergency alerting programs through	Safety and Security; Communications	Both	1, 2, 3	Lead: City of Rolling Hills Support: HQE Systems; communication partners; Area G DMAC; Peninsula cities; first responders; RHCA; Block Captains	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	High (\$25,000 - \$1 million)	FEMA HMGP and HHPD; Staff Time; CIP Budget	Long-Term (5 or more years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	<p>infrastructure investments, updated standard operating procedures, staff training, and regular testing. Maintain open and practiced communication channels with first responders, Peninsula cities, and Area G jurisdictions through the Disaster Management Area Coordinator to support effective multi-jurisdictional coordination. Conduct ongoing public outreach to increase awareness, participation, and confidence in emergency alerting systems, including Alert SouthBay and equine-specific alerting. Expand and enhance the Outdoor Emergency Siren System, including the addition of strategically located siren poles where feasible, and integrate supporting indoor alerting technologies, including the SAFE Network, a resilient alerting platform capable of delivering audible and visual notifications inside homes without reliance on cellular or AC power. Facilitate access to SAFE Network units and weather radios to improve redundancy, reach, and reliability of emergency communications.</p>								
RH-18	<p><b>Wildfire Risk Reduction, Water System Reliability, and Community Preparedness</b> - Continue to require and enforce Class A roofing standards to reduce structural ignition risk. Work with California Water Service on ongoing and planned infrastructure</p>	Safety and Security; Communications; Water Systems	Both	1, 2, 3, 5	Lead: City of Rolling Hills Support: LACoFD; Cal Water; RHCA; Block Captains; fuel reduction partners	Yes – older adults/ seniors; disabled or mobility impaired; isolated or	Moderate (\$50,000 - \$250,000)	FEMA HMGP and HMGP Post-Fire; Staff Time; General Fund; Cal FIRE Grants	Long-Term (5 or more years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	<p>improvements to enhance system reliability, fire protection capacity, and water quality, and encourage additional water sources and strategies that improve long-term fire protection and wildfire response capability. Provide opportunities for the Los Angeles County Fire Department to increase familiarity with the City's rural terrain, access routes, and water resources prior to wildfire events. Encourage homeowners to identify swimming pools as supplemental water sources on address signage. Implement and maintain wildfire mitigation practices, including vegetation management programs, chipping events, and expanded green waste disposal. Educate the community through multiple channels, including the City's Block Captain program, in partnership with the Los Angeles County Fire Department, using ongoing outreach, preparedness resources, and educational opportunities such as firescaping and home hardening workshops and City-produced videos. Develop and distribute Red Flag Warning educational materials to encourage residents, landscapers, and contractors to limit spark-generating activities during Red Flag Warning conditions. Implement and update the Community Wildfire Protection Plan (CWPP), prioritize hazardous fuel reduction areas, seek available funding to support fuel reduction projects, and continue</p>					limited access			

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	to apply home hardening and fire-resistant design practices to public infrastructure where feasible.								
RH-19	<b>Wildfire Mitigation and Sustainable Resilience Initiatives</b> - Encourage and support the implementation of wildfire mitigation activities that are consistent with principles of sustainable ecological management and long-term community resilience. Promote participation in recognized community-based wildfire preparedness and risk-reduction programs, provide educational opportunities for residents on topics such as firescaping, weather patterns, and fire behavior, and develop strategies that reduce wildfire risk while fostering meaningful community engagement and shared responsibility.	Safety and Security	Existing	1, 2, 5	Lead: City of Rolling Hills Support: LACoFD; RHCA; community groups; regional partners	Yes – isolated or limited access	Low (less than \$50,000)	Staff Time; General Fund; Cal FIRE/Local Grants	Long-Term (5 or more years)
RH-20	<b>Earthquake Mitigation, Preparedness, and Advanced Alerting Adopt and maintain earthquake-related building code provisions consistent with Los Angeles County requirements to reduce structural vulnerability and enhance life safety.</b> Educate residents on earthquake preparedness through the City website, bi-weekly newsletter, and preparedness events, and promote participation in the Bolt and Brace Program and other applicable retrofit initiatives. Incorporate earthquake scenarios into the City's tabletop and functional exercises and training programs to strengthen	Safety and Security; Communications	Both	1, 2, 4	Lead: City of Rolling Hills Support:	Yes – older adults or seniors; disabled or mobility impaired	Moderate (\$50,000 - \$250,000)	FEMA HMGP, FMA, HHPD; Staff Time; General Fund; State Seismic Programs	Long-Term (5 or more years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	preparedness, response, and recovery capabilities. Participate in state-led initiatives such as the Earthquake Datacasting Receiver Pilot Project to evaluate the use of advanced earthquake alerting receivers and enhance situational awareness.								
RH-21	<b>Landslide Hazard Assessment, Monitoring, and Risk Awareness</b> - Improve understanding of landslide hazard areas and associated risks to life and property through monitoring, data collection, and technical studies. Explore opportunities to partner with neighboring Peninsula cities to conduct hydrologic, and drainage studies that inform regional landslide risk conditions. Evaluate the use of regulatory tools and public outreach, as appropriate, to limit activities in identified landslide-prone areas and reduce exposure to risk. Develop and maintain a database to track landslide hazard information, community vulnerability, and observed conditions to support planning, permitting, and emergency response.	Safety and Security; Water Systems	Existing	1, 3, 4	Lead: City of Rolling Hills Support: Peninsula cities; geotechnical/hydrology consultants; LA County (as needed)	Yes – isolated or limited access	Moderate (\$50,000 - \$250,000)	FEMA HMGP, Staff Time, CIP Budget, State Geohazard Grants	Long-Term (5 or more years)
RH-22	<b>Severe Wind Hazard Assessment, Infrastructure Protection, and Mitigation Planning</b> - existing building codes and standards for their effectiveness in reducing wind-related damage to older structures. Continue to support vegetation management efforts by the Rolling	Safety and Security; Energy; Communications	Existing	1, 2, 3, 4	Lead: City of Rolling Hills Support: RHCA; Southern California Edison; Los Angeles County Fire Department; arborists/contractors; first responders.	Yes – older adults/ seniors; disabled or mobility impaired; isolated or	Moderate (\$50,000 - \$250,000)	Staff Time, CIP Budget, Southern California Edison vegetation management programs	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	Hills Community Association (RHCA) and Southern California Edison to clear roadway easements of shallow-rooted, dead, or high-risk trees to reduce road blockages, infrastructure damage, and property impacts during severe wind events. Coordinate with the City's established Red Flag Warning Ad Hoc Subcommittee to improve communication methods when Red Flag Warning conditions are declared and to support the development and dissemination of local policies and guidance aimed at reducing hazardous activities during high-wind conditions. Work with residents, the Los Angeles County Fire Department, and RHCA to educate property owners on potential risks associated with tall trees during severe wind events and encourage voluntary crown reduction and vegetation management practices to reduce hazards to roadways, structures, animals, and people.					limited access			
RH-23	<b>Water Conservation Education and Landscape Sustainability</b> - Inform residents of the Water Efficient Landscape Ordinance (Ordinance No. 361), which advances water conservation and supports public health, safety, and welfare. Provide ongoing water conservation education through the City website, bi-weekly newsletter, and regional outreach coordinated through the South Bay Cities Council of	Safety and Security; Health and Medical; Water Systems	Both	1, 2, 4, 5	Lead: City of Rolling Hills Support:	Yes - older adults/ seniors; disabled or mobility impaired	Low (less than \$50,000)	Staff Time, CIP Budget, California Water Service Program, Regional Grants	Long-Term (5 years or more)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	<p>Governments, and continue to fulfill water conservation outreach obligations under the City’s MS4 permit with the Regional Water Quality Control Board. Promote water-efficient practices and programs, including composting, firescaping workshops, and rain barrel distribution events. Continue to maintain and enhance drought-tolerant landscaping at City Hall, including the removal of turf and replacement with drought-tolerant vegetation and water-retaining accent materials such as gravel and stone, to serve as a demonstration of water-efficient design. Implement water-efficient site improvements through capital projects, including the ADA accessibility project at the publicly owned tennis courts, which will remove turf and select hardscape areas and replace them with drought-tolerant landscaping and water-conserving, water-retaining materials. Encourage community-wide water conservation efforts through example-based practices. Develop and maintain a drought communication and early warning approach to support timely, consistent communication regarding water supply conditions, conservation measures, and response actions. Continue to support California Water Service efforts to install and utilize leak detection devices on water distribution lines to improve system</p>								

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	efficiency, reduce water loss, and enhance water supply reliability.								
RH-24	<b>Heat Wave Preparedness, Public Information, and Vulnerable Population Awareness</b> - Educate residents on heat-related risks and preparedness actions and provide timely public information when heat wave conditions are forecast to support advance planning and protective actions. Although the City does not operate an official cooling center, provide residents with information on available nearby cooling centers and regional resources during extreme heat events. Coordinate heat-related messaging through existing City communication channels to promote hydration, heat illness awareness, and protective measures for vulnerable populations. Encourage residents to check on neighbors, family members, and pets during prolonged heat events. Where feasible, coordinate with regional partners and utility providers to share heat safety information, energy conservation guidance, and outage preparedness messaging.	Safety and Security; Food, Hydration, Shelter; Health and Medical; Communications	N/A	1, 2, 3	Lead: City of Rolling Hills Support: LA County Public Health; nearby jurisdictions/cooling centers; utilities; RHCA; Block Captains.	Yes – older adults/ seniors; disabled or mobility impaired	Low (less than \$50,000)	Staff Time; General Fund; County public health resources; Cal OES climate resilience programs	Short-Term (less than 5 years)
RH-25	Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are in high- or medium-risk hazard areas.	Food, hydration, shelter; Energy; Communications; Transportation	Existing	1, 2	Lead: City of Rolling Hills Support:	Yes – older adults/ seniors; disabled or mobility impaired; isolated or	Very High (\$1,000,000 and above)	FEMA HMGP and FEMA FMA, Staff Time, CIP Budget	Long-Term (5 years or more)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
						limited access			
RH-26	Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including: <ul style="list-style-type: none"> <li>• Codes</li> <li>• Site Plan Review</li> <li>• General Plan</li> <li>• Capital Improvement Plan</li> </ul>	Safety and Security; Communications; Transportation; and	Both	4	Lead: City of Rolling Hills Support:	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)
RH-27	Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements: <ul style="list-style-type: none"> <li>• Evaluate the current floodplain ordinance to determine if updates are needed</li> <li>• Upon FEMA flood map revisions, update and adopt the City's floodplain ordinance</li> </ul>	All located in the floodplain	Both	1, 2, 4	Lead: City of Rolling Hills Support:	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)
RH-28	Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following: <ul style="list-style-type: none"> <li>• Public outreach</li> <li>• Integrate into appropriate plans and programs</li> </ul>	Communications; Safety and Security	Both	1, 2, 4	Lead: City of Rolling Hills Support:	Yes – older adults/ seniors; disabled or mobility impaired; isolated or limited access	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)

Table 4-15 Mitigation Action Prioritization

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
RH-01	3	1	3	3	3	3	1	1	3	3	3	3	3	3	3	39	High
RH-02	3	1	3	3	3	3	1	0	1	3	3	3	3	3	3	36	High
RH-03	3	3	1	3	3	1	1	1	3	3	1	3	0	3	3	32	High
RH-04	3	1	1	3	3	3	1	0	0	3	3	3	3	3	3	33	High
RH-05	3	3	3	3	3	1	1	1	3	3	3	3	3	3	3	39	High
RH-06	3	3	3	3	3	1	1	0	3	3	3	3	3	3	3	38	High
RH-07	1	3	1	3	3	1	1	0	1	3	1	3	3	3	3	30	Medium
RH-08	1	3	3	3	3	3	1	0	1	1	3	3	0	3	1	29	Medium
RH-09	3	1	3	3	3	1	1	0	3	3	3	3	3	3	3	36	High
RH-10	1	1	1	3	3	1	1	0	3	1	1	3	0	3	1	23	Medium
RH-11	1	1	3	3	3	1	1	0	3	1	3	3	3	3	3	32	High
RH-12	1	1	1	3	3	1	1	0	3	3	1	3	1	3	3	28	Medium
RH-13	3	1	3	3	3	1	1	0	3	3	3	3	3	3	3	36	High
RH-14	3	1	3	3	3	1	1	0	1	3	1	3	3	3	3	32	High
RH-15	3	1	1	3	3	1	1	0	3	3	3	3	3	3	3	34	High
RH-16	3	1	1	3	3	1	1	0	0	3	3	3	1	3	3	29	Medium
RH-17	3	3	1	3	3	1	1	3	3	3	1	0	1	3	3	32	High
RH-18	3	3	1	3	3	1	1	3	3	3	1	0	1	3	3	32	High
RH-19	3	3	1	3	3	1	1	3	3	3	1	0	1	3	3	32	High
RH-20	3	3	1	3	3	1	1	0	1	3	1	0	1	3	3	27	Medium
RH-21	3	3	1	3	3	1	1	0	1	3	1	1	1	3	1	26	Medium
RH-22	1	3	1	3	3	1	1	1	1	3	3	3	3	3	3	33	High
RH-23	1	1	3	3	3	1	1	3	3	3	3	3	3	3	3	37	High

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
RH-24	3	0	3	3	3	1	1	0	3	3	1	0	3	3	3	30	Medium
RH-25	3	3	3	3	3	1	3	1	3	3	1	1	1	1	1	31	High
RH-26	3	3	3	3	3	1	0	1	1	3	3	1	3	3	1	32	High
RH-27	3	3	3	3	3	1	0	1	1	3	3	1	3	1	1	30	High
RH-28	3	3	3	3	3	1	0	1	3	3	3	3	3	3	1	36	High

Note: 31 or more = High Priority  
 15 to 30 = Medium Priority  
 0 to 14 = Low Priority

Table 4-16 Mitigation Action Classification and Natural Hazards Addressed

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RH-01	■		■			■	■	■	■	■	■	■	■	■	■
RH-02	■					■	■	■	■	■	■	■	■	■	■
RH-03	■				■	■	■	■	■	■	■	■	■	■	■
RH-04	■	■				■	■	■	■	■	■	■	■	■	■
RH-05	■		■						■						■
RH-06	■							■	■			■			■
RH-07	■							■	■			■			


Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RH-08	■									■			■		■
RH-09	■					■	■	■	■	■	■	■	■	■	■
RH-10	■						■	■	■	■	■	■	■	■	■
RH-11	■					■	■	■	■	■	■	■	■	■	■
RH-12	■					■	■	■	■	■	■	■	■	■	■
RH-13	■		■			■	■	■	■	■	■	■	■	■	■
RH-14			■			■	■	■	■	■	■	■	■	■	■
RH-15	■		■					■				■	■		■
RH-16	■		■			■		■					■		■
RH-17	■	■	■				■	■	■	■	■	■	■	■	■
RH-18	■		■		■										■
RH-19	■		■	■		■									■
RH-20	■	■	■					■							
RH-21	■					■				■					
RH-22	■		■										■		■
RH-23	■		■	■	■		■					■			■
RH-24	■		■		■							■			
RH-25	■	■	■						■						
RH-26	■						■	■	■	■	■	■	■	■	■
RH-27	■								■						
RH-28	■		■		■	■	■	■	■	■	■	■	■	■	■

## 4.10 Public Outreach


Table 4-17 Public Outreach

Local Outreach Activity	Date	Number of People Involved
Blue Newsletter	August 20, 2025	700 copies distributed
Block Captain Meeting	August 21, 2025	35
Prepared Peninsula Expo	October 26, 2025	Undetermined due to the open nature of the event, though community outreach was broad and widely accessible.
Block Captain Meeting	November 11, 2025	35
Blue Newsletter	January 8, 2026	700 copies distributed
Blue Newsletter	January 18, 2026	700 copies distributed
City Hall – Flyers at front counter	August 2025 – January 2026	Undetermined due to the open nature

**Palos Verdes Peninsula  
Multi-Jurisdictional Hazard Mitigation Plan**



**HELP SHAPE OUR  
COMMUNITY'S  
RESILIENCE PLAN**

**TAKE OUR  
SURVEY** 

**To learn more about the planning process:**  
<https://www.pvpready.gov/>

Figure 4-2 Outreach Materials Posted to Promote the Survey

Source: PVP 2025

## 4.11 Information Sources Used for This Annex

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

- **City Website.** The City’s website was used to populate the annex.
- **General Plan and Elements.** The City’s General Plan was reviewed to identify current and potential capabilities and integration.
- **2019 Hazard Mitigation Plan.** The 2019 HMP was reviewed to identify previous mitigation actions and populate sections of the annex.
- **Rolling Hills Municipal Code.** The City’s codes were reviewed to populate current capabilities and identify future capabilities and areas of integration.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit.** The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

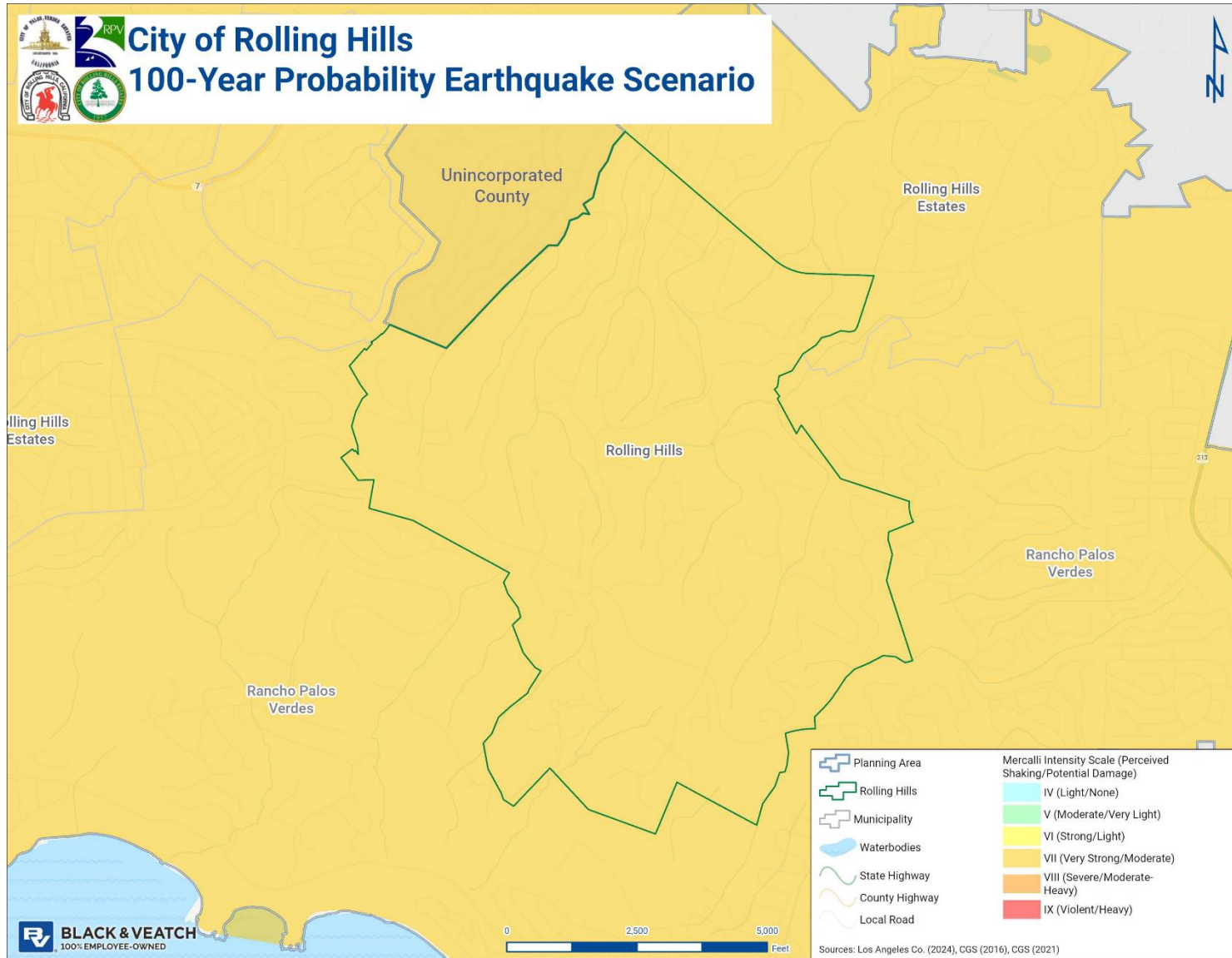


Figure 4-3 Earthquake Hazard Map – 100-Year Probability Scenario

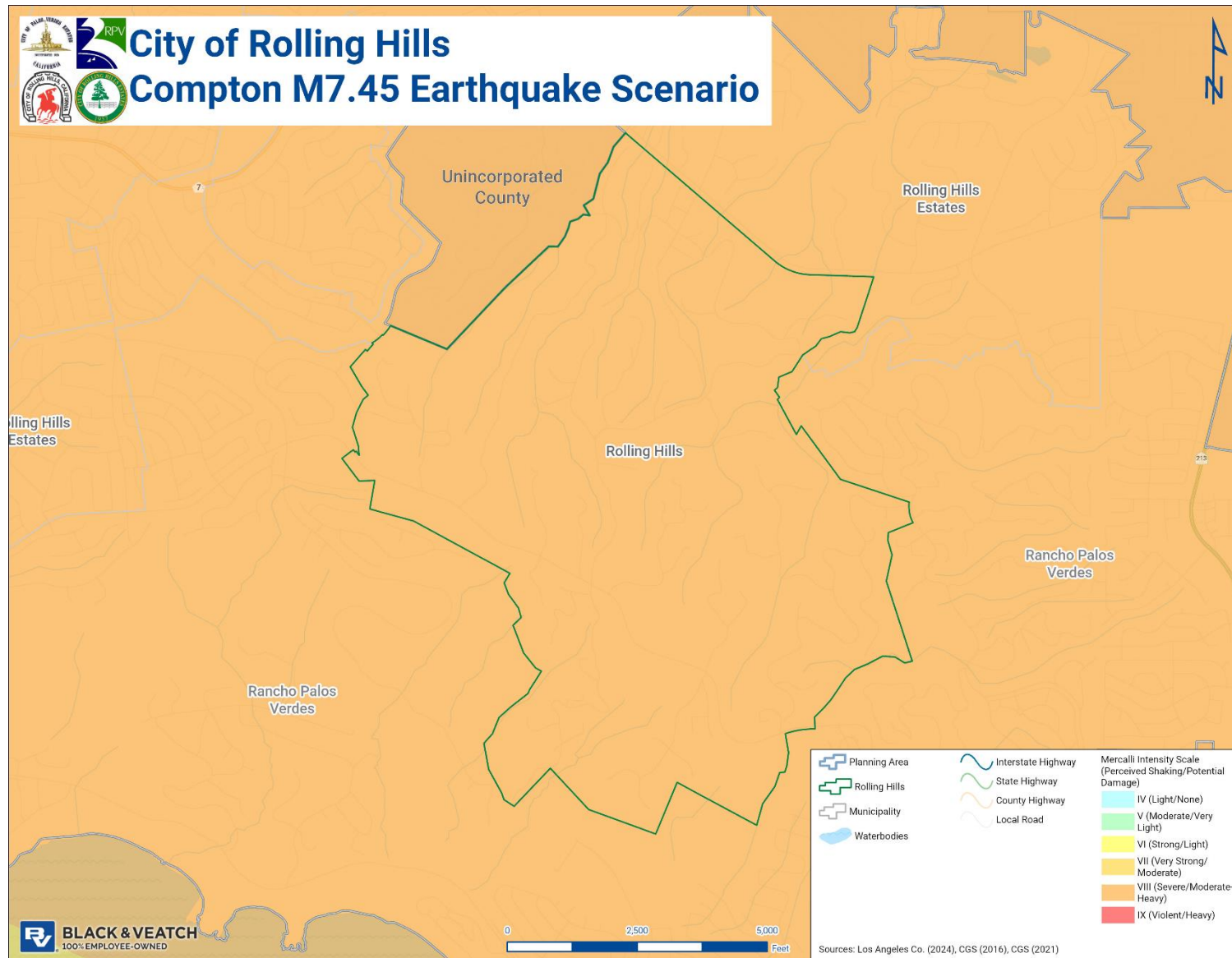


Figure 4-4 Earthquake Hazard Map – Compton M7.45 Scenario

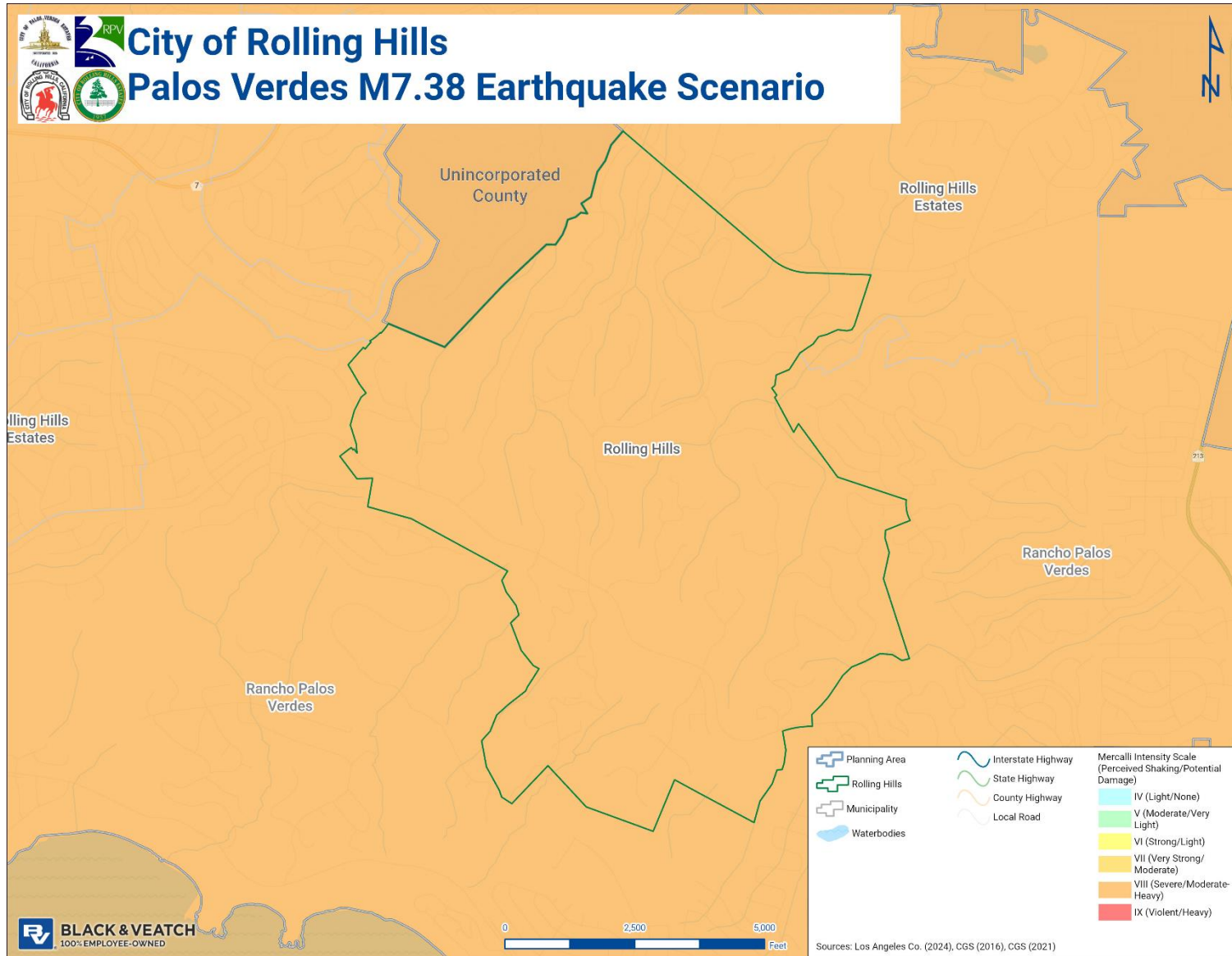


Figure 4-5 Earthquake Hazard Map – Palos Verdes M7.78 Scenario

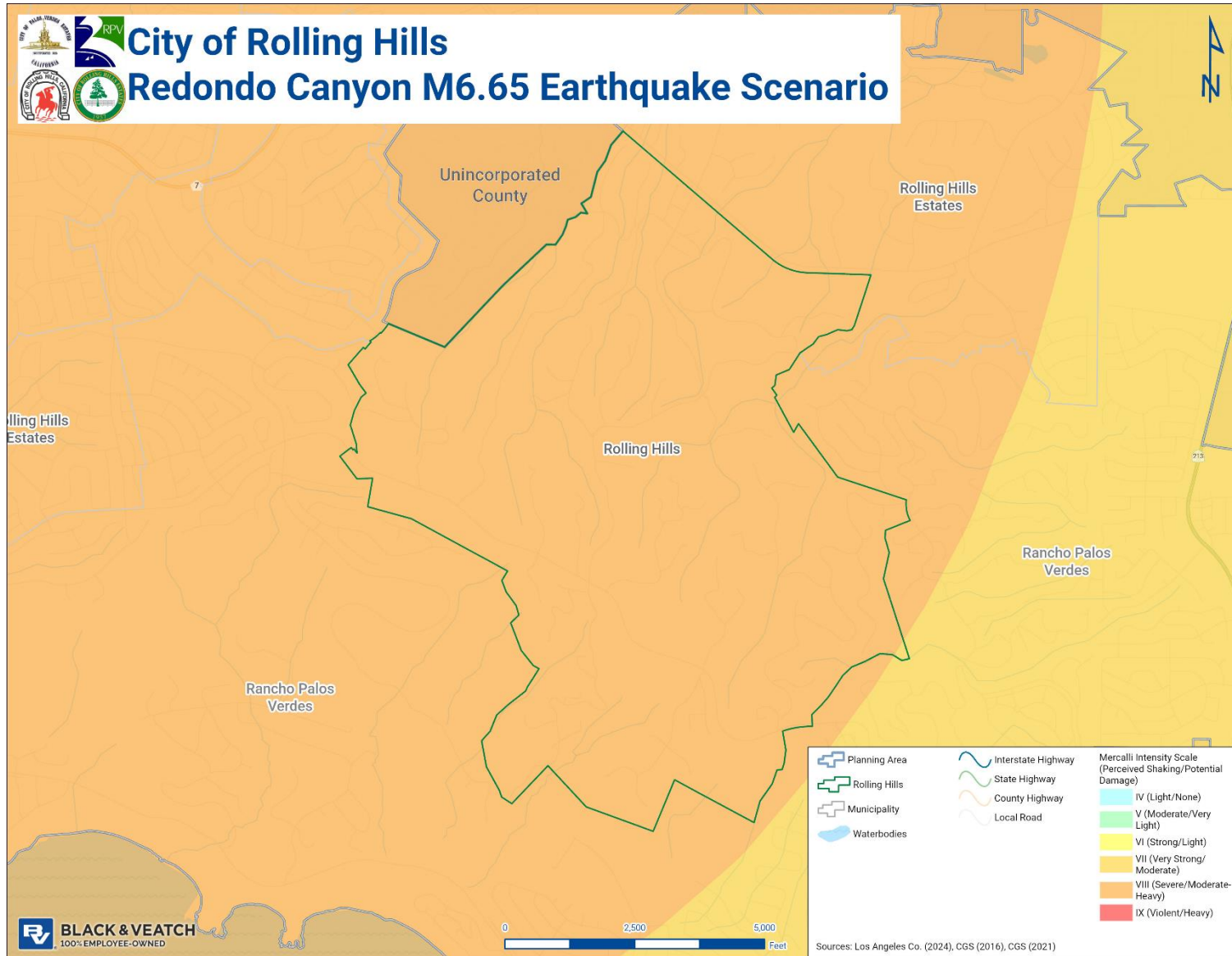


Figure 4-6 Earthquake Hazard Map – Redondo Canyon M6.65 Scenario

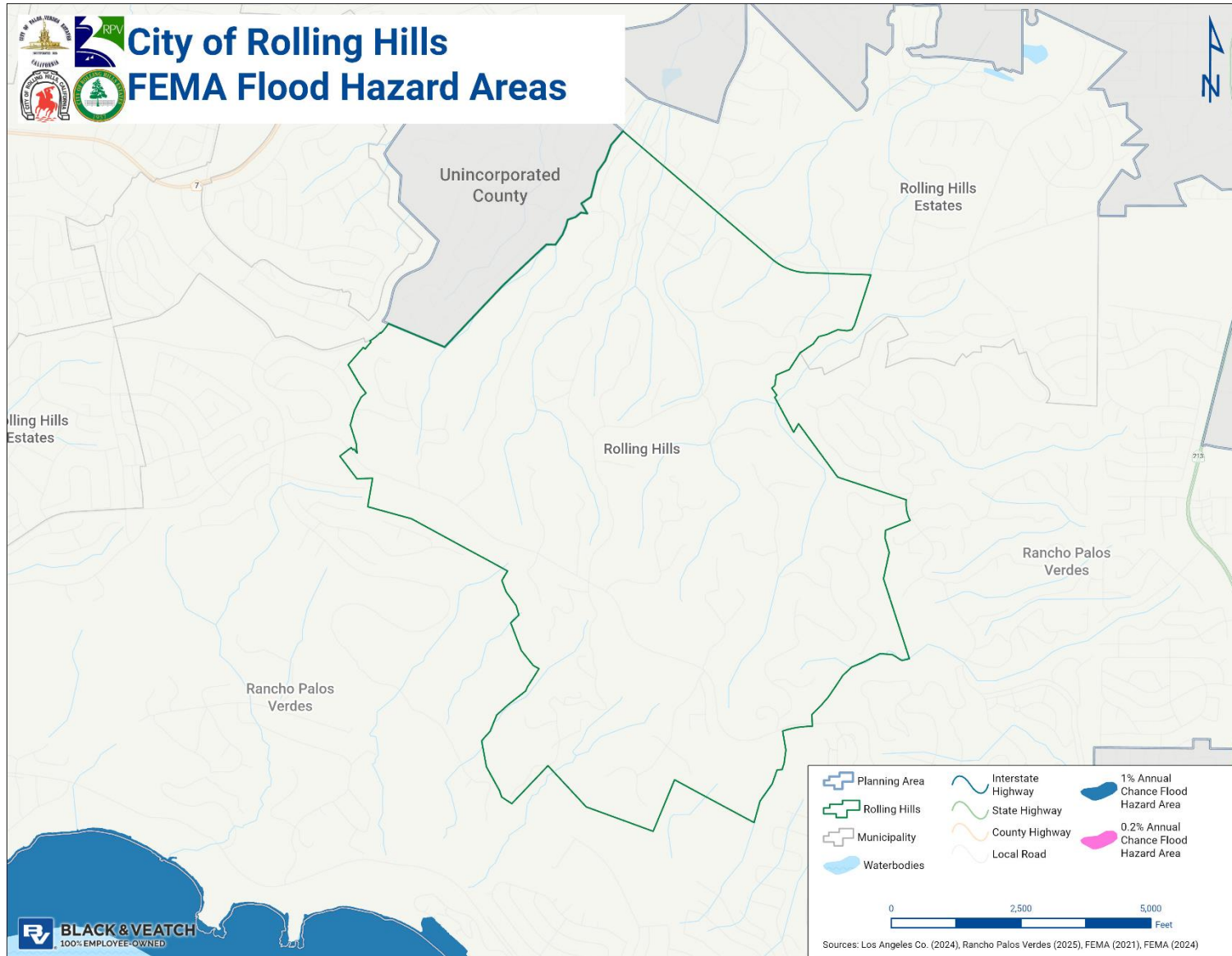


Figure 4-7 Flood Hazard Map – FEMA Flood Hazard Areas

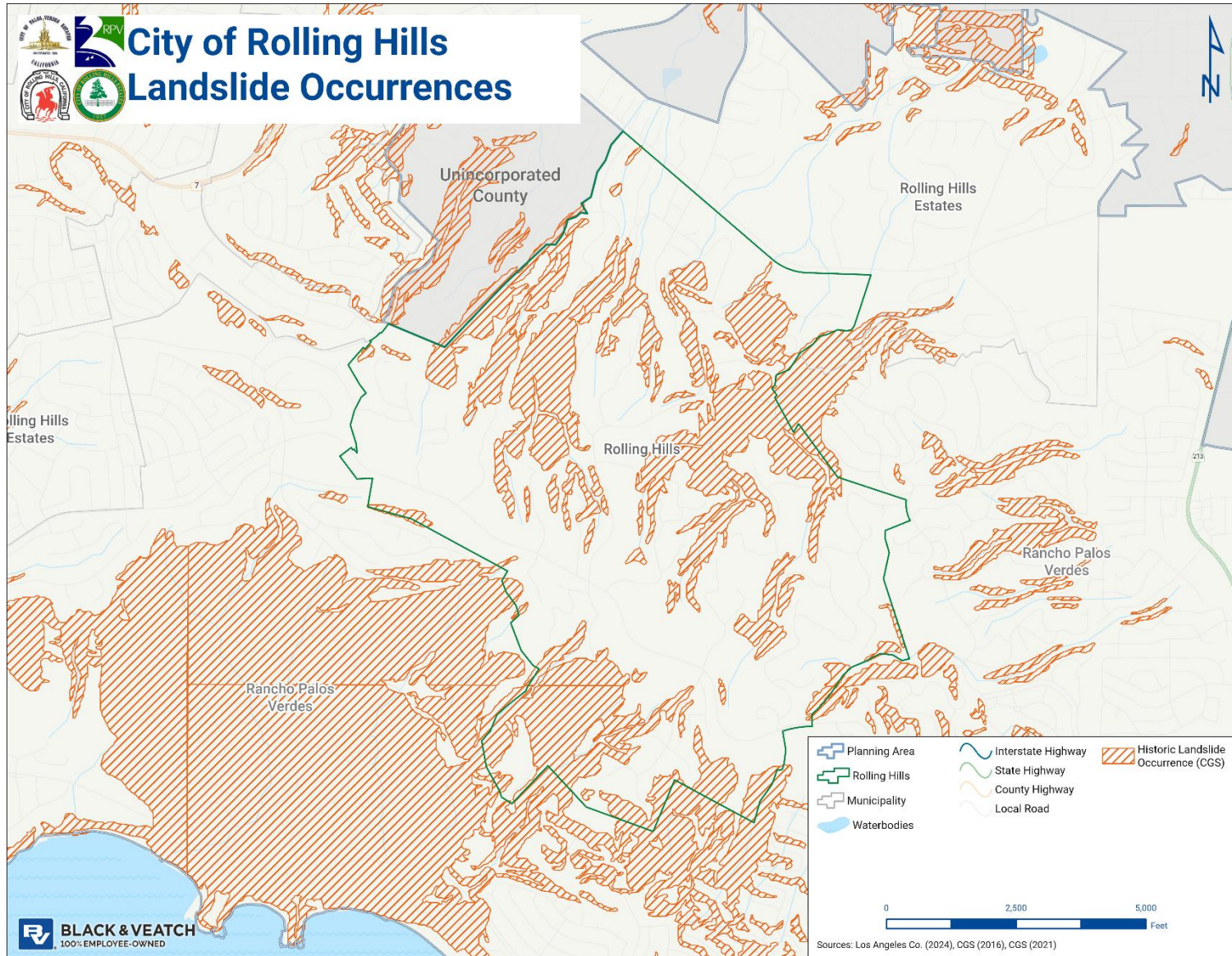


Figure 4-8 Landslide Hazard Map – Landslide Occurrences

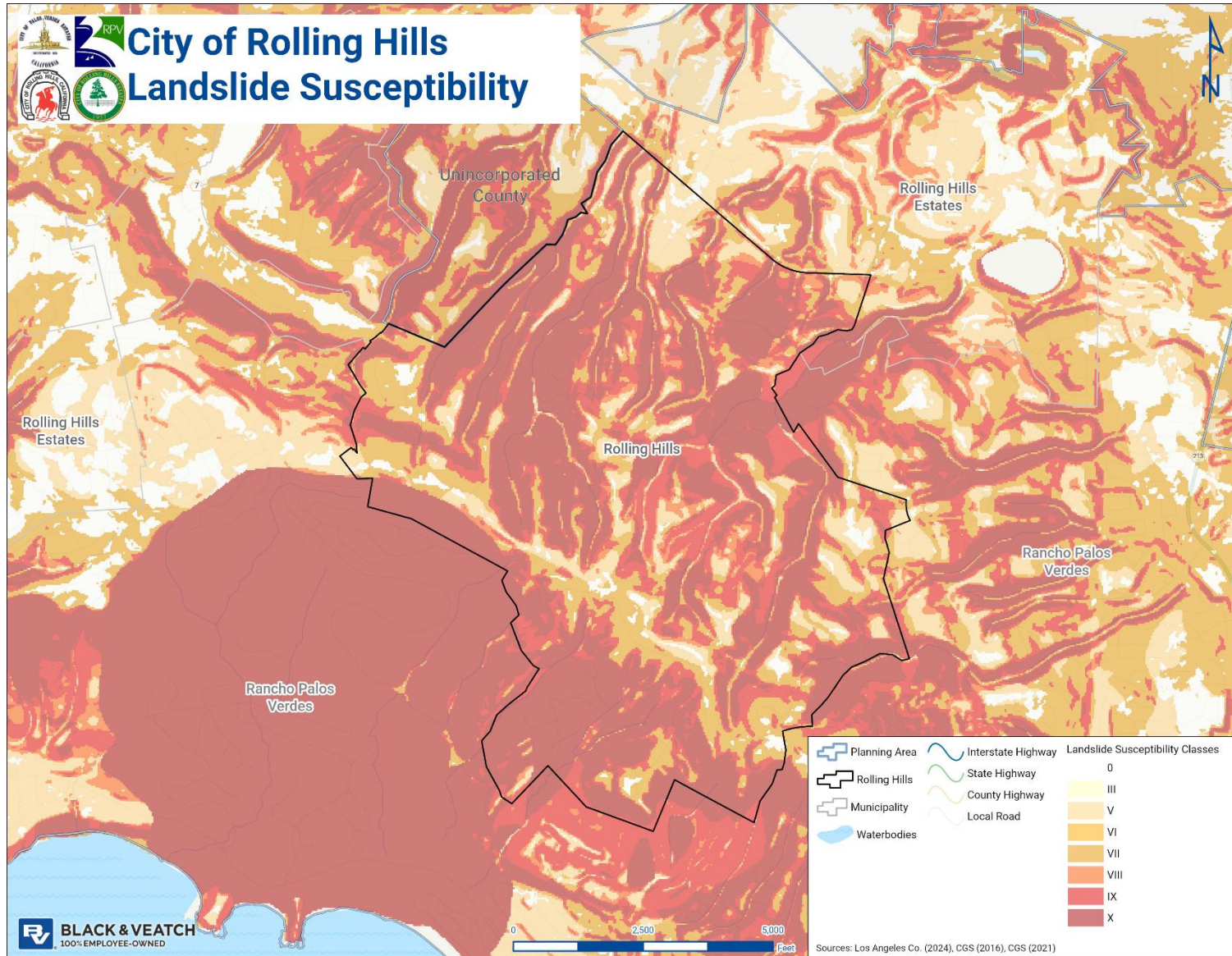


Figure 4-9 Landslide Hazard Map – Landslide Susceptibility

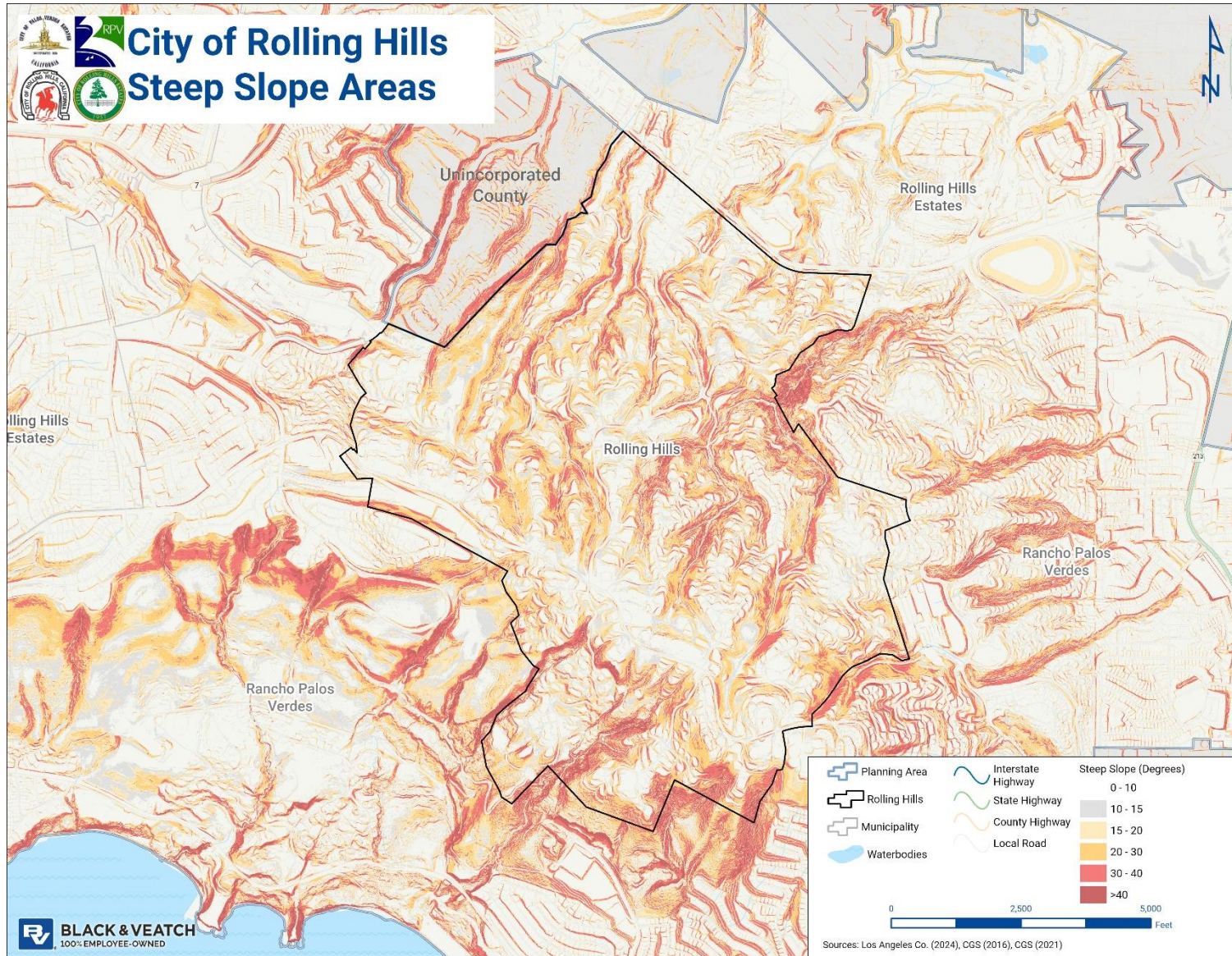


Figure 4-10 Landslide Hazard Map – Steep Slope Areas

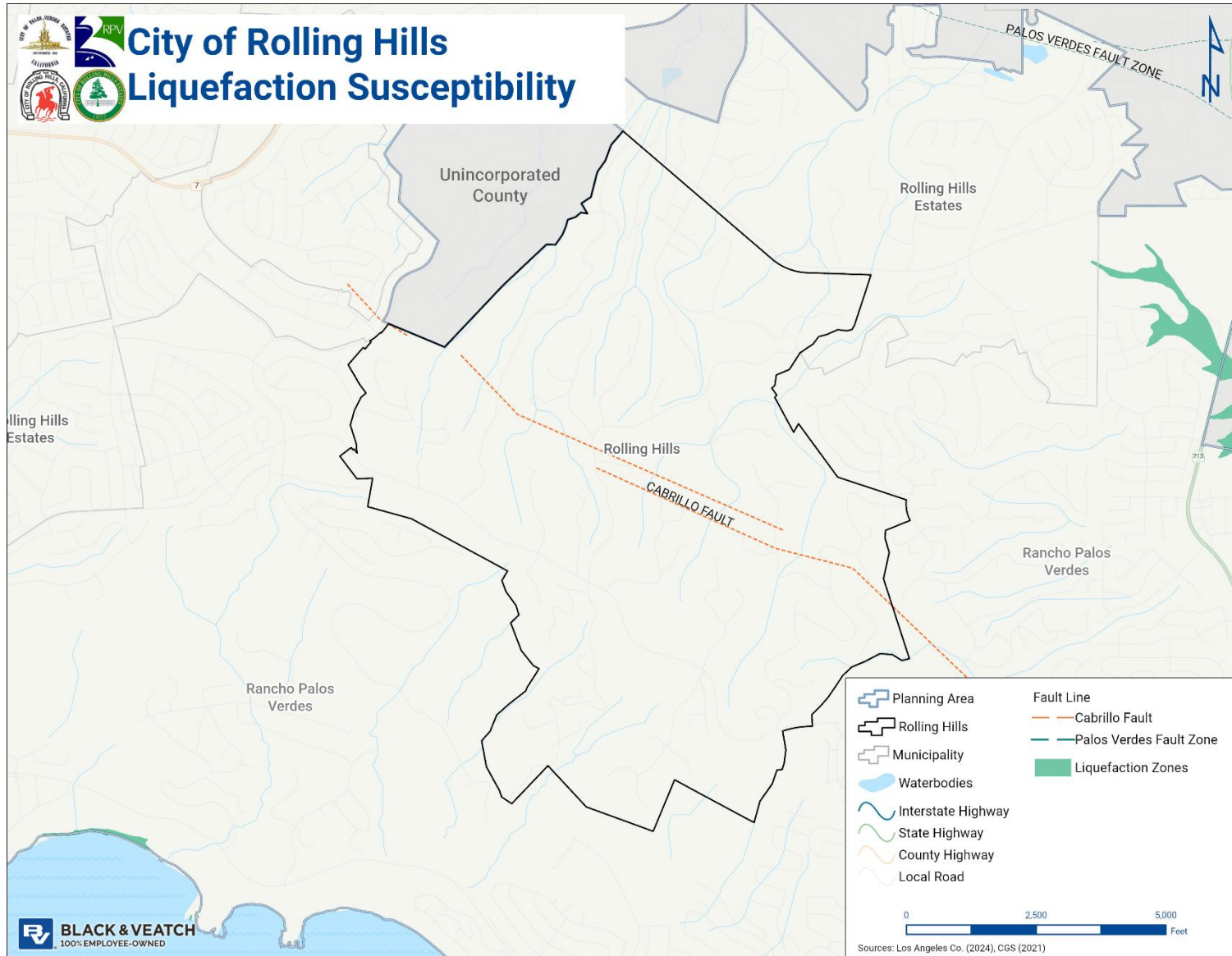


Figure 4-11 Liquefaction Hazard Map – Liquefaction Susceptibility

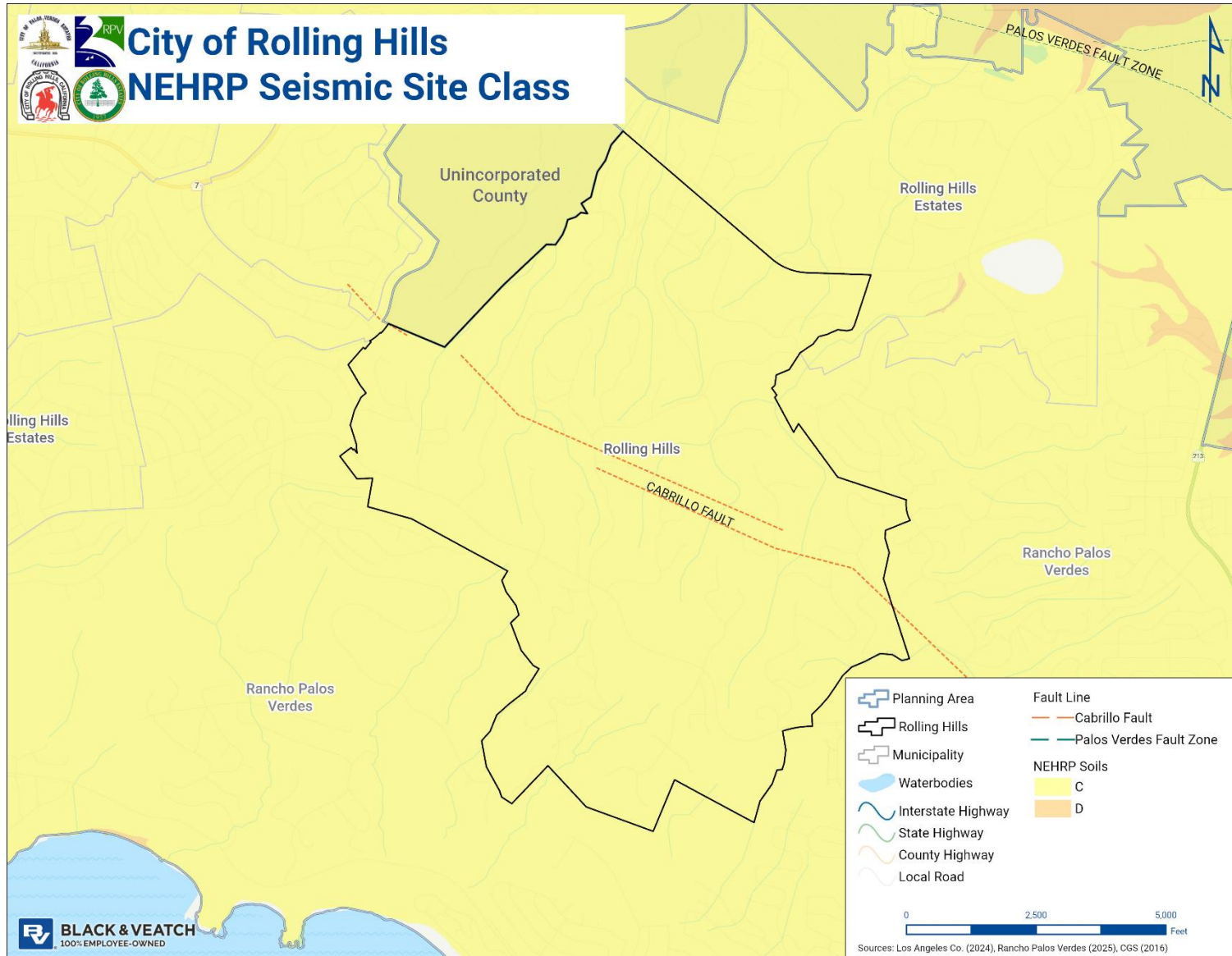


Figure 4-12 Liquefaction Hazard Map – NEHRP Seismic Site Class

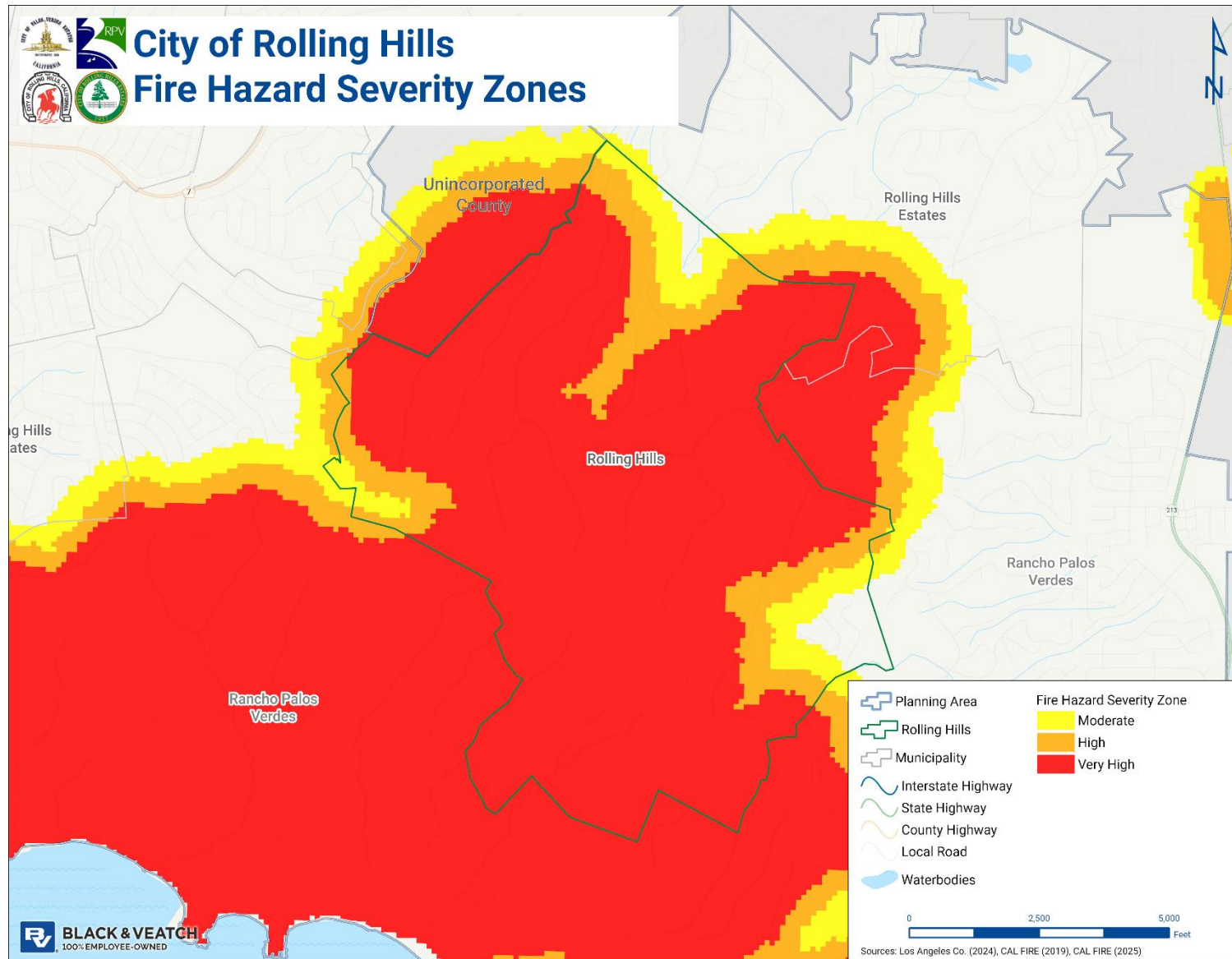


Figure 4-13 Wildfire Hazard Map – Fire Hazard Severity Zones

## 5. ROLLING HILLS ESTATES



**Figure 5-1** City of Rolling Hills Estates 2024 Mayor’s Ride

Source: (City of Rolling Hills Estates 2025)

### 5.1 Local Hazard Mitigation Planning Team

**Table 5-1** Local Planning Team

	Primary Point of Contact	Alternate Point of Contact
Name and Title:	Jessica Slawson, Assistant to the City Manager	Alexa Davis, Assistant City Manager
Address:	4045 Palos Verdes Drive North Rolling Hills Estates, CA 90274	4045 Palos Verdes Drive North Rolling Hills Estates, CA 90274
Phone Number:	(310) 377-1577	(310) 377-1577
Email:	jessicas@rollinghillsestates.gov	alexad@rollinghillsestates.gov
<b>Contributors:</b>		
Name and Title:	Greg Grammer, City Manager	
Method of Participation:	Virtual and in-person meetings; email correspondence	
Name and Title:	Alexa Davis, Assistant City Manager	
Method of Participation:	Virtual and in-person meetings; email correspondence	

Name and Title:	Jessica Slawson, Assistant to the City Manager
Method of Participation:	Virtual and in-person meetings; email correspondence
Name and Title:	Jeannie Naughton, Public Works and Community Development Director
Method of Participation:	Virtual and in-person meetings; email correspondence
Name and Title:	Kirsten Graham, Public Works Manager
Method of Participation:	Virtual and in-person meetings; email correspondence
Name and Title:	Gabby Swain, Administrative Aide
Method of Participation:	Virtual and in-person meetings; email correspondence

## 5.2 Jurisdictional Profile

### 5.2.1 Location and Features

The City of Rolling Hills Estates is located in the center of the Palos Verdes Peninsula in southern Los Angeles County. The peninsula’s golf courses, beaches, and nature reserves attract visitors from across the region. Rolling Hills Estates is accessible via SR-1, SR-107, and SR-213, which are all located just outside City borders. The City is about 20 miles south of downtown Los Angeles and 10 miles west of Long Beach (City of Rolling Hills Estates 2022).

### 5.2.2 History

The City of Rolling Hills Estates officially became Los Angeles County’s 60th municipality on September 18, 1957. In that first year, the City’s population totaled only 3,500, but its new citizens were united in their concern over maintaining the community’s rural atmosphere and equestrian lifestyle, characterized by rolling hills, white fences, bridle trails, and vast open spaces (City of Rolling Hills Estates 2025).

The City was also concerned in its early years with annexation of new areas. In 1959, the City added the Montecillo, Chandler Quarry, Country Club Estates and northern Masongate areas to its eastern and western portions. Between 1960 and 1966, the City annexed the research and development land behind the Northrop Corporation; the Peninsula Center, Harbor Sight, the Ranch, Rolling Hills Park Estates, Highridge, Hillcrest Manor, Hillcrest Meadows, Terraces, and Cresta Verdes areas. Finally, in 1982, the City added the site of the former Palos Verdes Landfill to assure that concerns regarding this closed facility would be recognized (City of Rolling Hills Estates 2025).

Today there are 30 neighborhood areas within the community, each with its own special character, architectural style, and Homeowners’ Association. These Associations often represent citizens directly before the City Council and serve as neighborhood social organizations as well (City of Rolling Hills Estates 2025).

### 5.2.3 Governance

Rolling Hills Estates is a “general law city” and provides services to the public as mandated by the California State Government Code. As provided by state law, our City’s legislative body is the City Council, comprised of five residents elected at large on a non-partisan ballot to serve 4-year overlapping terms. On an annual basis, one member is selected by the Council to serve as Mayor.

The City Council assumes responsibility for adoption of this plan; the City Manager’s Office will oversee its implementation.

## 5.3 Current Trends

### 5.3.1 Population

According to the California Department of Finance, the population of Rolling Hills Estates as of May 2025 was 8,545. Since 1970, the population has grown by at an average annual rate of 3.6 percent.

### 5.3.2 Development

**Table 5-2 Recent and Expected Future Development Trends**

Criterion	Response																																				
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan?	No.																																				
Is your jurisdiction expected to annex any areas during the performance period of this plan?	No.																																				
Provide the number of new construction permits for each hazard area or provide a qualitative description of where development has occurred.	Most development has generally occurred in the northwestern area of the City, in one new subdivision that included 114 new single-family homes (construction began in 2015 and generally was completed in 2022). New accessory dwelling unit construction occurred throughout the single-family residential areas throughout the City.																																				
Are any areas targeted for development or major redevelopment in the next 5 years?	The proposed project is a 454-unit residential mixed-use project on a 10.42-acre site located on five lots at 615-855 Deep Valley Drive and 924-950 Indian Peak Road. The project would include 10,229 square feet (SF) of commercial space and 881 parking spaces across four buildings. The project would remediate the steeply sloped hillside that experienced a landslide failure in 1997. The project would provide 44 units for very low-income households, which qualifies it for mandatory benefits under California's Density Bonus Law. The three buildings proposed along Deep Valley Drive would be seven stories, consisting of three- and five-story portions over two levels of podium parking. The building proposed on the Indian Peak Road site would be five stories over one level of podium parking.																																				
<ul style="list-style-type: none"> <li>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</li> </ul>	See above																																				
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	<table border="1"> <thead> <tr> <th></th> <th>2020</th> <th>2021</th> <th>2022</th> <th>2023</th> <th>2024</th> </tr> </thead> <tbody> <tr> <td>Single Family</td> <td>31</td> <td>22</td> <td>1</td> <td>1</td> <td>0</td> </tr> <tr> <td>Multi-Family</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Other (mobile homes, accessory dwellings, mixed use, etc.)</td> <td>94</td> <td>4</td> <td>7</td> <td>6</td> <td>7</td> </tr> <tr> <td>Commercial</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Total</td> <td>125</td> <td>26</td> <td>8</td> <td>7</td> <td>7</td> </tr> </tbody> </table>		2020	2021	2022	2023	2024	Single Family	31	22	1	1	0	Multi-Family	0	0	0	0	0	Other (mobile homes, accessory dwellings, mixed use, etc.)	94	4	7	6	7	Commercial	0	0	0	0	0	Total	125	26	8	7	7
	2020	2021	2022	2023	2024																																
Single Family	31	22	1	1	0																																
Multi-Family	0	0	0	0	0																																
Other (mobile homes, accessory dwellings, mixed use, etc.)	94	4	7	6	7																																
Commercial	0	0	0	0	0																																
Total	125	26	8	7	7																																
Describe the level of buildout in the jurisdiction, based on your jurisdiction's buildable lands inventory. If no such inventory exists, provide a qualitative description.	The City is largely built-out, with only two single-family residential lots that are undeveloped. All future development opportunities will be redevelopment of existing sites. The General Plan increased allowable density in the City's Commercial District, which projects the possible build-out of several hundred units within the 2040 Planning horizon.																																				

## 5.4 Capability Assessment

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

Findings of the capability assessment were reviewed to identify opportunities to expand or improve upon capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan.

### 5.4.1 Planning and Regulatory Capabilities

Jurisdictions have the ability to develop policies and programs and to implement rules and regulations to protect and serve residents. Local policies are typically identified in community plans, implemented through local ordinance, and enforced through a governing body. An assessment of planning and regulatory capabilities is presented in Table 5-3.

**Table 5-3 Planning and Regulatory Capabilities**

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Codes, Ordinances, &amp; Requirements</b>				
<b>Building Code</b>	Yes	No	Yes	Yes
<b>Comment:</b>	<i>Building Code (Chapter 15) specifies how new structures can be built. It includes the California Building Code, in addition to any amendments made by the City. Mitigation actions may involve amending the Building Code to improve a building's safety or structural stability.</i>			
<b>Zoning Code</b>	Yes	No	Yes	Yes
<b>Comment:</b>	<i>Zoning Ordinance (Chapter 17) implements the City's General Plan by establishing specific regulations for development. It includes standards for where development can be located, how buildings must be sized, shaped, and positioned, and what types of activities can occur in an area. Hazard mitigation actions that pertain to new or substantially redeveloped buildings can be adopted into the Zoning Ordinance.</i>			
<b>Subdivisions</b>	Yes	No	Yes	Yes
<b>Comment:</b>	<i>Subdivisions (Chapter 16)</i>			
<b>Stormwater Management</b>	Yes	No	Yes	Yes
<b>Comment:</b>	-			
<b>Post-Disaster Recovery</b>	Yes	Yes	No	Yes
<b>Comment:</b>	<i>The City of RHE contract with LA County to provide Fire and Police services, both of which assist in post-disaster recovery.</i>			
<b>Real Estate Disclosure</b>	No	Yes	Yes	No
<b>Comment:</b>	<i>California Civil Code 1102 and 1103 which requires disclosure by the seller and/or seller's agent to the potential buyer if the property is subject to flooding or fire hazards.</i>			
<b>Growth Management</b>	Yes	No	No	Yes
<b>Comment:</b>	<i>The City of RHE has land use authority to set permissible levels of development throughout the City, in accordance with the adopted General Plan.</i>			
<b>Site Plan Review</b>	Yes	No	No	Yes
<b>Comment:</b>	-			
<b>Environmental Protection</b>	No	No	No	No
<b>Comment:</b>	-			

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Flood Damage Prevention</b>	Yes	No	No	Yes
<b>Comment:</b>	Chapter 15.28 (Flood Damage Prevention)			
<b>Emergency Management</b>	Yes	No	Yes	Yes
<b>Comment:</b>	-			
<b>Climate Change</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Planning Documents</b>				
<b>General Plan</b>	Yes	No	Yes	Yes
<b>Is the General Plan compliant with Assembly Bill 2140?</b>	Yes			
<b>Comment:</b>	General Plan outlines long-term direction for development and policy in a community. There are opportunities to coordinate local hazard mitigation actions with policies governed by the General Plan. Next update to General Plan Safety Element should include integration with the Hazard Mitigation Plan. Also, General Plan is an excellent resource to assist with implementing many of the mitigation action items identified in the Hazard Mitigation Plan.			
<b>Capital Improvement Plan</b>	Yes	No	No	Yes
<b>How often is the plan updated?</b>	5 years			
<b>Comment:</b>	The Capital Improvement Program directs construction activities for City-owned facilities and infrastructure for the next 5 years. Mitigation actions may involve construction of new or upgraded facilities and infrastructure.			
<b>Disaster Debris Management Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Floodplain or Watershed Plan</b>	Yes	No	No	Yes
<b>Comment:</b>	-			
<b>Stormwater Plan</b>	Yes	No	No	Yes
<b>Comment:</b>	Storm Water Management Plan provides long-range planning of water supplies and water use to ensure a stable water supply and compliance with water conservation efforts. Mitigation actions that involve reducing water use may be incorporated into the next update to the Storm Water Management Plan.			
<b>Urban Water Management Plan</b>	No	No	No	No
<b>Comment:</b>	Cal Water is the water purveyor for the PV Peninsula			
<b>Habitat Conservation Plan</b>	No	No	No	No
<b>Comment:</b>	The City of RHE has no HCPs.			
<b>Economic Development Plan</b>	No	No	No	No
<b>Comment:</b>	The City of RHE does not currently have an economic development plan.			
<b>Community Wildfire Protection Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Forest Management Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Climate Action Plan</b>	Yes	No	No	Yes
<b>Comment:</b>	As a part of these efforts, the City of Rolling Hills Estates, in cooperation with the South Bay Cities Council of Governments, has developed a <a href="#">Climate Action Plan (CAP)</a> to reduce GHG emissions within the city. The City's CAP serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policy to achieve desired outcomes over the next 20 years.			

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Threat &amp; Hazard Identification &amp; Risk Assessment (THIRA)</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Post-Disaster Recovery Plan</b>	No	No	No	No
<b>Comment:</b>	-			
<b>Emergency Operations Plan</b>	Yes	No	No	Yes
<b>Comment:</b>	<i>An Emergency Operations Plan (EOP) is a reference and guidebook to operations during a major emergency impacting Rolling Hills Estates. The Plan includes a discussion on a wide range of hazards, organization and staffing of the Emergency Operations Center, and connectivity with field responders and external agencies. The EOP is an excellent source of hazard information for the Hazard Mitigation Plan. (Rolling Hills Estates Plan completed in 2025).</i>			
<b>Public Health Plan</b>	No	No	No	No
<b>Comment:</b>	We contract with the County of Los Angeles to provide Public Health services.			

### Opportunities to Expand Planning and Regulatory Capabilities

The table above, Section 5.6 (Integration), and Section 5.9 (Hazard Mitigation Strategy) highlights opportunities for the City to strengthen planning and regulatory capabilities through hazard mitigation integration. Aligning mitigation efforts with updates to codes, ordinances, and planning initiatives fosters a coordinated approach to reducing hazard risk, supporting resilient development and a safer community.

### 5.4.2 Development and Permitting Capabilities

Jurisdictions regulate land use through the adoption and enforcement of zoning, subdivision and land development ordinances, building codes, building permit ordinances, floodplain, and stormwater management ordinances. When effectively prepared and administered, these regulations can lead to hazard mitigation. Development and permitting capabilities are presented in Table 5-4.

**Table 5-4 Development and Permitting Capabilities**

Criterion	Response
Does your jurisdiction issue development permits?	Yes
If no, who does? If yes, which department?	Community Development
Does your jurisdiction track permits by hazard area?	No
Does your jurisdiction have a buildable lands inventory?	We maintain surplus (government owned) lands database, but not general privately held buildable lands inventory.

### 5.4.3 Fiscal Capabilities

Assessing a jurisdiction’s fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant funding eligibility, and local jurisdictional authority to generate internal financial capability, such as through impact fees. An assessment of fiscal capabilities is presented in Table 5-5.

**Table 5-5 Fiscal Capabilities**

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

***Opportunities to Expand Fiscal Capabilities***

Section 5.6 (Integration), and Section 5.9 (Hazard Mitigation Strategy) highlights opportunities for the City to strengthen its fiscal capabilities through hazard mitigation integration. Various funding sources are available to support mitigation projects that reduce natural hazard risk. By implementing mitigation measures, updating codes, and improving infrastructure, the City can continue working towards minimizing damage and recovery costs. Additionally, investing in more resilient infrastructure and mitigation projects, it can lower long-term maintenance and response costs.

**5.4.4 Administrative and Technical Capabilities**

Planning regulatory and fiscal capabilities provide the backbone for successfully developing a mitigation strategy; however, without the appropriate personnel, the strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard mitigation. These resources include technical experts, such as engineers and scientists, as well as personnel with capabilities that may be found in multiple departments, such as grant writers. An assessment of administrative and technical capabilities is presented in Table 5-6.

**Table 5-6 Administrative and Technical Capabilities**

Staff/Personnel Resource		Available?
Planners or engineers with knowledge of land development and land management practices		Yes
<i>If Yes, Department /Position:</i>	In house staff: Senior Planner, Community Development & Public Works Director. Contract staff: Willdan Engineering; full engineering services.	
Engineers or professionals trained in building or infrastructure construction practices		Yes
<i>If Yes, Department /Position:</i>	Contract staff with Willdan Engineering: Building Officials, plan checkers, building inspectors.	
Planners or engineers with an understanding of natural hazards		Yes
<i>If Yes, Department /Position:</i>	Community Development & Public Works Director	
Staff with training in benefit-cost analysis		Yes
<i>If Yes, Department /Position:</i>	Finance: Senior accountant and Administrative Services Director	
Surveyors		Yes
<i>If Yes, Department /Position:</i>	Contract staff with Willdan Engineering	
Personnel skilled or trained in GIS applications		Yes
<i>If Yes, Department /Position:</i>	Community Development Department Staff: Administrative Analyst, Assistant Planner, Community Development and Public Works Director	
Scientist familiar with natural hazards in local area		No
Emergency manager		Yes
<i>If Yes, Department /Position:</i>	City Manager’s Office: Assistant to the City Manager	
Grant writers		No
Procurement Services and Management		Yes
<i>If Yes, Department /Position:</i>	City Manager’s Office: Assistant City Manager / Finance Director	

**Opportunities to Expand Administrative and Technical Capabilities**

Section 5.6 (Integration), and Section 5.9 (Hazard Mitigation Strategy) highlights opportunities for the City to expand its administrative and technical capabilities through hazard mitigation integration. By maintaining and expanding these resources, including planning, engineering, GIS, and emergency planning, the City can better identify vulnerabilities, evaluate mitigation options, and design effective risk-reduction projects. These capabilities provide informed decision-making, efficient implementation, and ongoing progress toward a more resilient City.

**5.4.5 Education and Outreach Capabilities**

Regular engagement with the public on issues regarding hazard mitigation provides an opportunity to directly interface with community members. Assessing the education and outreach capability illustrates the connection between the government and community members, which opens a two-way dialogue that can result in a more resilient community, based on awareness and engagement. An assessment of education and outreach capabilities is presented in Table 5-7.

**Table 5-7 Education and Outreach Capabilities**

Criterion		Response
Do you have a public information officer or communications office?		Yes
Do you have personnel skilled or trained in website development?		Yes
Do you have hazard mitigation information available on your website?		Yes
<i>If yes, briefly describe:</i>	<i>The City uses its website to provide information to its residents including meetings and events, news, and hazard information. The City includes hazard extent maps, like fire severity zones, on its website as well. On the City's Public Safety webpage, they provide information on emergency preparedness and a link to sign up for emergency alerts and notifications. Additionally, the City hosts a regional emergency preparedness and informational website with the four Palos Verdes Peninsula City jurisdictions.</i>	
Do you use social media for hazard mitigation education and outreach?		Yes
<i>If yes, briefly describe:</i>	<i>The City has social media accounts used to provide its residents with news, upcoming meetings and events, and alerts (including hazard events).</i>	
Do you have any citizen boards or commissions that address issues related to hazard mitigation?		Yes
<i>If yes, briefly describe:</i>	<i>The City participates in a regional (Peninsula) Public Safety Committee comprised of city council representatives that serve on the board to discuss and direct regional emergency preparedness efforts. The City additionally has an established Equine Emergency Preparedness Sub-committee.</i>	
Do you have any other programs in place that could be used to communicate hazard-related information?		Yes
<i>If yes, briefly describe:</i>	<i>The City communicates hazard-related information at an annual Emergency Preparedness Expo event held in partnership with the Palos Verdes Peninsula cities. The City also participates in the annual National Night Out event which local officials, staff, and public safety partners attend neighborhood gatherings to discuss public safety/emergency preparedness. A Peninsula Community Emergency Response Team (CERT) has been established.</i>	
Do you have any established warning systems for hazard events?		Yes
<i>If yes, briefly describe:</i>	<i>Local Alert and Warning Communication System – Alert South Bay through the Everbridge Platform. The City participates in the County of Los Angeles emergency evacuation communication tool through the Genasys platform.</i>	

**Opportunities to Expand Education and Outreach Capabilities**

The table above, Section 5.6 (Integration), and Section 5.9 (Hazard Mitigation Strategy) identifies opportunities for the City to strengthen education and outreach capabilities through hazard mitigation integration. This can be done by building on current efforts like the city website, social media pages, and through the Public Safety Committee and CERT. Focusing on these efforts, the City will continue increasing awareness and help the community become better prepared for future natural hazards.

### 5.4.6 Community Classifications

Table 5-8 Community Classifications

	Participating?	Classification or Number	Date Classified
FIPS Code	Yes	037-62644	N/A
UEI#	Yes	TFBXN1M3MYA1	N/A
Community Rating System	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Unsure	-
Public Protection (ISO for Fire)	Yes	Class 1 or 2	1957
StormReady	No	N/A	N/A
TsunamiReady	No	N/A	N/A
Firewise	No	N/A	N/A

### 5.4.7 Adaptive Capacity for Climate Change

Table 5-9 Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating <sup>a</sup>
<b>Technical Capacity</b>	
Jurisdiction-level understanding of potential climate change impacts	Medium
Jurisdiction-level monitoring of climate change impacts	Unsure
Technical resources to assess proposed strategies for feasibility and externalities	Low
Jurisdiction-level capacity for development of GHG emissions inventory	Unsure
Capital planning and land use decisions informed by potential climate impacts	Medium
Participation in regional groups addressing climate risks	Medium
<b>Implementation Capacity</b>	
Clear authority/mandate to consider climate change impacts during public decision-making processes	Medium
<i>Comment:</i> State requirements and regulation imposed mandates may direct decision-making processes.	
Identified strategies for GHG mitigation efforts	Medium
Identified strategies for adaptation to impacts	Medium
Champions for climate action in local government departments	High
Political support for implementing climate change adaptation strategies	High
Financial resources devoted to climate change adaptation	Unsure
<i>Comment:</i> Grant funding, and other programs are reviewed.	
Local authority over sectors likely to be negative impacted	Low
<b>Public Capacity</b>	
Residents' knowledge of and understanding of climate risk	Medium
Residents' support of adaptation efforts	High
Residents' capacity to adapt to climate impacts	Unsure
Local economy current capacity to adapt to climate impacts	Unsure
Local ecosystems capacity to adapt to climate impacts	Medium

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

## 5.5 National Flood Insurance Program Compliance

**Table 5-10 National Flood Insurance Program Compliance**

Criterion	Response
<b>Flood Risk Summary</b>	
Please describe areas of the jurisdiction prone to flooding, specifically those outside of the mapped floodplain.	According to the Safety Element of the General Plan, flooding in the City includes storm-induced flooding like flash floods in the canyon areas (generally classified as open space), saturated mudflows of the hillsides, and shallow flooding in streets and homes associated with poor storm drainage.
Do FEMA flood maps adequately address flood risk in the jurisdiction?	Yes
How many structures in the jurisdictions SFHA have been determined to be substantially damaged from any hazard event?	N/A
Additional comments on flood risk	There are no high-risk flood zones that have been mapped within the jurisdictional boundaries.
<b>Staff Resources</b>	
Provide an explanation of the jurisdiction’s NFIP administration services (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, review and use of base flood data, and agency notification.
What local department is responsible for floodplain management?	Public Works
Who is your floodplain administrator? (department/position)	Director
Are any staff certified floodplain managers (CFMs)?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program?	No
<b>Insurance Summary <sup>a</sup></b>	
How many flood insurance policies are in force in your jurisdiction?	15
<i>What is the insurance in force?</i>	\$3,663,000
<i>What is the premium in force?</i>	\$9,712
How many total loss claims have been filed in your jurisdiction?	9
<i>What were the total payments for losses?</i>	\$12,344
Does the jurisdiction maintain a list of properties that have been damaged by flooding?	No
Does the jurisdiction maintain a list of property owners interested in flood mitigation?	No
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	N/A
How many properties have been mitigated (elevation or acquisition)?	None
<b>Compliance History</b>	
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No

Criterion	Response
Does your jurisdiction have a Substantial Damage Response Plan?	No
Summarize the jurisdiction’s Substantial Damage determination procedures.	1) Initial field assessment (rapid evaluation to determine green, yellow or red tag); 2) detailed data collection (square footage, foundation type, quality of finishes) and calculate repair/replacement costs; 3) communicate either repair (<50% replacement costs) or considered new construction (>50%)
Summarize the jurisdiction’s Substantial Improvement procedures.	1) Applicants must submit a valuation for the proposed work which includes costs for materials and labor; 2) if the valuation of the work is <50% of the adjusted assessed value, standard permits are issued; 3) if the valuation of the work is >50% of the adjusted assessed value, the project is considered a substantial improvement and the entire structure must be brought into compliance with current codes. There are limited exceptions for work related to code enforcement/life/health & safety codes and for historic structures.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
Are any RiskMAP projects currently underway in your jurisdiction?	N/A
<b>Regulation</b>	
What is the date that your flood damage prevention ordinance was last amended?	2021
Does the jurisdiction’s administration of the floodplain exceed NFIP requirements? (freeboard, mapping, etc.)	Meets the minimum
<b>Community Rating System</b>	
Does your jurisdiction participate in the Community Rating System (CRS)?	No

a. According to FEMA statistics as of (08/31/2025)

## 5.6 Integration

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

### 5.6.1 Existing Integration

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

- **City of Rolling Hills Estates Emergency Operations Plan** –City specific document that outlines strategies and responses to emergencies and disasters by establishing roles, actions, and procedures to effectively prepare for, respond to, and recover from a wide range of potential hazards.
- **Safety Element of the City’s General Plan** –The purpose of the Safety Element is to identify potential hazards to the City of Rolling Hills Estates’ jurisdiction, including the community’s citizens, structures, public facilities, and infrastructure. Policies in the Safety Element address various public safety hazards and emergency preparedness. The Safety Element is linked to both the Open Space and Recreation Element and Conservation Element, as many designated open space or conservation areas are also documented as earthquake fault zones, unstable soils or slope zones, floodplains, or watersheds. Open space can also be used as a buffer zone between uses that may create or have public safety hazards, such as hazardous materials use or production. Development within designated open space and conservation areas would be inconsistent with the goals and policies in the Safety Element. The Safety Element is also linked to the Circulation Element, which provides a policy framework for a safe and efficient circulation system, which is critical during the response to an emergency or in the event that an evacuation is necessary. The Sustainability Element addresses climate resiliency issues and is interrelated with Safety Element’s climate resiliency policies.
- **Public Outreach** – The City maintains a website and [social media](#) pages where they share information with residents. The [Emergency Preparedness webpage](#) has information for residents on how to receive notifications and emergency alerts, provides information on reducing fire risk, and links to other resources.

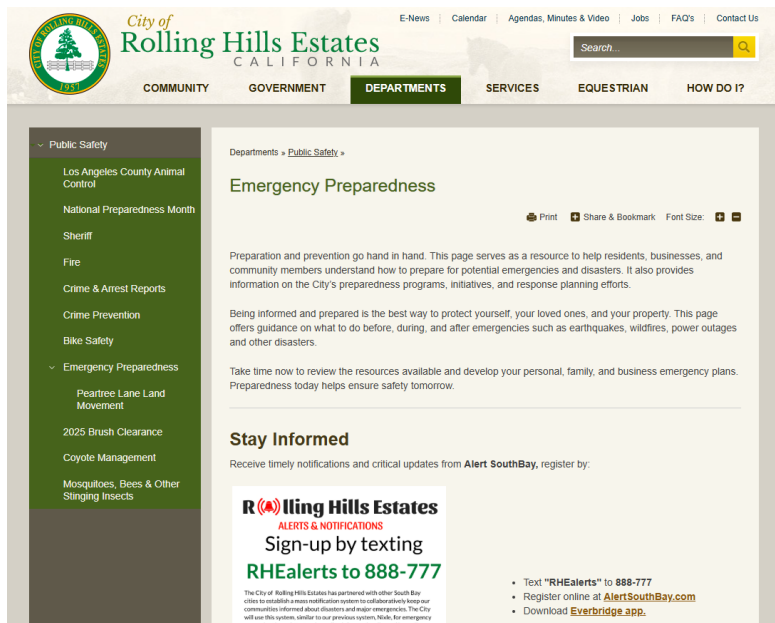


Figure 5-2 Screenshot of the City’s Emergency Preparedness Page

### 5.6.2 Opportunities for Future Integration

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

- **Codes and Ordinances** – As the City updates, revises, and develops codes and ordinances, there are opportunities for integrating the hazard mitigation plan that can include amending codes to withstand hazards, development standards for building in hazard areas, prohibiting development in hazard areas, and setbacks to minimize hazard exposure.
- **Capital Improvement Plan** – As part of the updating process of the CIP, the City can review the mitigation action identified in the current HMP to identify and prioritize projects that can be included in the CIP that will reduce hazard risk. The HMP can also be used to guide project selection so capital funding can support long-term resilience from natural hazards.

- **Stormwater Plan** – Prior to updating the Stormwater Plan, the City should review the HMP to identify and integrate critical areas prone to repetitive flooding and develop a targeted plan to upgrade the stormwater systems in those areas.
- **Climate Action Plan** – The Climate Action Plan can be reviewed to understand climate projections prior to designing and implementing mitigation and capital improvement projects. Those projects should be factor in projections so they can be built to withstand future projections and increase their project useful life.
- **Emergency Operations Plan** – During the next update of the EOP, the City can integrate hazard mitigation principles into evacuation planning, continuity of operations, sheltering, and emergency notifications. The natural hazards in the EOP should align with the hazards included in the HMP.
- **General Plan** - There are opportunities to coordinate local hazard mitigation actions with policies governed by the General Plan. Next update to General Plan Safety Element should include integration with the Hazard Mitigation Plan. Prior to applying for funding for mitigation projects, the City can review the General Plan to identify areas to focus on mitigation hazards.
- **Palos Verdes Peninsula Evacuation and Mass Care Plan**— Regional document that will identify evacuation and mass care vulnerabilities and gaps to better inform future mitigation strategies related to mass care/shelter and evacuations.

## 5.7 Risk Assessment

### 5.7.1 Jurisdiction-Specific Natural Hazard Event History

Table 3-11 lists past occurrences of natural hazards, resulting in a disaster declaration, for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

**Table 5-11 Past Natural Hazard Events**

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Fire	Woolsey Fire	FM-5280-CA	November 9, 2018	Reduced air quality; intake of evacuated equine
Fire	Wildfires	EM-3409-CA	November 9, 2018	Reduced air quality
Fire	Wildfires	DR-4407-CA	November 12, 2018	Reduced air quality
Biological	Covid-19 Pandemic	EM-3428-CA DR-4482-CA CA20-01	March 13, 2020 March 22, 2020 March 4, 2020	Workforce functions/day-to-day transition; economic impact
Severe Storm	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4699-CA	April 3, 2023	Storm drain damage; Isolated landslide
Severe Storm	Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides	DR-4769-CA	April 13, 2024	N/A
Fire	Palisades Fire	FM-5549-CA	January 7, 2025	Reduced air quality
Fire	Eaton Fire	FM-5550-CA	January 8, 2025	Reduced air quality
Fire	Wildfires And Straight-Line Winds	DR-4856-CA	January 8, 2025	Reduced air quality

### 5.7.2 Hazard Ranking

The prioritization and categorization of identified hazards for Rolling Hills Estates is based principally on the Priority Risk Index (PRI), a tool used to measure the degree of risk for identified hazards in a particular planning area. The PRI was used to assist the City in identifying hazards that pose the most significant threat. Table 5-12 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy.

**Table 5-12 Hazard Risk Ranking Summary**

Hazard	Weighted Risk Factors					PRI	Risk Ranking
	Probability	Impact	Spatial Extent	Warning Time	Climate Change		
Drought	1.2	0.3	0.8	0.1	0.4	2.8	Medium
Earthquake	0.9	0.9	0.8	0.4	0.2	3.2	High
Flood	0	0	0	0	0	0	No Risk
Landslide	1.2	0.6	0.6	0.4	0.4	3.2	High
Sea Level Rise	0	0	0	0	0	0	No Risk
Severe Weather - Heat Wave	0.9	0.6	0.8	0.1	0.4	2.8	Medium
Severe Weather - Strong Wind	1.2	0.6	0.8	0.1	0.4	3.1	High
Tsunami	0	0	0	0	0	0	No Risk
Wildfire	0.6	0.6	0.4	0.4	0.4	2.4	Medium

Note: PRI Value 1 to 1.9 = Low Hazard Risk Ranking  
 PRI Value 2.0 to 2.9 = Medium Hazard Risk Ranking  
 PRI Value 3.0 to 4.0 = High Hazard Risk Ranking

### 5.7.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex (see Figure 5-4 through Figure 5-14).

#### Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: 0

#### Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- No additional vulnerabilities.

## 5.8 Status of Previous Plan Mitigation Actions

Table 5-13 summarizes the mitigation actions that were recommended in the prior plan and their implementation status at the time this update was prepared.

**Table 5-13 Status of Prior Plan Actions**

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH-1 Integrate the goals and action items from the Joint Natural Hazards Mitigation Plan into existing regulatory documents and programs, where appropriate.	Ongoing Capability	Identified as a Current Capability	Yes	RHE-03
MH-2 Identify and pursue funding opportunities to develop and implement local mitigation activities.	<ul style="list-style-type: none"> <li>FEMA HMGP</li> <li>2018-Awarded \$40,882 in recovery funds from Cal OES/FEMA for Disaster #DR-4305</li> </ul>	Identified as a Current Capability	Yes	RHE-03
MH-3 Hazard Mitigation Planning Subcommittee will continue to develop a sustainable process for implementing, monitoring, and evaluating regional mitigation activities.	Ongoing Capability	Identified as a Current Capability	Yes	RHE-05
MH-4 Identify, improve, and sustain collaborative programs focusing on public and private sector organizations, and individuals to avoid activity that increases risk to natural hazards. <ul style="list-style-type: none"> <li>Cal Water – Palos Verdes Peninsula Water Reliability Project.</li> <li>Southern California Edison PSPS</li> <li>Southern California Gas Company programs.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-06
MH-5 Develop public and private partnerships to foster natural hazard mitigation program coordination and collaboration with the City’s Hazard Mitigation Subcommittee. <ul style="list-style-type: none"> <li>Continue Waste Management disposal of brush clearance material and curb side pickup of hazardous waste</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-02

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH-6 Develop inventories of critical facilities and infrastructure. <ul style="list-style-type: none"> <li>Assess structural vulnerability to the identified hazards and prioritize mitigation projects.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-04
MH-7 Strengthen emergency management program with maintained plans, training, and exercises. <ul style="list-style-type: none"> <li>Completion and ongoing review of our Continuity and Operations Plan</li> <li>Development of Horse Census.</li> <li>NIMS/SEMS training for staff and city council</li> <li>Disaster drills and exercises for staff.</li> <li>Emergency operations training for staff.</li> <li>Equine preparedness</li> <li>Development of Emergency Operations Plan and COOP.</li> <li>CERT Trainings for community.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-05
MH-8 Develop, enhance, and implement education programs aimed at mitigating natural hazards, and reducing the risk to citizens, public agencies, private property owners, businesses, and schools. <ul style="list-style-type: none"> <li>“Nextdoor” is a social network that enables neighbors to communicate with each other and allows the City to post important information during times of emergency.</li> <li>Launched Social Media Platforms/City Accounts- FB, ND, IG, Twitter – (as above reasoning for use).</li> <li>Annual Preparedness Expo – Large scale event promoting.</li> <li>Emergency preparedness.</li> <li>Launched Mass Notification System – Nixle/Everbridge. Alert system used for urgent notifications &amp; advisories. Ability to apply IPAWS.</li> <li>Setting up emergency webpage.</li> </ul>	-	Identified as a Current Capability as it is part of the City’s day-to-day operations	-	-
MH-9 Use updated technical knowledge and tools to inform the public of hazard potential. <ul style="list-style-type: none"> <li>Safety Element Update, website, City newsletter</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-26

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<ul style="list-style-type: none"> <li>Nixle / Everbridge – Mass Notification System.</li> <li>Social Media Platforms (FB, ND, IG, Twitter)</li> <li>E-notify (city email list).</li> </ul>				
<p>MH-10 Maintain hazard warning systems to ensure effectiveness and efficiency and increase coordination between local jurisdictions and emergency service providers.</p> <ul style="list-style-type: none"> <li>Alert LA (Sheriff’s Dept)</li> <li>Los Angeles County Regional Interoperability Community System</li> <li>South Bay Alerts – Regional Multijurisdictional Notification System.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-06
<p>MH-11 Develop an Evacuation Plan as a Function-Specific Annex to the Emergency Operations Plan.</p> <ul style="list-style-type: none"> <li>Development of EOP</li> <li>Identifying exits and entrances of Peninsula.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-26
<p>MH-12 Develop Pre-Disaster Recovery Plan including priorities for restoration of the community’s infrastructure and vital public facilities following a disaster.</p> <ul style="list-style-type: none"> <li>Development of COOP (Continuity of Operations Plan).</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-22
<p>MH-13 Adopt and implement State Building Code Chapter 34.</p> <ul style="list-style-type: none"> <li>Develop policy for government to determine what reconstruction criteria should be applied to structures damaged during a disaster. Develop additional zoning, building and reconstruction policies and requirements in the local government development and building codes for post-disaster situations (Post-Disaster Recovery Plan).</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-26
<p>MH-14 Develop and implement programs to coordinate maintenance and mitigation activities to reduce risk to public infrastructure.</p> <ul style="list-style-type: none"> <li>Safety Element Update</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-26

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<ul style="list-style-type: none"> <li>Promote emergency preparedness through public awareness campaigns (social media, annual emergency expo. And newsletters).</li> </ul>				
MH-15 Maintain information on website and cable access channels to include information specific to residents, building code information, and educational information on damage prevention.	Completed task; now maintaining.	Remove – action has been completed	-	-
MH-16 Incorporate the building and infrastructure inventory into the Mitigation Plan update. <ul style="list-style-type: none"> <li>Incorporate future building inventory revisions into future updates of the Mitigation Plan.</li> </ul>	Completed 2012.	Remove – action has been completed	-	-
MH-17 Educate City staff on federal cost-share & grant programs, and other related federal programs so the full array of assistance available is understood. <ul style="list-style-type: none"> <li>Attend Cal OES and FEMA workshops and briefings including Notice of Interests (NOI).</li> <li>LA County programs – South Bay Cities Council of Governments Programs.</li> </ul>	Ongoing Capability	Identified as a Current Capability as it is part of the City’s day-to-day operations	-	-
MH-18 Update Climate Action Plan. <ul style="list-style-type: none"> <li>To be completed through the South Bay Cities Council of Governments.</li> <li>Energy Efficiency CAP Completed in 2015; Complete CAP December 2017.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-26
MH-19 Update the Continuity of Operations Plan (COOP).	Continuity of Operations Plan completed in 2014; updated every 5 years	Identified as a Current Capability	Yes	RHE-22
MH-20 Provide updated mobile communication devices for key personnel. <ul style="list-style-type: none"> <li>Research and purchase updated equipment</li> <li>Mobile devices and computer tablets purchased for department heads, City Management, and key staff.</li> </ul>	Ongoing Capability	Identified as a Current Capability as it is part of the City’s day-to-day operations	-	-

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<p>MH-21 Solicit grant funds for emergency supplies. Solicit grant funds for emergency equipment and supplies caches including equine cache and supplies.</p> <ul style="list-style-type: none"> <li>Request for local funding submitted; Safety Element Update to address appropriate placement of supplies</li> <li>Request/solicit grant funding and use General Fund for emergency preparedness supplies and strategic caches.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-23
<p>MH-22 Coordinate with the Los Angeles County Sanitation District to ensure that an appropriate mitigation action plan and disaster response plan is in place for the Palos Verdes Landfill.</p> <ul style="list-style-type: none"> <li>Safety Element Update</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-26
<p>MH-23 Identify neighborhoods in the City that are currently on septic tank systems. Using grant funds, tie into main line sewer system. Mitigation activity to reduce risk to public health, environment, and public/private property and/or infrastructure.</p> <ul style="list-style-type: none"> <li>Assess neighborhoods that are currently on septic systems.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-07
<p>MH-24 Purchase of an electric utility cart/ATV for City Maintenance Department. The electric cart/ATV will be used for trail inspections including: weed abatement, trail maintenance, delivery of supplies and tools in the event of an emergency or disaster.</p> <ul style="list-style-type: none"> <li>Research ATV/Utility vehicles with clean energy</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-24
<p>MH-25 Install curb and gutter and/or drywell systems in areas lacking adequate drainage to prevent flooding and ensure stormwater compliance.</p> <ul style="list-style-type: none"> <li>Storm drain tie into existing infrastructure.</li> </ul>	Ongoing Capability	Identified as a Current Capability		
<p>MH-26 Stabilization work of county sewer line in canyon area of Academy Hill</p> <ul style="list-style-type: none"> <li>Feasibility Study</li> <li>Partner with LA County Public Works</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-12

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
MH-27 Continue to participate in the National Flood Insurance Program <ul style="list-style-type: none"> <li>Continue through the development review process and issuance of building permits.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-27
MH-28 Fund, Design, and Construct storm drainpipe repairs for infrastructure identified in major need of repair. Work includes relining of priority storm drains to ensure the integrity of the system for flooding purposes, and supports clean and efficient drainage to outlets <ul style="list-style-type: none"> <li>Storm drain assessment completed</li> <li>Relining of severe storm drains as first priority.</li> <li>Continue improvements on assessed storm drains.</li> <li>Continue maintenance on storm drains and outlets.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-28
EQ-1 Integrate new earthquake hazard mapping data and improve technical analysis of earthquake hazards using GIS technology. <ul style="list-style-type: none"> <li>Information to be generated through Safety Element Update and incorporated into City GIS</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-01
EQ-2 Encourage seismic strength evaluations of critical facilities and public infrastructure in the City to meet current seismic standards.	Completed evaluation in 2006.	Removed – action has been completed	-	-
EQ-3 Encourage reduction of nonstructural and structural earthquake hazards in homes, businesses, and government offices through public awareness. <ul style="list-style-type: none"> <li>City Website</li> <li>Social Media PSAs and Annual Emergency Preparedness Expo.</li> </ul>	Ongoing Capability	Identified as a Current Capability as it is part of the City's day-to-day operations	-	-
WF-1 Encourage development and dissemination of information relating to the fire hazard to help educate and assist builders & homeowners in being engaged in wildfire mitigation activities, and to help guide emergency services during response. <ul style="list-style-type: none"> <li>Materials developed and being distributed on an ongoing basis and posted on City website.</li> </ul>	Ongoing Capability	Identified as a Current Capability as it is part of the City's day-to-day operations	-	-

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<ul style="list-style-type: none"> <li>2019 Natural Disaster Town Hall for Peninsula community – Assembly Member, LA County Fire, Cal OES, and Utility company presentations.</li> <li>Development of LA County’s Ready, Set, Go campaign.</li> <li>Social Media PSAs.</li> <li>Prepared Peninsula Expo</li> <li>National Fire Prevention Week</li> </ul>				
<p>WF-2 Continue communication, coordination &amp; collaboration between wildland/urban interface property owners, local planners and fire prevention crews &amp; officials to address risks, existing mitigation measures, and federal assistance programs.</p> <ul style="list-style-type: none"> <li>Annual brush clearance coordinated by LA County Fire, LA County Ag Comm Weights and Measures, and City.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-10
<p>WF-3 Encourage implementation of wildfire mitigation activities through enforcement in a manner consistent with the goals of promoting sustainable ecological management &amp; community stability.</p> <ul style="list-style-type: none"> <li>Plan Check for fire code compliance, and Planning Department Code Enforcement and Fire Department inspections.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-09 RHE-10
<p>WF-4 Conduct Annual Fire Department Open House.</p> <ul style="list-style-type: none"> <li>Annual Fire Department Open House at local station 106 – in coordination with City Emergency Preparedness Expo</li> </ul>	Ongoing Capability	Identified as a Current Capability as it is part of the City’s day-to-day operations	-	-
<p>WF-5 Establish and implement Weed Abatement Enforcement Program.</p> <ul style="list-style-type: none"> <li>Weed abatement notices were mailed to residents annually with information.</li> <li>Properties inspected annually.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-11
<p>WF-6 Defensible home and fuel modification model project that shows building changes residents can implement.</p> <ul style="list-style-type: none"> <li>Shows landscape examples of what can be done to lower wildfire risk (defensible space) on City website.</li> </ul>	Ongoing Capability	Identified as a Current Capability as it is part of the City’s day-to-day operations	-	-

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
WF-7 Participation in the Alert Wildfire Camera program and Fire Detection Network in partnership with neighboring jurisdictions and outside research and/or utility companies.	Ongoing Capability	Identified as a Current Capability	Yes	RHE-09
WF-8 Undergrounding of electrical utilities for wildfire prevention.	Ongoing Capability	Identified as a Current Capability	Yes	RHE-08
EM-1 Improve knowledge of landslide hazard areas and understanding of vulnerability and risk to life and property in hazard-prone areas. <ul style="list-style-type: none"> <li>Safety Element Update</li> <li>Identified in GIS</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-03 RHE-04 RHE-05
EM-2 Address construction and subdivision design within steep slopes to reduce the potential adverse impacts from development. <ul style="list-style-type: none"> <li>Safety Element Update</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-26
EM-3 Regulate activities in identified potential and historical landslide areas. <ul style="list-style-type: none"> <li>Safety Element Update</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-01
EM-4 Develop public information programs regarding proper maintenance of steep slopes and surface drainage structures located on private property. <ul style="list-style-type: none"> <li>Safety Element Update</li> <li>Sandbags</li> </ul>	Ongoing Capability	Identified as a Current Capability as it is part of the City's day-to-day operations	-	-
HM-1 Continue to participate in household hazardous waste events and programs. <ul style="list-style-type: none"> <li>Publicize collection sites and events for hazardous materials monthly.</li> <li>Participation in stormwater pollution programs (i.e., Clean Bay program).</li> <li>Waste Management Services</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-16

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
<p>HM-2 Develop emergency plans and responses to hazardous material chemical releases.</p> <ul style="list-style-type: none"> <li>• Create annex in Emergency Operations Plan.</li> <li>• Create Standard Operating Procedure for emergency alerting authorities.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-04
<p>HC-1 Establish trainings in response to active shooter incidents. 2018 held a situational awareness training for public, including active shooter component.</p> <ul style="list-style-type: none"> <li>o Provide “stop the bleed” training for staff and public.</li> <li>o Purchase of tourniquet kits for public facilities.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-14
<p>HC-2 Strengthen Cyber terrorism efforts to protect computer network, operations, and financial harm.</p> <ul style="list-style-type: none"> <li>• 24/7 cyber monitoring</li> <li>• Change out of hardware devices</li> <li>• Membership and information sharing with (HSIN &amp; MISAC).</li> <li>• Cyber security expert for evaluation of vulnerabilities (internal &amp; external)</li> <li>• Future funding for trainings, malware protection, software and devices.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-15
<p>UR-1 Continue communication, coordination, and collaboration with Southern California Edison for Public Safety Power Shutoff (PSPS) program.</p> <ul style="list-style-type: none"> <li>• Held education / awareness meetings for PSPS.</li> <li>• Ongoing vegetation management, system hardening, and aerial inspections.</li> <li>• Create annex in Emergency Operations Plan.</li> <li>• Create Standard Operating Procedure for emergency alerting authorities.</li> <li>• Purchase of generators and City maintenance equipment for vegetation management.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE – 18

Action from Prior Plan	Comment if Completed	Removed; Identified as a Current Capability or No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action No. in Plan Update
UR-2 Development of White Paper for all utility companies. <ul style="list-style-type: none"> <li>Ongoing education efforts of utility company preparedness plan and customer contact updates.</li> <li>Collaborate with other Peninsula cities and all utility companies for the development of a White Paper.</li> </ul>	Ongoing Capability	Identified as a Current Capability	Yes	RHE-19

## 5.9 Hazard Mitigation Strategy

This section includes the following components of the mitigation strategy for this jurisdiction:

- Hazard Mitigation Action Plan Matrix
- Mitigation Action Prioritization
- Mitigation Action Classification and Natural Hazards Addressed

**Table 5-14 Hazard Mitigation Action Plan Matrix**

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RHE-01	Mitigate current and future land movement risks affecting public and private properties through appropriate land use planning, regulation, geotechnical review, and development practices.	Safety and Security	Both	1, 3, 4	Lead: City Community Development and Public Works Dept. & City Manager's Office	No	Moderate (\$50,001 - \$250,000)	Staff Time, General Fund	Long-Term (5 or more years)
RHE-02	Develop a multi-jurisdictional Evacuation and Mass Care Plan that incorporates and coordinates evacuation routes, shelter operations, and communication procedures across the City and partner agencies.	Safety and Security; Communications; Transportation	Both	1, 2, 3, 5	Lead: City Manager's Office and PVP Cities  Support: LA County Fire and Sheriff's Depts.	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Moderate (\$50,001 - \$250,000)	FEMA HMGP and HMGP Post-Fire; Staff Time; General Fund Budget	Short-Term (less than 5 years)
RHE-03	Seek funding to support hazard mitigation goals and strategies by identifying and pursuing funding opportunities to develop and implement local mitigation activities identified in the City's mitigation strategy.	All	Both	All	Lead: City Manager's Office	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	FEMA HMGP, FMA, HMGP Post-Fire, HHPD; Staff Time; CIP Budget	Short-Term (less than 5 years)
RHE-04	Develop inventories of critical facilities, community lifelines, and infrastructure - Identifying infrastructure and critical facility vulnerabilities and useful lifespan for maintenance, improvements and/or replacement.	Safety and Security; Health and Medical; Energy; Communications; Transportation; Hazardous Materials; Water Systems	Both	1, 3, 4, 5	Lead: Public Works / Community Development Department  Support: Building and Safety	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Low to Very High	FEMA HMGP, FMA, HMGP Post-Fire, HHPD; Staff Time; CIP Budget	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RHE-05	Strengthen ongoing emergency and disaster planning and training, with a focus on natural hazards that can impact the City, to improve preparedness, response readiness, and community resilience.	All	Both	All	Lead: City Manager's Office  Support: LA County OEM, LA County Fire, LA County LASD, LA County Animal Care and Control	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Moderate (\$50,001 - \$250,000)	FEMA HMGP; Staff Time; General Fund	Short-Term (less than 5 years)
RHE-06	Maintain hazard and alert warning systems (Alert South Bay, Genasys, PVP Wildfire Cameras, Area G Radio System) and seek other technological advances to support emergency planning efforts.	Safety and Security; Communications	Both	1, 2, 4	Lead: City Manager's Office  Support: LA County OEM, LA County Fire, LA County Sheriff Depts.	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Low (\$0-\$50,000)	FEMA HMGP Post-Fire; Staff Time; General Fund	Short-Term (less than 5 years)
RHE-07	Identify neighborhoods that are on a septic tank system and identify programs, community-led efforts, and potential grant funding opportunities to connect these neighborhoods to the municipal sewer system. This will help in reducing vulnerability to natural hazards (flood, earthquake, landslides) that can cause system failures during these events.	Health and Medical; Hazardous Materials; Water Systems	Existing	5	Lead: Public Works Department  Support: LA County Sewer/Sanitation Departments, Residents	No	High (\$250,001 - \$1 million)	CIP Budget; Property Owners	Long-Term (5 years or more)
RHE-08	Underground electrical utilities and/or harden electrical infrastructure, in partnership with the utility providers, to reduce vulnerability to natural hazards that lead to power outages and protect critical infrastructure in the City.	Energy	Both	1, 2, 3	Lead: Public Works and City Manager's Office  Support: Electrical Public Utility Company – SCE	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Very High (more than \$1 million)	FEMA HMGP; Staff Time; CIP Budget	Long-Term (5 years or more)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RHE-09	Maintain and expand participation in the regional wildfire detection camera program with a focus on mitigating fast-spreading wildfires through early detection. Incorporate the use of AI wildfire camera program established by the Palos Verdes Peninsula cities.	Safety and Security	Both	3, 4	Lead: City Manager's Office, Public Works Department  Support: LA County Fire Dept. and LA County Weights and Measures – weed abatement division	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	High (\$250,001 - \$1 million)	FEMA HMGP Post-Fire; CIP Budget	Short-Term (less than 5 years)
RHE-10	Conduct city fuel reduction projects (brush clearance, thinning, mowing) along evacuation routes, utility corridors, and wildland -urban interface areas.	Safety and Security	Both	All	Lead: City Manager's Office, Public Works Department  Support: LA County Fire Dept. and LA County Weights and Measures – weed abatement division	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	FEMA HMGP Post-Fire; CIP Budget	Short-Term (less than 5 years)
RHE-11	Maintain building and safety code requirements related to the Los Angeles County Fire Code. Regardless of location in the City, all structures and buildings are subject to codes required under the Very High Fire Hazard Severity Zone.	Safety and Security	Both	1, 4	Lead: City Community Development Department  Support: City Public Works, City Manager's Office, LA County Fire Dept. CAL Fire	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	FEMA HMGP Post-Fire; CIP Budget	Short-Term (less than 5 years)
RHE-12	Stabilization work of county sewer line in canyon area of Academy Hill to reduce the potential for sewage spills in the Canyon area.	Hazardous Materials; Water Systems	Existing	5	Lead: City Public Works Department  Support: County Public Works Department / City	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Moderate to High (up to \$1 million)	Staff Time; CIP Budget	Long-Term (5 or more years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
					Community Development Department				
RHE-13	Seek grant funding to retrofit / seismically strengthen critical facilities and community lifelines in the City.	Safety and Security	Existing	1	Lead: City Manager's Office / City Administrative Services Department  Support: City Community Development Department	No	Low to Moderate (up to \$250,000)	FEMA HMGP; Staff Time; CIP Budget	Long-Term (5 or more years)
RHE-14	Continue active shooter/mass casualty event trainings and for city staff and public.	Safety and Security; Health and Medical	N/A	2, 3	Lead: City Manager's Office  Support: LA County Sheriff and Fire Departments	No	Low (less than \$50,000)	Staff Time; General Fund	Short-Term (less than 5 years)
RHE-15	Strengthen cyber terrorism efforts to protect computer network, operations, and financial harm.	Safety and Security	Both	3, 4	Lead: Administrative Services Department  Support: City Manager's Office, CISA (Homeland Security)	No	Low (less than \$50,000)	Staff Time; CISA – Homeland Security Grants; General Fund Budget	Short-Term (less than 5 years)
RHE-16	Continue to participate and promote household hazardous waste events and programs.	Health and Medical; Hazardous Materials	N/A	2, 3, 5	Lead: City Public Works Department  Support: City Manager's Office, County Public Works Dept., City contracted waste hauler	No	Low (less than \$50,000)	Staff Time; General Fund; Other grant support from state or county agencies (Cal Recycle)	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RHE-17	Continue to seek grant opportunities and funding related to land movement issues.	Safety and Security	Both	1, 2, 3, 4	Lead: City Community Development Department, City Manager's Office  Support: Cal OES – FEMA, County Office of Emergency Management	No	Very High (\$1 million+)	FEMA HMGP; Staff Time; CIP Budget; Cal OES	Long-Term (5 or more years)
RHE-18	Conduct an updated equine census in the City and continue equine emergency / disaster preparedness training for community members.	Safety and Security	N/A	2, 3	Lead: City Manager's Office  Support: LA County Animal Care and Control, LA County Sheriff and Fire Department, PVP Cities	No	Low (less than \$50,000)	Staff Time; General Fund	Short-Term (less than 5 years)
RHE-19	Maintain and implement Palos Verdes Peninsula Utility Whitepaper document.	All	Both	All	Lead: City Manager's Office  Support: City Public Works Department, PVP Cities	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	Staff Time; General Fund; FEMA HMGP	Short-Term (less than 5 years)
RHE-20	Seek grant opportunities and programs that support grid resilience and power redundancy (i.e., backup generators and solar options) for City infrastructure and community lifelines.	Energy; Communications	Both	3, 4	Lead: City Community Development / Public Works Department, City Manager's Office  Support: Public utility companies	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Moderate (\$50,001 - \$250,000)	FEMA HMGP; FEMA HMGP Post-Fire; Staff Time; CIP Budget	Long-Term (5 years or more)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
RHE-21	Hold annual preparedness event with Palos Verdes Peninsula regional partners to promote disaster and emergency readiness and preparedness.	All	N/A	2, 3	Lead: City Manager's Office  Support: Palos Verdes Peninsula cities, public safety partners (law/fire), public utility companies, local non-profit organizations.	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Low (less than \$50,000)	Staff Time; General Fund; Grants awarded through utility partnerships	Short to Long-Term1
RHE-22	Update City Continuity of Operations Plan (COOP).	Safety and Security	Both	4	Lead: City Manager's Office	No	Low (less than \$50,000)	Staff Time; General Fund;	Short-Term (less than 5 years)
RHE-23	Solicit grant funding for emergency supplies and equipment; community caches and equine caches.	Safety and Security; Food, Hydration, Shelter	New	2, 3	Lead: City Manager's Office	No	Low (less than \$50,000)	FEMA HMGP Post-Fire; Staff Time; General Fund;	Short-Term (less than 5 years)
RHE-24	Solicit grant funding for the purchase of an off-road vehicle / utility cart for trail use for inspections related to weed abatement, trail maintenance, and use of delivery of supplies/tools in the event of an emergency or disaster.	Safety and Security; Food, Hydration, Shelter; Transportation	New	2, 3	Lead: City Manager's Office  Support: City Community Services Department	No	Low (less than \$50,000)	FEMA HMGP Post-Fire; Staff Time; General Fund;	Short-Term (less than 5 years)
RHE-25	Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are in high- or medium-risk hazard areas.	Food, hydration, shelter; Energy; Communications; Transportation	Existing	1, 2	Lead: City Manager's Office  Support: City Community Services Department	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Very High (\$1,000,000 and above)	FEMA HMGP and FEMA FMA, Staff Time, CIP Budget	Long-Term (5 years or more)
RHE-26	Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land	Safety and Security; Communications; Transportation; and	Both	4	Lead: City Manager's Office	Yes – older adults or seniors; disabled or mobility impaired;	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
	use decisions in the community, including: <ul style="list-style-type: none"> <li>Codes and Ordinances</li> <li>General Plan / Safety Plan Element</li> <li>EOP</li> <li>Climate Action Plan</li> </ul>				Support: City Community Services Department	isolated or limited access			
RHE-27	Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements: <ul style="list-style-type: none"> <li>Evaluate the current floodplain ordinance to determine if updates are needed</li> <li>Upon FEMA flood map revisions, update and adopt the City's floodplain ordinance</li> </ul>	All located in the floodplain	Both	1, 2, 4	Lead: City Manager's Office  Support: City Community Services Department	Yes – older adults or seniors; disabled or mobility impaired; isolated or limited access	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)
RHE-28	Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.	N/A	N/A	2, 4	Lead: City Manager's Office  Support: City Community Services Department	No	Low (\$0-\$50,000)	Staff Time, General Fund	Short-Term (less than 5 years)

Table 5-15 Mitigation Action Prioritization

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
RHE-01	3	3	3	3	0	0	1	3	1	1	1	3	0	3	1	26	Medium
RHE-02	3	1	3	3	3	0	1	1	0	3	1	3	3	3	3	31	High
RHE-03	1	1	3	3	3	3	3	1	3	3	3	3	3	3	3	39	High
RHE-04	3	3	3	3	1	0	3	1	3	3	3	3	3	3	3	38	High
RHE-05	3	3	3	3	3	0	1	1	1	3	3	3	3	3	3	36	High
RHE-06	3	3	3	3	3	1	1	1	1	3	3	3	3	3	3	37	High
RHE-07	0	1	1	1	1	0	1	1	1	0	1	3	1	3	3	18	Medium
RHE-08	3	3	1	1	1	0	1	1	3	3	1	3	0	1	3	25	Medium
RHE-09	3	3	3	3	3	3	3	0	3	1	3	3	3	3	3	40	High
RHE-10	3	3	3	3	3	1	3	3	3	0	3	0	3	3	3	37	High
RHE-11	3	3	3	3	3	1	1	1	1	0	3	1	3	3	1	30	High
RHE-12	0	0	1	1	1	0	1	1	0	0	1	1	0	3	3	13	Low
RHE-13	3	3	3	1	3	0	1	0	0	0	1	0	0	3	3	21	Medium
RHE-14	3	0	3	3	3	1	1	0	0	0	3	1	3	3	3	27	Medium
RHE-15	0	0	3	3	3	1	1	0	0	0	3	0	3	3	3	23	Medium
RHE-16	1	1	3	3	3	3	3	3	0	0	3	3	3	3	3	35	High
RHE-17	3	3	3	1	1	0	0	1	1	0	1	0	0	3	3	20	Medium
RHE-18	3	0	3	3	3	3	1	0	0	0	3	1	3	3	3	29	Medium
RHE-19	3	1	3	3	0	1	1	3	1	3	3	3	3	3	3	34	High
RHE-20	3	1	3	1	3	1	1	1	1	0	3	3	0	3	3	27	Medium
RHE-21	1	1	3	3	3	3	3	0	0	3	3	3	3	3	3	35	High
RHE-22	1	0	3	3	3	0	1	0	0	1	3	3	3	3	3	27	Medium
RHE-23	3	0	1	1	3	0	1	0	0	0	3	3	3	3	3	24	Medium

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
RHE-24	1	1	3	3	3	0	1	0	0	1	3	3	3	3	3	28	Medium
RHE-25	3	3	3	3	3	1	3	1	3	3	1	1	1	1	1	31	High
RHE-26	3	3	3	3	3	1	0	1	1	3	3	1	3	3	1	32	High
RHE-27	3	3	3	3	3	1	0	1	1	3	3	1	3	1	1	30	Medium
RHE-28	3	3	3	3	3	1	0	1	1	3	3	3	3	1	1	32	High

Note: 31 or more = High Priority  
 15 to 30 = Medium Priority  
 0 to 14 = Low Priority

Table 5-16 Mitigation Action Classification and Natural Hazards Addressed

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RHE-01	■	■				■				■					
RHE-02			■			■		■	■	■			■		■
RHE-03	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
RHE-04	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
RHE-05	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
RHE-06	■		■			■	■	■	■	■	■	■	■	■	■
RHE-07		■	■	■		■		■	■	■					

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
RHE-08		■			■	■		■	■	■			■		■
RHE-09	■	■	■		■	■									■
RHE-10	■	■		■	■	■									■
RHE-11	■	■	■			■									■
RHE-12	■	■				■		■							
RHE-13		■						■							
RHE-14	■					■									
RHE-15	■					■									
RHE-16	■		■			■									
RHE-17	■	■				■				■					
RHE-18	■					■		■	■	■			■		■
RHE-19	■					■	■	■	■	■	■	■	■	■	■
RHE-20		■				■		■	■	■		■	■		■
RHE-21			■		■	■	■	■	■	■	■	■	■	■	■
RHE-22	■					■	■	■	■	■	■	■	■	■	■
RHE-23	■	■				■		■	■	■			■		■
RHE-24	■					■		■	■	■			■		■
RHE-25	■	■	■					■							
RHE-26	■						■	■	■	■	■	■	■	■	■
RHE-27	■							■							
RHE-28	■					■	■	■	■	■	■	■	■	■	■

## 5.10 Public Outreach

**Table 5-17 Public Outreach**

Local Outreach Activity	Date	Number of People Involved
Social Media Outreach (Facebook, Instagram, X)	September 12, 2025; September 17, 2025; November 3, 2025; January 8, 2026; January 15, 2026	Approximately 2,600 accounts follow RHE social media platforms
Website post – On the City’s <a href="#">Emergency Preparedness webpage</a> , the City posted about the 2026 update and provided a link to the survey.	September 12, 2025 Static / Dedicated Webpage	Hundreds of people view the City’s website
City E-Newsletters	September 24, 2025; September 16, 2025; October 15, 2025; October 29, 2025; December 2, 2025, January 14, 2025	Hundreds of people receive the newsletter
Regional PVP Webpage: PVPready.gov MJHMP dedicated webpage	Static / Dedicated Webpage	Unsure
City Celebration Event – Informational Booth	September 13, 2025	Unsure
Prepared Peninsula Expo Event MJHMP Informational Booth / Direct Outreach/Engagement	October 26, 2025	Several hundred
Community Stakeholder Meetings	June 11, 2025; July 8, 2025; September 10, 2025; November 20, 2025; February 11, 2025	Varies



Figure 5-3 City Facebook Post from January 15, 2026

Source: City of Rolling Hills Estates 2026

## 5.11 Information Sources Used for This Annex

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

- **City Website.** The City website was used to support the development and compilation of the jurisdictional annex.
- **City Codes.** The City code website was used to help identify and review the capabilities of the City.
- **Plans.** Available plans on the City website were reviewed to help prepare the capabilities portion of the annex and identified integration opportunities and potential mitigation actions.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit.** The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

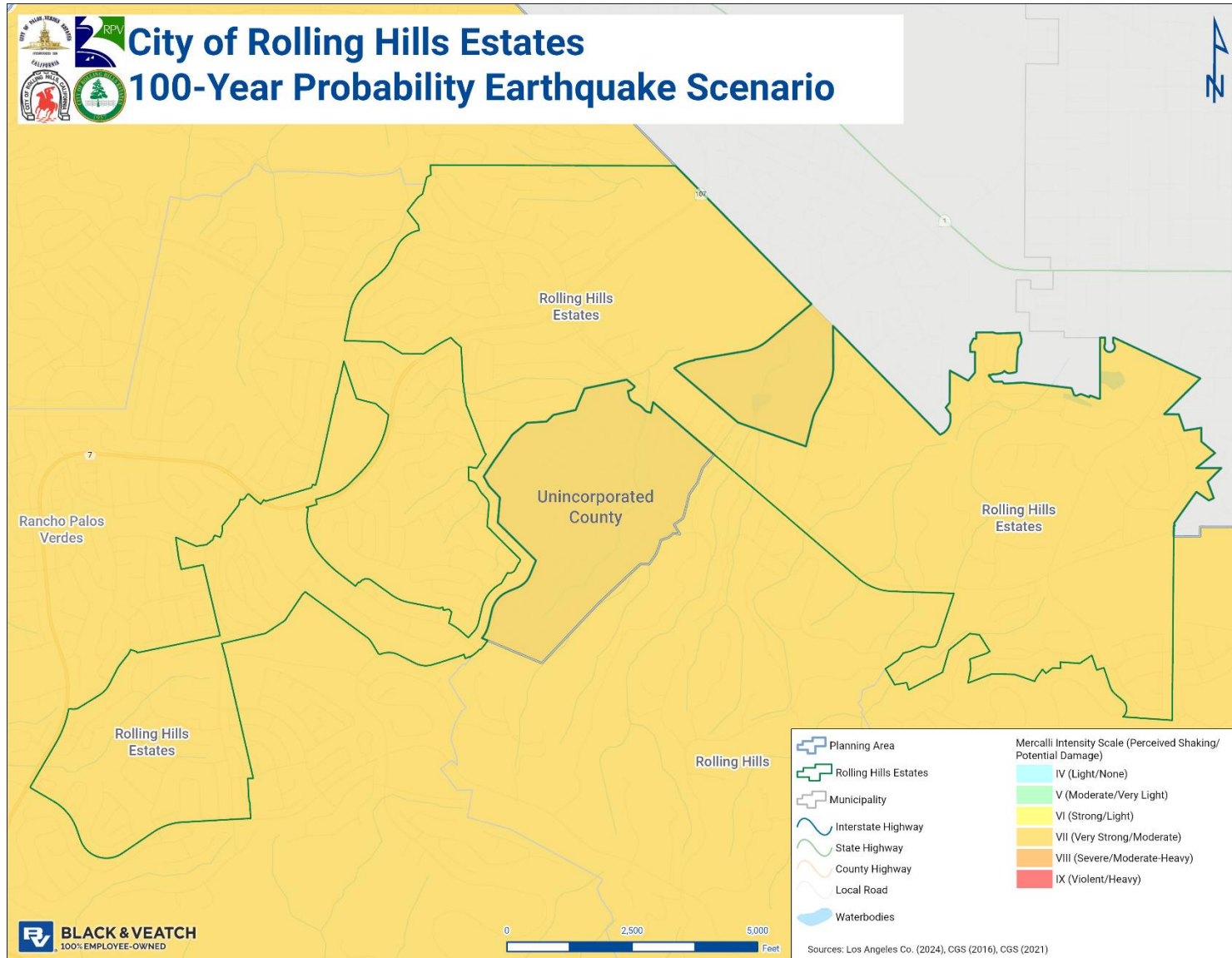


Figure 5-4 Earthquake Hazard Map – 100-Year Probability Earthquake Scenario

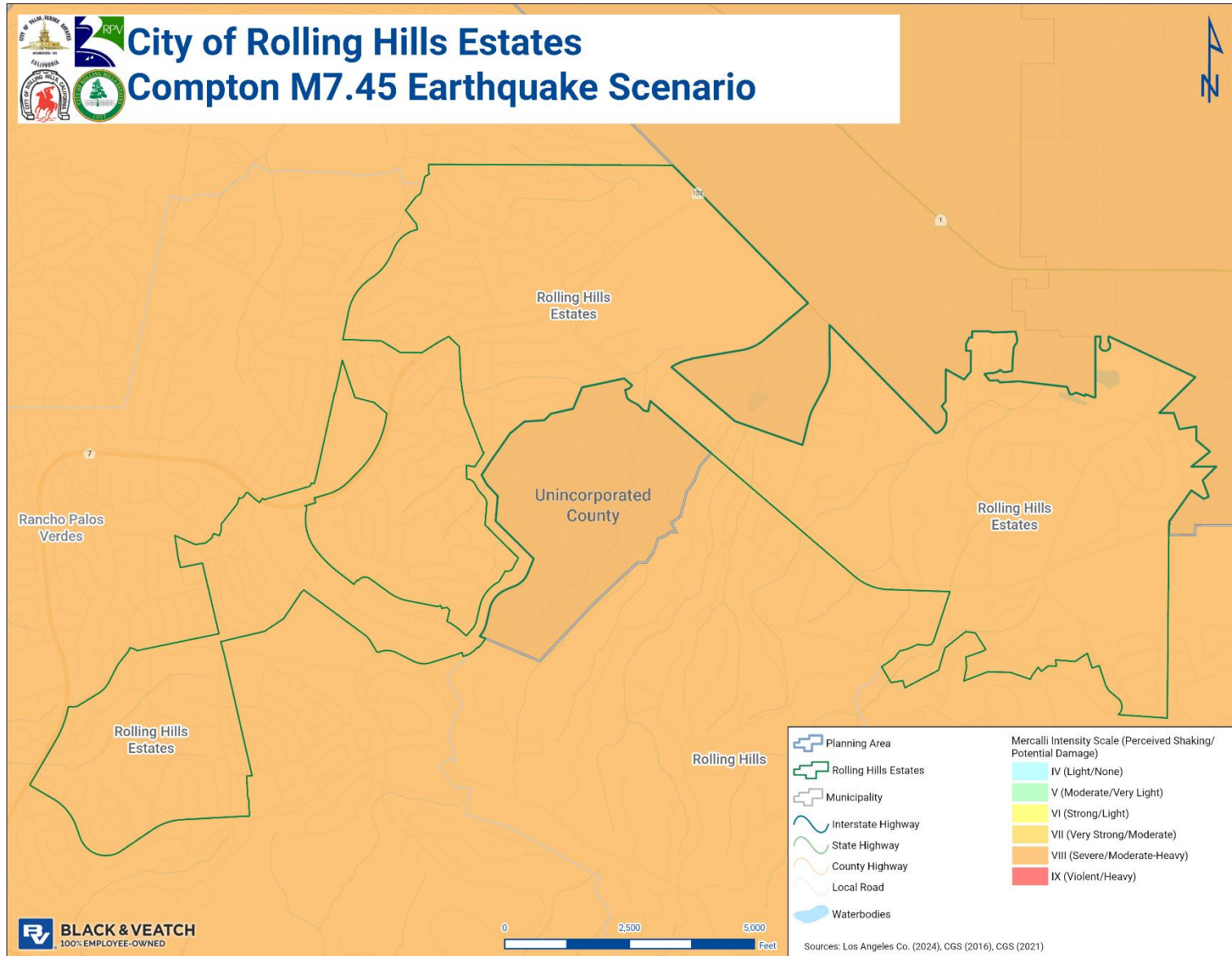


Figure 5-5 Earthquake Hazard Map – Compton M7.45 Earthquake Scenario

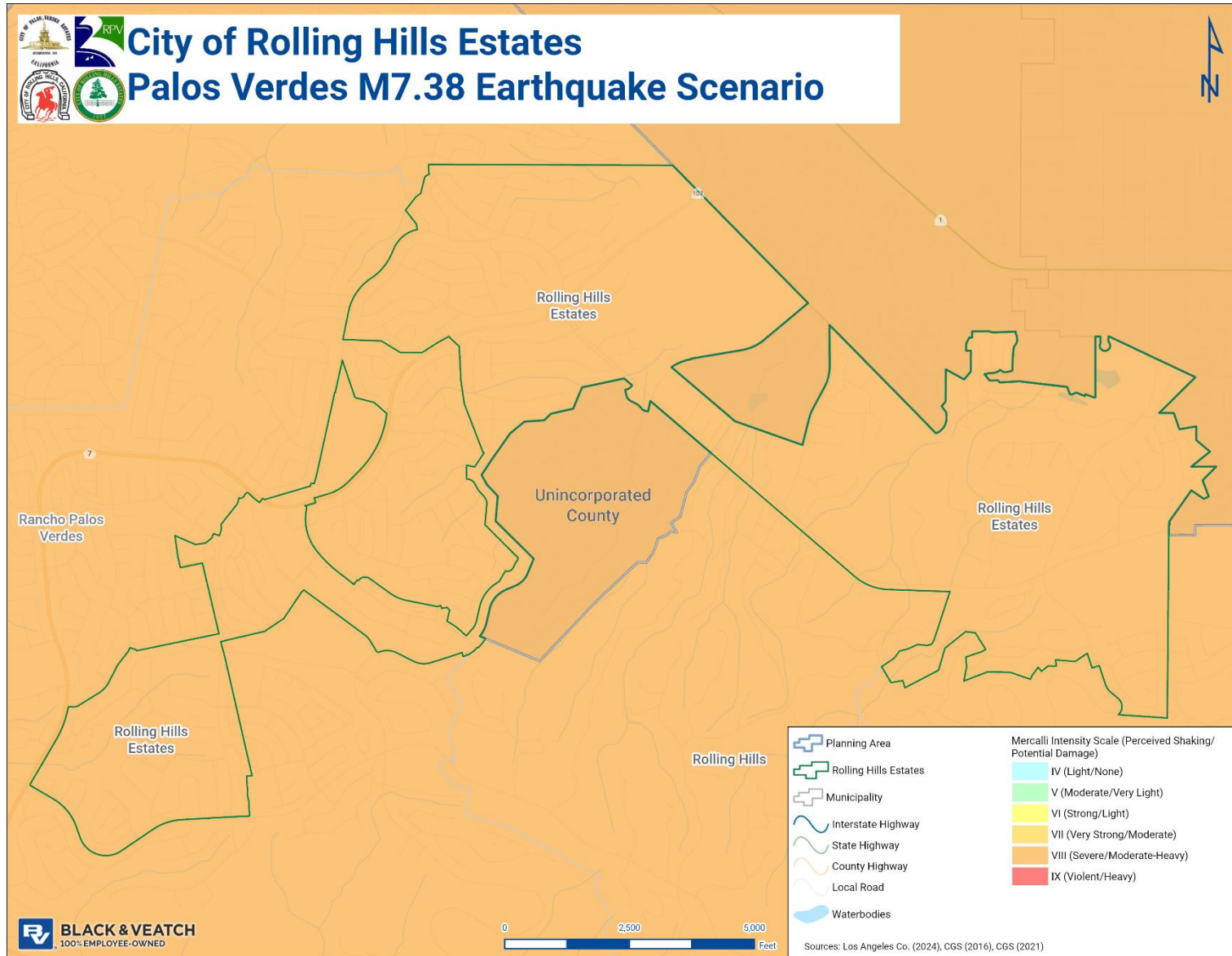


Figure 5-6 Earthquake Hazard Map – Palos Verdes M7.38 Earthquake Scenario

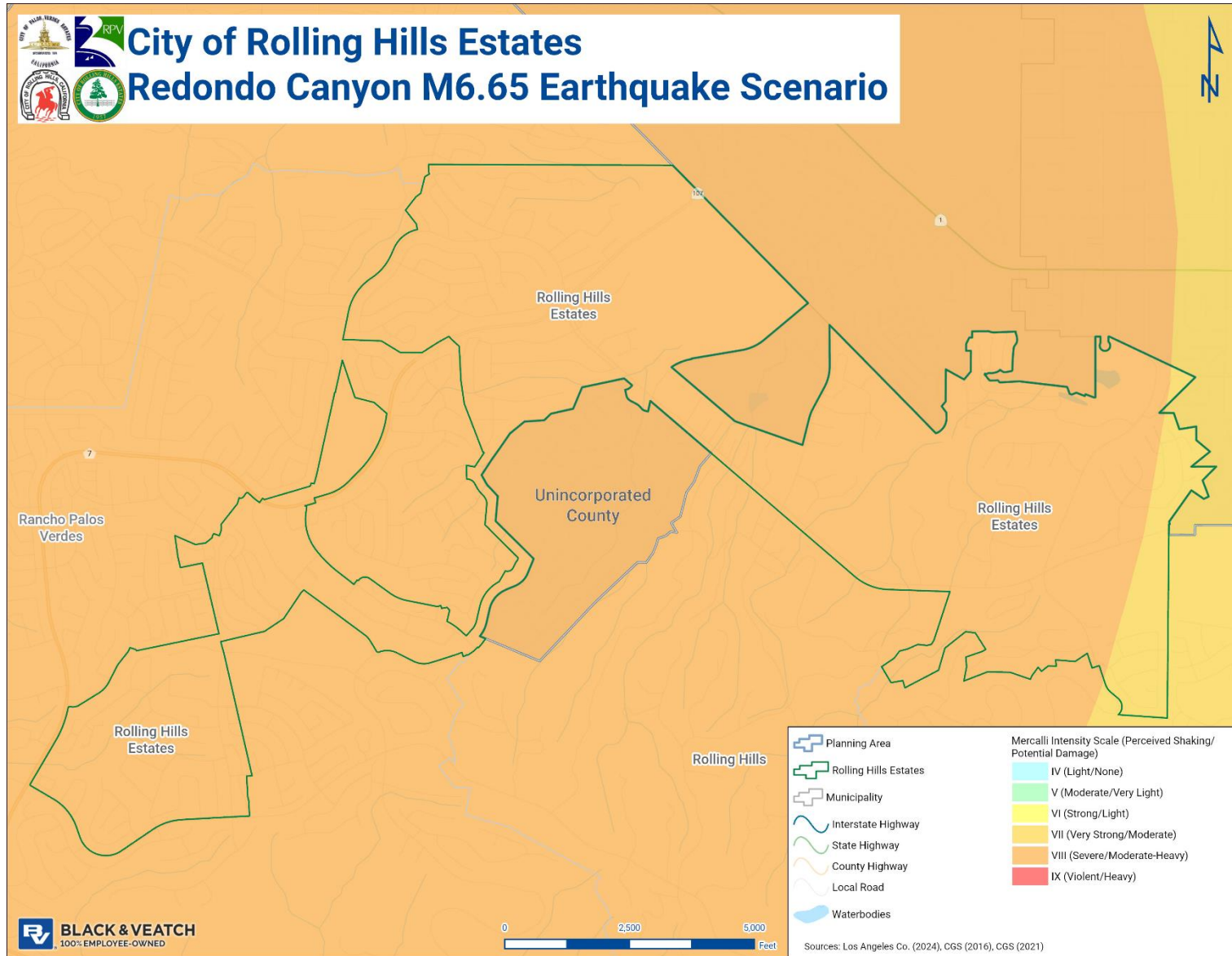


Figure 5-7 Earthquake Hazard Map – Redondo Canyon M6.65 Earthquake Scenario

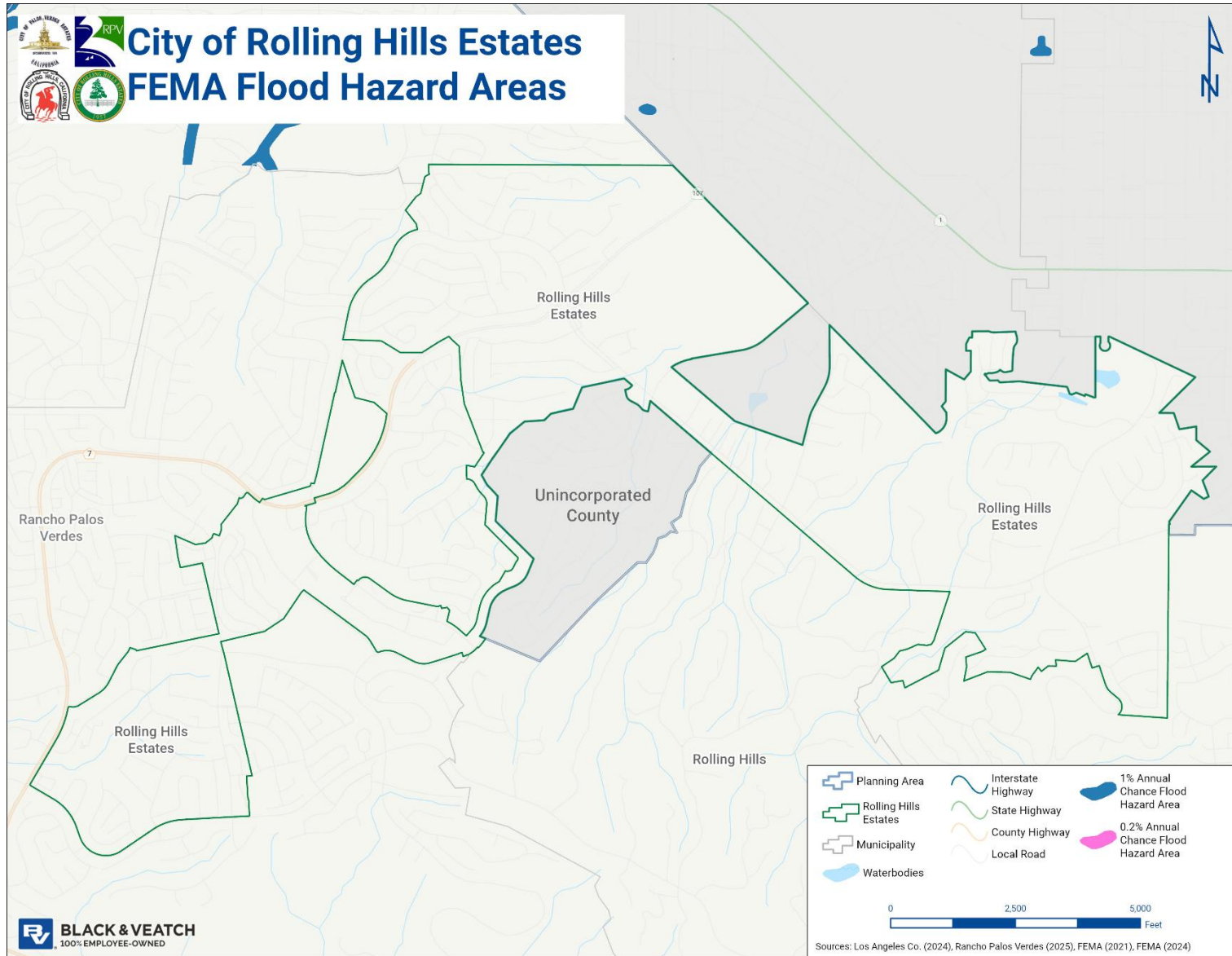


Figure 5-8 Flood Hazard Map – FEMA Flood Hazard Areas

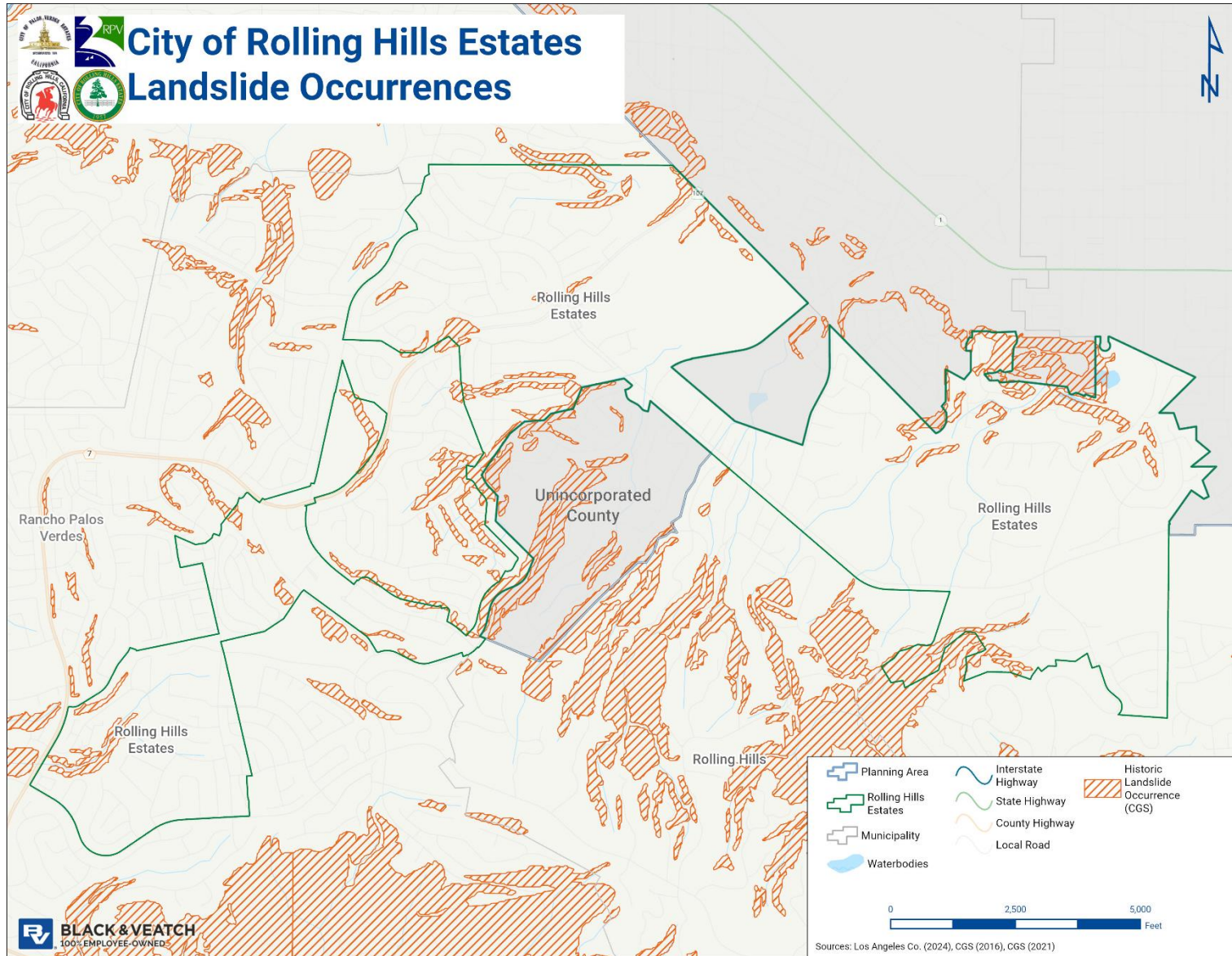


Figure 5-9 Landslide Hazard Map – Landslide Occurrences

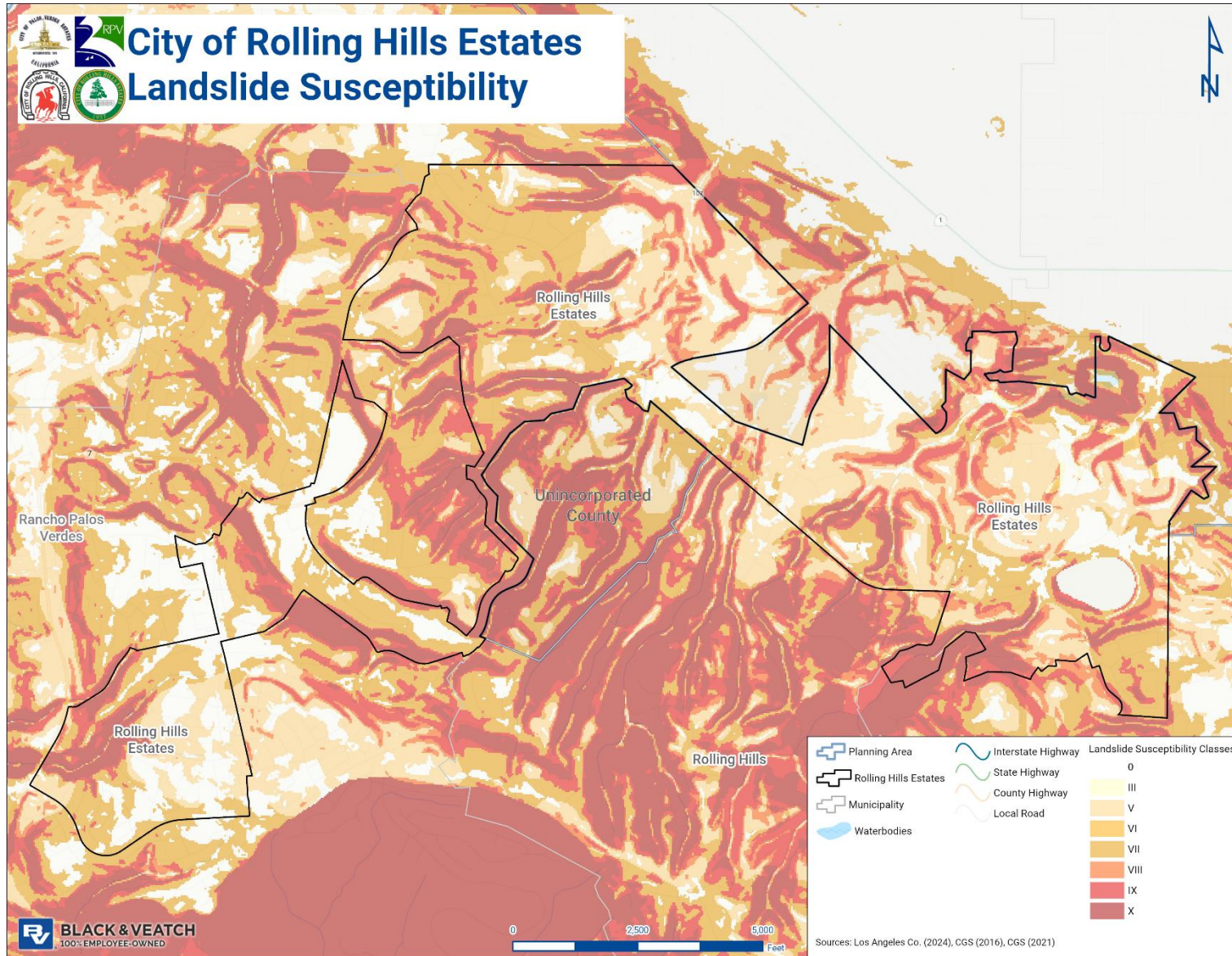


Figure 5-10 Landslide Hazard Map – Landslide Susceptibility

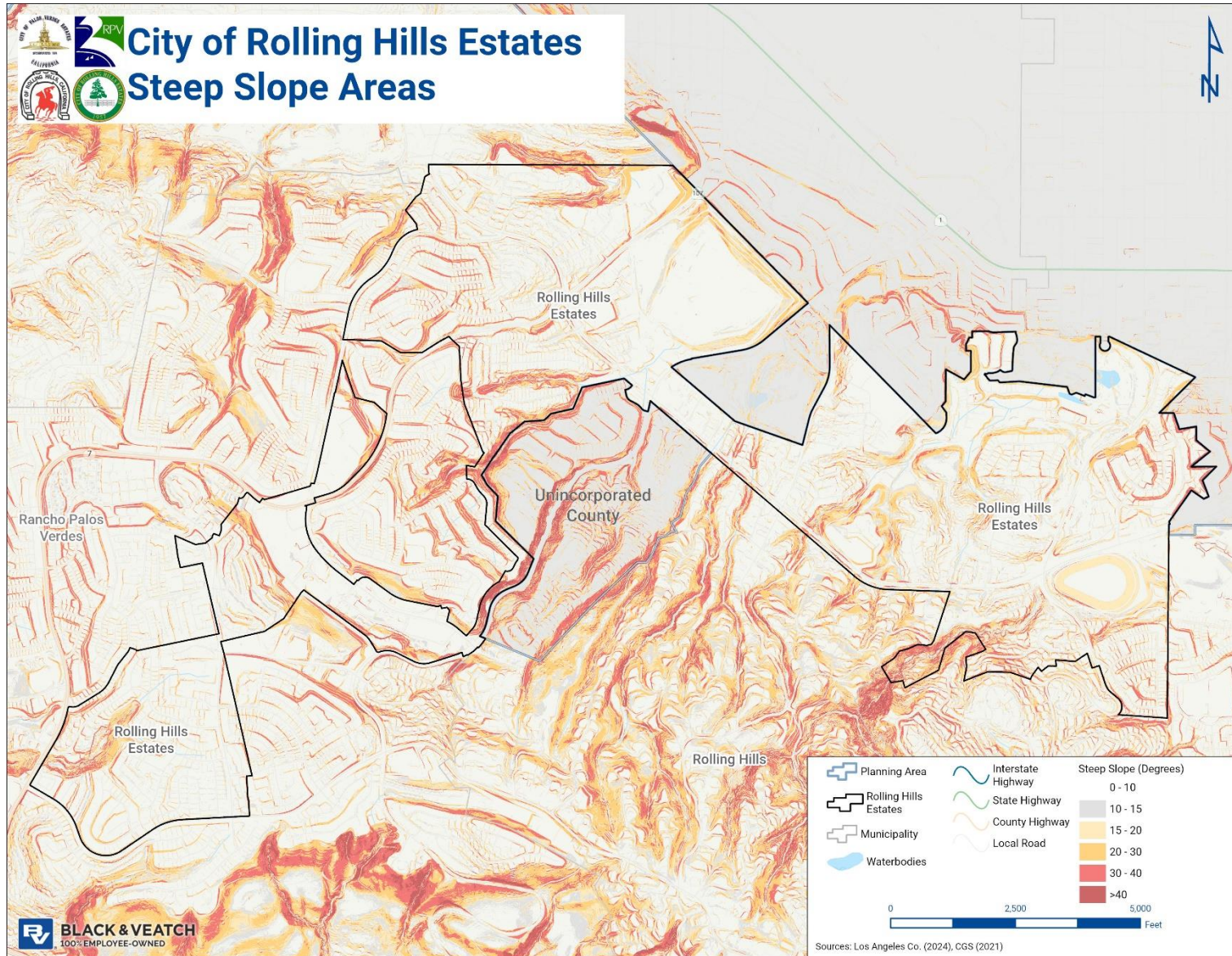


Figure 5-11 Landslide Hazard Map – Steep Slope Areas

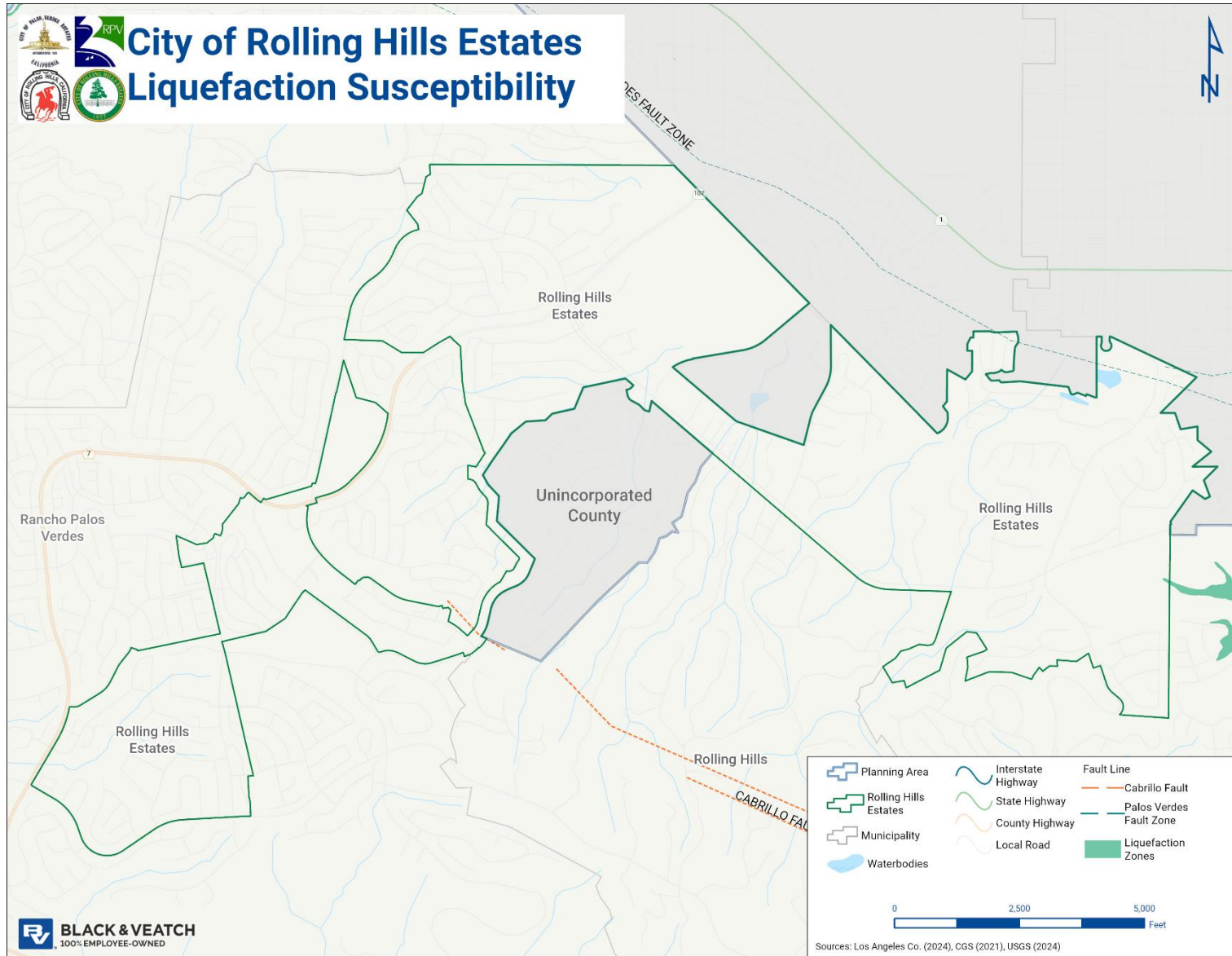


Figure 5-12 Liquefaction Hazard Map – Liquefaction Susceptibility

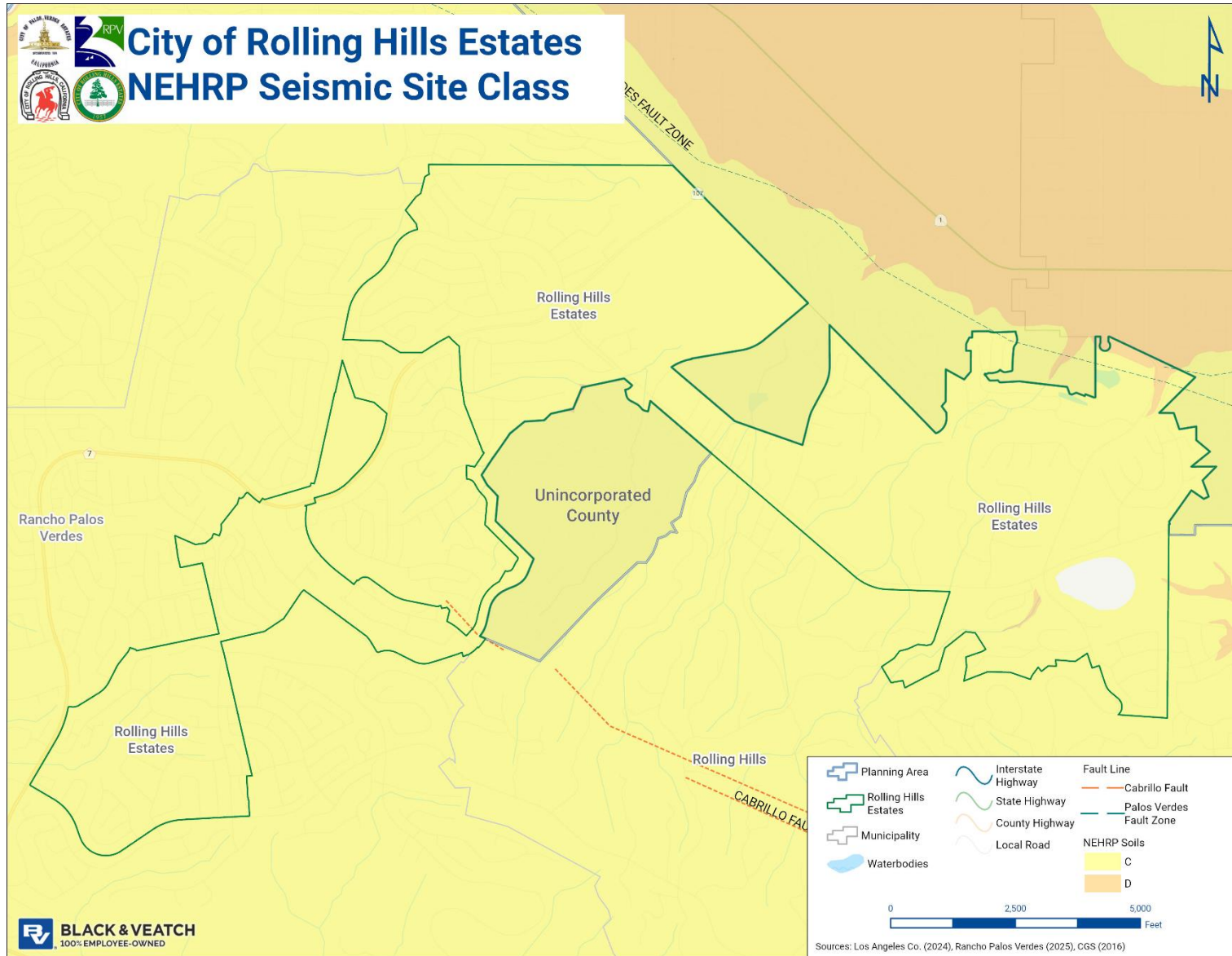


Figure 5-13 Liquefaction Hazard Map – NEHRP Seismic Site Class

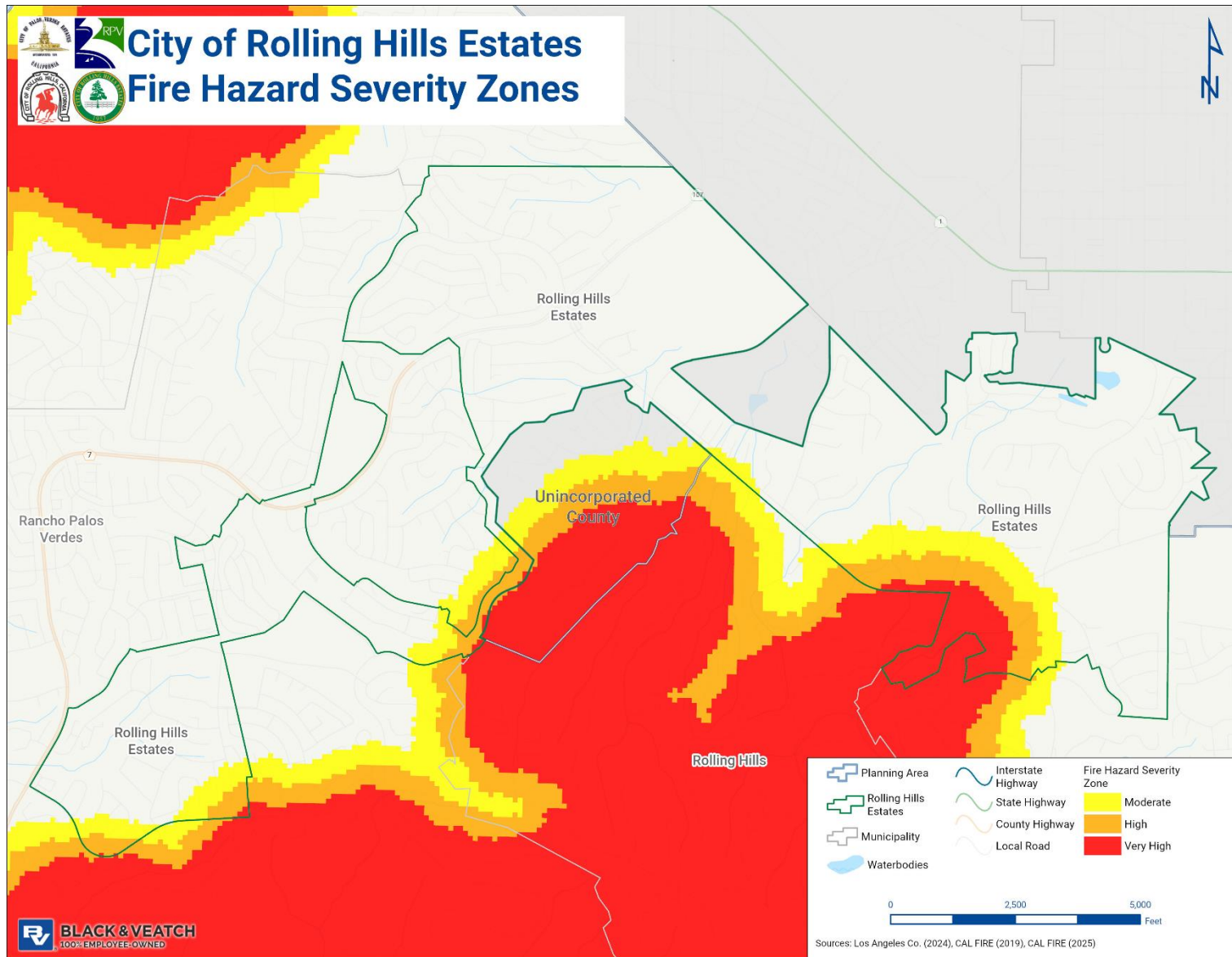


Figure 5-14 Wildfire Hazard Map – Fire Hazard Severity Zones

## 6. ABALONE COVE LANDSLIDE ABATEMENT DISTRICT



**Figure 6-1** Abalone Cove Landslide Abatement District Drill Rig Arrival

Source: (Abalone Cove Landslide Abatement District 2022)

### 6.1 Local Hazard Mitigation Planning Team

**Table 6-1** Local Planning Team

	Primary Point of Contact	Alternate Point of Contact
Name and Title:	Gordon Leon, Chair	Jim Knight, Board Member
Address:	63 Narcissa Drive Rancho Palos Verdes, CA 90275	5 Cinnamon Lane Rancho Palos Verdes CA 90275
Phone Number:	(310) 463-9240	(310) 714-8622
Email:	Gordon.leon@gmail.com	Knightjim33@gmail.com
<b>Contributors:</b>		
Name and Title: Method of Participation:	Gordon Leon, Chair of Abalone Cove Landslide Abatement District Input from ACLAD records, attended and participated in Planning Committee meetings	
Name and Title: Method of Participation:	Jim Knight, Board Member of Abalone Cove Landslide Abatement District Input from ACLAD records, attended and participated in Planning Committee meetings	
Name and Title: Method of Participation:	Coleen Miller, Clerk Assisted with District Board meetings to present the plan	

## 6.2 Jurisdictional Profile

### 6.2.1 Overview

The Abalone Cove Landslide Abatement District (ACLAD) is a “geologic hazard abatement district” created by the City of Rancho Palos Verdes (RPV) and residences of the Abalone Cove community under special legislation passed by the California Legislature in 1980 for the “purposes of prevention, mitigation, abatement or control” of the Abalone Cove landslide. It was the first geohazard abatement district (GHAD) created in the state. The District is governed by five elected Directors, which serve for a term of 4 years. Under the California Improvement Act of 1911, the District may assess properties benefiting from the mitigation or abatement efforts for the cost of the improvements (Abalone Cove Landslide Abatement District 2022).

ACLAD is broadly responsible for abatement efforts to prevent movement of the Abalone Cove landslide. The most effective measurement is the dewatering wells and currently, the district operates and maintains the dewatering wells. These include wells drilled during the formation of ACLAD by the interim homeowner’s association, wells drilled under the authority of ACLAD, funded by issuance of a bond, and wells drilled by the City. ACLAD also monitors the groundwater elevation, including periodic re-drilling. Annually, ACLAD monitors the Global Positioning System (GPS) stations measurements for evidence of possible slide movement and works with the City of Rancho Palos Verdes to maintain the storm drain culvert extending beneath Palos Verdes Drive South. Due to the dewatering wells, the groundwater table within and immediately upslope of the landslide has been lowered significantly. This can halt or slow the ground movement except during periods of exceptional rainfall and has increased the stability of the Abalone Cove Landslide. The District conducts or contracts investigations related to the geology, rainwater discharge, and groundwater flow in the area to aid in evaluating and developing abatement efforts (Abalone Cove Landslide Abatement District 2022).

### 6.2.2 Assets

Table 6-2 summarizes the critical assets of the district and their value.

**Table 6-2 Abalone Cove Landslide Abatement District Assets**

Asset	Value
<b>Property</b>	
30 Dewatering wells	\$3,750,000
3,000 Ft. of Drainage lines	\$300,000
<b>Critical Infrastructure and Equipment</b>	
Monitoring wells, camera, sensors	\$25,000
30 Generators	\$27,000
<b>Critical Facilities</b>	
No facilities owned by ACLAD-some equipment stored at personal property	
<b>TOTAL:</b>	<b>\$4,102,000</b>

## 6.3 Capability Assessment

### 6.3.1 Planning and Regulatory Capabilities

Jurisdictions develop plans and programs and implement rules and regulations to protect and serve residents. When effectively prepared and administered, these plans, programs and regulations can support the implementation of mitigation actions.

Note that special-purpose districts do not have the regulatory authority to adopt or enforce building codes as part of their regulatory capabilities, but any repair or replacement of assets will be governed by codes and standards applied by the municipality where ACLAD is located (City of Rancho Palos Verdes), including the current California Building Code. See Section 3.4.1 in this Volume for other codes and regulations enforced by the City that may apply to development of assets owned by the Abalone Cove Landslide Abatement District.

Additionally, special-purpose districts are not eligible to participate in the NFIP. However, any new assets or infrastructure developed by ACLAD are in compliance with the floodplain regulations established by the City of Rancho Palos Verdes.

The following existing codes, ordinances, policies, programs, or plans are applicable to this hazard mitigation plan:

- Rancho Palos Verdes Ordinance No. 108 – requires the approval of environmental assessments, environmental impact reports, conditional use permits, and tentative maps prior to the issuing of permits in areas located within mapped landslide areas.
- The Creepy (Slow Moving) Landslides of the Portuguese Bend Area – 2014

### *Opportunities to Expand Planning and Regulatory Capabilities*

The District has developed two mitigation actions that will work to expand planning and regulatory capabilities:

- Mitigation Action ACLAD-05: Expand on current collaboration and coordination with Rancho Palos Verdes on future plans and projects, including mitigation measures related to landslides.
- Mitigation Action ACLAD-06: Integrate the hazard mitigation plan into other plans, programs, and projects that will help in reducing the impacts of future hazards, including landslides.

### 6.3.2 Fiscal Capabilities

Assessing a jurisdiction's fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant funding eligibility, and local jurisdictional authority to generate internal financial capability, such as through impact fees. An assessment of fiscal capabilities is presented in Table 6-3.

**Table 6-3 Fiscal Capabilities**

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
<i>If yes, specify:</i>	<i>Annual District assessment fee for mitigation measures based upon adopted budget</i>
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
State-Sponsored Grant Programs	No
Development Impact Fees for Homebuyers or Developers	No
Federal Grant Programs	No
Other City of RPV loan	Yes
<i>If yes, specify:</i>	<i>\$1.6 million loan to be repaid by ACLAD to the City of RPV with interest</i>

**Opportunities to Expand Fiscal Capabilities**

The District is committed to continuing to identify new and evolving fiscal capabilities that could support mitigation.

**6.3.3 Administrative and Technical Capabilities**

Planning, regulatory, and fiscal capabilities provide the backbone for successfully developing a mitigation strategy; however, without the appropriate personnel, the strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard mitigation. These resources include technical experts, such as engineers and scientists, as well as personnel with capabilities that may be found in multiple departments, such as grant writers. An assessment of administrative and technical capabilities is presented in Table 6-4.

**Table 6-4 Administrative and Technical Capabilities**

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	Contractors with expertise in construction practices and RPV City Public Works
Planners or engineers with an understanding of natural hazards	Yes	Local contractors that understand landslide mitigation and City of RPV Public Works. ACLAD and City geologists.
Staff with training in benefit-cost analysis	No	-
Surveyors	No	-
Personnel skilled or trained in GIS applications	yes	City of RPV staff
Scientist familiar with natural hazards in local area	Yes	Contract with a geologist with extensive knowledge of local landslide as well as City geologists
Emergency manager	No	-
Grant writers	No	-
Procurement Services and Management	No	-
Other	Yes	Contractors with expertise in drilling dewatering wells

### Opportunities to Expand Administrative and Technical Capabilities

The District has not identified any additional opportunities to expand administrative and technical capabilities.

#### 6.3.4 Education and Outreach Capabilities

Regular engagement with the public on issues regarding hazard mitigation provides an opportunity to directly interface with community members. Assessing the education and outreach capability illustrates the connection between the government and community members, which opens a two-way dialogue that can result in a more resilient community, based on awareness and engagement. An assessment of education and outreach capabilities is presented in Table 6-5.

**Table 6-5 Education and Outreach Capabilities**

Criterion		Response
Do you have a public information officer or communications office?		No
Do you have personnel skilled or trained in website development?		Yes
Do you have hazard mitigation information available on your website?		Yes
<i>If yes, briefly describe:</i>	ACLAD website and monthly meetings keep the district members updated on landslide mitigations	
Do you use social media for hazard mitigation education and outreach?		Yes
<i>If yes, briefly describe:</i>	Email notifications to District members of projects and monthly Board zoom meetings	
Do you have any citizen boards or commissions that address issues related to hazard mitigation?		Yes
<i>If yes, briefly describe:</i>	ACLAD Board of Directors	
Do you have any other programs in place that could be used to communicate hazard-related information?		Yes
<i>If yes, briefly describe:</i>	Website; clerk outreach to community; monthly Board meetings open to the public	
Do you have any established warning systems for hazard events?		No

### Opportunities to Expand Education and Outreach Capabilities

The District is committed to supporting the City of Rancho Palos Verdes’ hazard education and outreach efforts.

#### 6.3.5 Adaptive Capacity for Climate Change

**Table 6-6 Adaptive Capacity for Climate Change**

Criterion	Jurisdiction Rating <sup>a</sup>
<b>Technical Capacity</b>	
Jurisdiction-level understanding of potential climate change impacts	High
<i>Comment:</i>	District fully understands that above average rain can impact land stability.
Jurisdiction-level monitoring of climate change impacts	High
<i>Comment:</i>	District monitors local rainfall data which can affect land stability.
Technical resources to assess proposed strategies for feasibility and externalities	Medium
<i>Comment:</i>	Estimates of general rainfall data may not translate to specific areas of land stability
Jurisdiction-level capacity for development of GHG emissions inventory	Low
<i>Comment:</i>	ACLAD mitigations do not abate GHGs nor a consideration in ongoing programs.

Criterion		Jurisdiction Rating <sup>a</sup>
Capital planning and land use decisions informed by potential climate impacts		Medium
<i>Comment:</i>	Higher than normal rainfall is a red flag for land movement but mitigation measures are an ongoing process, even if during a low rainfall season. Land movement can continue for years after one heavy rain season.	
Participation in regional groups addressing climate risks		High
<i>Comment:</i>	ACLAD works closely with the City of RPV in assessing risks with GPS and geotechnical advice.	
<b>Implementation Capacity</b>		
Clear authority/mandate to consider climate change impacts during public decision-making processes		High
<i>Comment:</i>	ACLAD Board has full authority to implement mitigation measures for above average rainfall.	
Identified strategies for GHG mitigation efforts		Low
<i>Comment:</i>	No strategies for GHG mitigation	
Identified strategies for adaptation to impacts		High
<i>Comment:</i>	Dewatering wells and drainage lines to ocean, surface drainage, fill fissures	
Champions for climate action in local government departments		Low
<i>Comment:</i>	There is no climate program with local government departments	
Political support for implementing climate change adaptation strategies		High
<i>Comment:</i>	All mitigation strategies must have at least 51% approval by the District members per Prop. 218.	
Financial resources devoted to climate change adaptation		Medium
<i>Comment:</i>	District fees fund many mitigation measures but not all mitigation measures can be implemented due to financial restraints.	
Local authority over sectors likely to be negatively impacted		High
<i>Comment:</i>	ACLAD Board Members have full authority to implement mitigation measures.	
<b>Public Capacity</b>		
Local residents' knowledge of and understanding of climate risk		Medium
<i>Comment:</i>	Most local residents understand the relationship of above average rainfall and land stability, but some technical geology information needs explanation by experts.	
Local residents' support of adaptation efforts		High
<i>Comment:</i>	Most residents support the efforts of ACLAD.	
Local residents' capacity to adapt to climate impacts		Low
<i>Comment:</i>	Some have lost homes, some have moved due to fear, some are staying and supporting foundations. In general landslides cause great stress on families.	
Local economy current capacity to adapt to climate impacts		Medium
<i>Comment:</i>	Some roads get closed affecting District members getting to work. Others have lost their home equity entirely. Others are spending tens to hundreds of thousand dollars to save their home.	
Local ecosystems capacity to adapt to climate impacts		Unsure
<i>Comment:</i>	Unknown	

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

### Opportunities to Expand Adaptive Capacity Capabilities

The District has not identified any additional opportunities to expand adaptive capacity capabilities.

## 6.4 Integration

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

### 6.4.1 Existing Integration

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

- Rainfall data, GPS data program, water level monitoring program, and geologists input help with implementing ACLAD mitigation program which includes dewatering wells, drainage lines to the ocean, addressing surface drainage, filling fissures.
- There are 9 dewatering wells in operation and extract water at a rate of approximately 250 gallons per minutes.
- ACLAD is finalizing the electrical supply for several dewatering wells.
- ACLAD installed two monitoring wells with piezometers.
- Ongoing repairs and drainage line improvements throughout the district.

### 6.4.2 Opportunities for Future Integration

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

- ACLAD utilizes city GPS and Heat Map data to help plan our mitigation measures. Future planning and capital improvement projects can be better coordinated with the City of RPV and with the hazard data in the risk assessment of this plan.

## 6.5 Risk Assessment

### 6.5.1 Jurisdiction-Specific Natural Hazard Event History

Table 6-7 lists past occurrences of natural hazards, resulting in a disaster declaration, for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

**Table 6-7 Past Natural Hazard Events**

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Flood	Severe Winter Storms, Flooding, and Mudslides	EM-3591-CA	January 9, 2023	Triggered earth movements in the District

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	DR-4683-CA CA23-1	January 14, 2023 January 4, 2023	Triggered earth movements in the District
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	EM-3592-CA CA23-3	March 10, 2023 March 1, 2023	Triggered earth movements in the District
Severe Storm	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4699-CA	April 3, 2023	Triggered earth movements in the District
Severe Storm	Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides	DR-4769-CA	April 13, 2024	Triggered earth movements in the District

### 6.5.2 Hazard Ranking

The prioritization and categorization of identified hazards for ACLAD is based principally on the Priority Risk Index (PRI), a tool used to measure the degree of risk for identified hazards in a particular planning area. The PRI was used to assist ACLAD in identifying hazards that pose the most significant threat. Table 6-8 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy.

**Table 6-8 Hazard Risk Ranking Summary**

Hazard	Weighted Risk Factors					PRI	Risk Ranking
	Probability	Impact	Spatial Extent	Warning Time	Climate Change		
Drought	1.2	0.3	0.8	0.1	0.4	2.8	Medium
Earthquake	0.9	0.9	0.8	0.4	0.2	3.2	High
Flood	1.2	0.3	0.2	0.1	0.4	2.2	Medium
Landslide	1.2	0.6	0.6	0.4	0.4	3.2	High
Sea Level Rise	0.9	0.3	0.2	0.1	0.4	1.9	Low
Severe Weather - Heat Wave	0.9	0.6	0.8	0.1	0.4	2.8	Medium
Severe Weather - Strong Wind	1.2	0.6	0.8	0.1	0.4	3.1	High
Tsunami	0.6	0.3	0.4	0.1	0.2	1.6	Low
Wildfire	0.9	0.9	0.6	0.4	0.4	3.2	High

Note: PRI Value 1 to 1.9 = Low Hazard Risk Ranking  
 PRI Value 2.0 to 2.9 = Medium Hazard Risk Ranking  
 PRI Value 3.0 to 4.0 = High Hazard Risk Ranking

### 6.5.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk

maps of the hazards are provided at the end of this annex. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- The ongoing challenge for ACLAD is funding of much needed mitigation projects. Due to constant land movement, drainage lines break, dewatering wells get sheared off. If a home isn't a total loss, constant movement causes ongoing damage.
- Landslides can also change the elevation of roadways and in turn, disrupt the storm drain system associated with those roadways causing flooding of properties and impacting residential and emergency services egress and ingress. Altamira Canyon (Figure 6-2) has significant vulnerability to both infusion of stormwater into the porous bottom and fissures contributing to land movement as well as serious canyon wall erosion causing the loss of homes above the canyon.

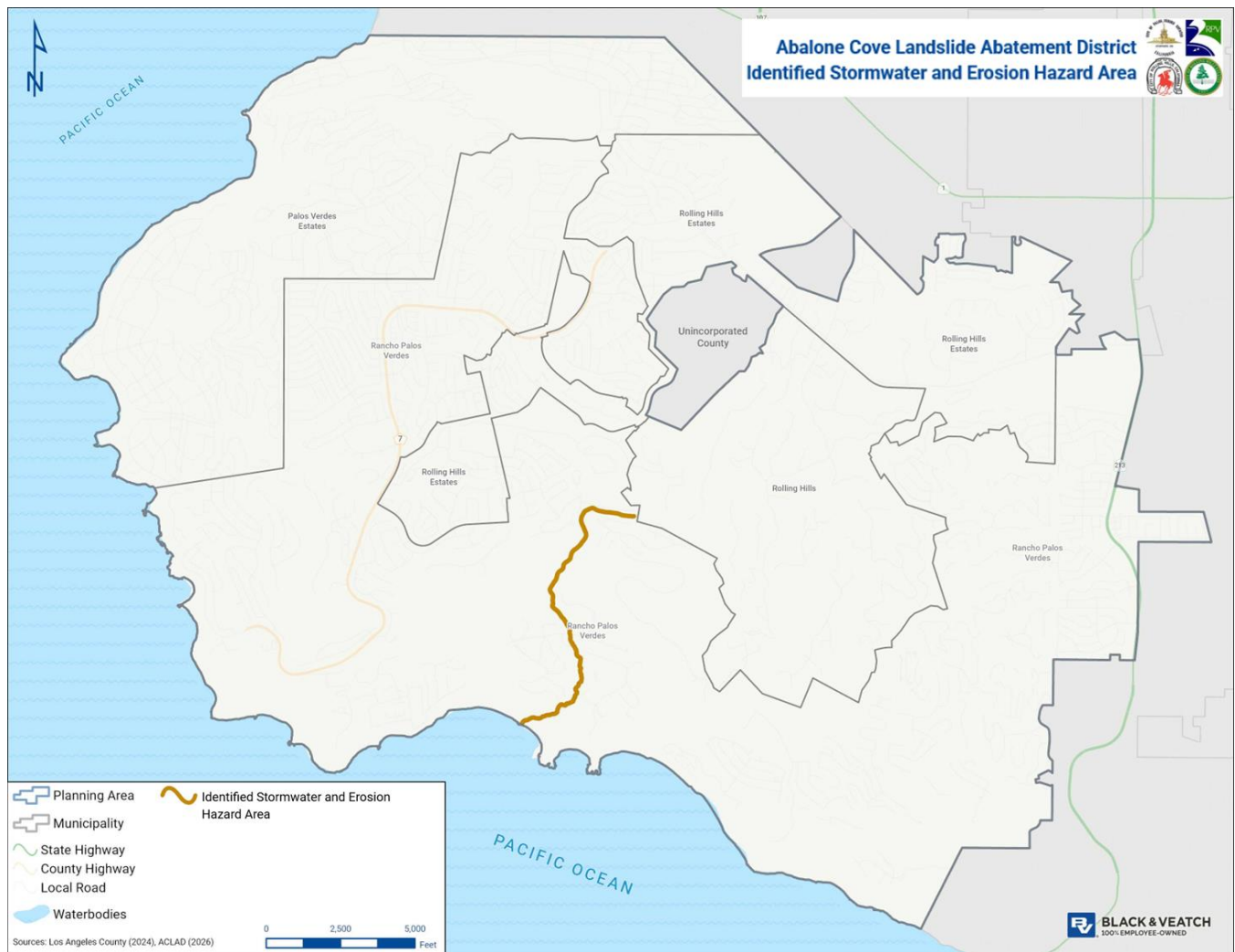


Figure 6-2 Altamira Canyon Area of Stormwater Infusion and Erosion

## 6.5.4 Prior Actions to Address Jurisdiction Vulnerabilities

Although this is the first hazard mitigation plan ACLAD has participated in, the District and other local governments have been committed to landslide mitigation measures for decades described in the following actions and metrics.

### Government Action

#### Building Moratorium

**Action** - After the start of the Abalone Cove Landslide (1978-1982), the RPV Council immediately established a building moratorium in the area.

**Metric** - The building moratorium successfully prevented additional homes from being subject to damages from land movement.

#### Panel of Experts

**Action** - The RPV City in 1979 authorized the first in a series of geological investigations by a panel of expert geologists to define the problem and identify potential solutions. The Abbot and Associates February 28, 1979, final report (Document A) set forth specific mitigation measures which included: dewatering wells; sewer system; lining Altamira Canyon; and all storm drains be impervious to the shoreline.

**Metric** - This panel of experts successfully provided the expertise to advise the City on what specific actions would be most effective in mitigating the landslide.

### ACLAD and Government Actions

The mitigation recommendations of the Abbot and Associates 1979 report were implemented by the District under the direction of the City of RPV at the time. Today the two agencies coordinate mitigation measures.

#### Dewatering Wells

**Action** - Private citizens drilled 8 dewatering wells in 1980 which were transferred to the then recently formed ACLAD that same year. The City at this time took entire responsibility for and operated ACLAD at the time.

**Metrics** - A report from the City Geologist in 1982 documented a slowdown of the slide after these initial wells were drilled. This metric is still true today with the dewatering wells having a direct correlation to slowing land movement when compared to GPS data. But over time well casings get sheared off with land movement and need re-drilling. Soils decompose and clog the pumps. Pumps fail with non-stop use. ACLAD has extensive records of this maintenance and repairs.

#### Sewer System

**Action** - A sewer system was installed in 2000 under the direction of the City of RPV Public Works.

**Metric** - The sewer system has no proven correlation to slowing the landslide. The effectiveness of a sewer system as mitigation has been debated amongst geologists some arguing that septic leach lines were too shallow to influence deeper hydrological dynamics affecting slide planes. The GPS data seems to corroborate with this theory. Before the 2000 installation of the sewer system, the GPS data showed that the dewatering wells were correlated with slowing of land movement. The data between the 2000 installation of the sewer system and before the recent landslide of 2023-24 showed no change in GPS data trends. It was the back to back higher than normal rainfall data from 2022-2023 that did correlate with a dramatic increase of land movement as evidenced by GPS data.

### Lining Altamira Canyon

**Action** - The City has spent quite a bit of funding for numerous studies over 30 years to line Altamira Canyon.

**Metric** - None of the project studies ever broke ground despite the fact that there have been hydrological studies clearly showing a huge amount of storm water infuses into the landslide through the porous canyon floor and fissures. Canyon walls have shown tremendous accumulative erosion over the years. The City finally installed a plastic lining on a portion of upper Altamira Canyon owned by the City as a temporary “winterization”. But most of Altamira Canyon is still vulnerable to winter stormwater infusing into the landslide and causing serious erosion.

### All Drainage Impervious to the Shoreline

#### Water Well Drainage Lines

**Action** - All water wells have drainage lines that carry water to the shoreline.

**Metric** - The drainage lines successfully get well water to the shoreline but constant maintenance is required as land movement causes line breakages. In some cases, entire drainage lines need to be re-laid above ground.

#### Stormwater

**Action** - No action to line Altamira Canyon except a temporary “winterization” of City owned property. There is a 10’ CMP culvert in Altamira Canyon that runs beneath lower Narcissa Drive and carries stormwater under PV Drive South. But that CMP pipe dumps all of the uphill stormwater into raw land before it reached the shoreline. A ½ round CMP drainage channel runs from the end of Figtree to Altamira Canyon.

**Metric** - The residential streets of ACLAD have, in the past for the most part, been successful in directing mild storm drainage to Altamira Canyon. In heavier winter storms the water on the streets overflows and floods residential properties. With the current landslide, the streets have been radically deformed such that our streets are failing to properly operate for storm drainage causing flooding onto properties and pooling which allows stormwater to soak into the soils. The 10’ culvert has been successful but, being metal (CMP), is constantly rusting out on the bottom and with the recent land movement has now separated entirely.

### Other Data Beyond the 1979 Panel of Experts Recommendations

#### GPS

**Action** - The RPV City has continually monitored land movement with a GPS system. Document C shows data from 2007 to June 2024, reporting pre-landslide data to compare to post landslide data.

**Metric** - This GPS data has been successful in establishing a metric for assessing the effectiveness of the abatement efforts and, over the long-term, has contributed to a better understanding of the relationship between well production, groundwater elevations, rainfall and land movement.

#### Flooding/Erosion

Aside from landslides, heavy rainfall has been responsible for flooding and erosion damage to the residents of the Portuguese Bend community (Document D).

**Action** - As to Altamira Cyn., any mitigation measures to avoid flooding/erosion have been implemented by the residents entirely themselves and not any Agency. For example, along a section of where Altamira Canyon crosses Narcissa Drive, the canyon storm water was flooding properties and eroding the walls of the canyon threatening adjacent property (Document E). The residents constructed canyon gabion wall barriers to prevent the erosion.

One resident actually built a storm drain entirely under his and a downhill property to control the flooding with standard inlets/stormwater pipes as seen on any public street.

Our streets are our stormwater drain system. The deformation of the slope of the streets from the landslide has disrupted the flow of storm water from reaching the ocean causing flooding in the roads impacting ingress for emergency services, egress for the residents and large ponds of water now are allowed to soak into the raw land. ACLAD has re-sloped most of the roads.

**Metric** - The resident mitigation measures in Altamira Canyon. have helped reduce flooding and erosion where they were installed. But further downstream where the velocity of the stormwater runoff increases large sections of private hillsides have collapsed from erosion reducing revetment and causing extensive damage to upslope homes.

ACLAD has filled in the low spots in the roads with crushed rock to re-grade the slope with some success. This has caused a drain on ACLAD financial resources and further land movement can distort the streets again. Assistance from a publicly funded agency to more fully control storm water flooding/erosion for the residents is greatly needed.

## 6.6 Hazard Mitigation Strategy

This section includes the following components of the mitigation strategy for this jurisdiction:

- Hazard Mitigation Action Plan Matrix
- Mitigation Action Prioritization
- Mitigation Action Classification and Natural Hazards Addressed

**Table 6-9 Hazard Mitigation Action Plan Matrix**

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
ACLAD-01	Where appropriate, support retrofitting, purchase or relocation of ACLAD-owned structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are in high- or medium-risk hazard areas.	All	Both	1, 2	Lead: ACLAD Board of Directors Support: Rancho Palos Verdes	Yes	Very High (\$1,000,000 and above)	FEMA HMGP, Annual Budget	Long-Term (5 years or more)
ACLAD-02	Continue identifying areas to install deep dewatering wells in the City of Rancho Palos Verdes. These wells will be placed in strategic locations to relieve water pressure that causes land movement in the City.	Safety and Security; Water Systems	Both	1, 4, 5	Lead: ACLAD Board of Directors Support: Rancho Palos Verdes	Yes	Very High (\$1,000,000 and above)	FEMA HMGP, CIP (Rancho Palos Verdes), Annual Budget	Short to Long-Term
ACLAD-03	Purchase generators for ACLAD-owned dewatering wells that are in need of backup power. This would ensure continuity of operations and help prevent movement of landslides.	Energy; Safety and Security; Water Systems		1, 4	Lead: ACLAD Board of Directors	Yes	Moderate (\$50,001 - \$250,000)	FEMA HMGP, Annual Budget, CIP (Rancho Palos Verdes)	Short Term (less than 5 years)
ACLAD-04	Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.	N/A	N/A	1, 3, 4	Lead: ACLAD Board of Directors Support: Rancho Palos Verdes	No	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
ACLAD-05	Expand on current collaboration and coordination with Rancho Palos Verdes on future plans and projects, including mitigation measures related to landslides.	Safety and Security	N/A	1, 2, 3	Lead: ACLAD Board of Directors Support: Rancho Palos Verdes	No	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short Term (less than 5 years)
ACLAD-06	Integrate the hazard mitigation plan into other plans, programs, and projects that will help in reducing the impacts of future hazards, including landslides.	Safety and Security; Communications; Transportation; and	Both	4	Lead: ACLAD Board of Directors	Yes	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short-Term (less than 5 years)
ACLAD-07	Water Well Drainage Lines – Conduct a feasibility study to identify which drainage lines are in poor condition and need to be replaced. Once identified, begin replacing and installing the drainage lines.	Safety and Security; Water Systems	Both	1, 4	Lead: ACLAD Board of Directors Support: Rancho Palos Verdes	Yes	High (\$250,000-\$1 million)	Annual Budget, CIP (Rancho Palos Verdes)	Short to Long-Term
ACLAD-08	Access Road Erosion Mitigation – Determine and implement needed measures to prevent access road erosion from extreme precipitation events and earth movements.	Safety and Security; Water Systems	Both	1, 4, 5	Lead: ACLAD Board of Directors Support: Rancho Palos Verdes	Yes	High (\$250,000-\$1 million)	Annual Budget, CIP (Rancho Palos Verdes)	Short to Long-Term
ACLAD-09	Assess street storm drain system to determine proper slope to prevent flooding	Safety and Security; Water Systems	Both	1, 4, 5	Lead: ACLAD Board of Directors	Yes	Moderate (\$50,001 - \$250,000)	FEMA HMGP, Annual Budget	Short Term (less than 5 years)
ACLAD-10	Assess Altamira Canyon wall erosion to determine what action is needed to prevent loss of revetment for structures upslope	All	Both	1, 4, 5	Support: Rancho Palos Verdes	Yes	Moderate (\$50,001 - \$250,000)	FEMA HMGP, Annual Budget	Short Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
ACLAD-11	Assess lining of Altamira Cyn. using previous RPV City studies to determine best course of action to prevent infusion of stormwater into porous bottom and fill fissures.	Safety and Security; Water Systems	Both	1, 4, 5	Lead: ACLAD Board of Directors	Yes	Moderate (\$50,001 - \$250,000)	FEMA HMGP, Annual Budget	Short Term (less than 5 years)

**Table 6-10 Mitigation Action Prioritization**

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
ACLAD-01	3	3	3	3	3	1	3	1	3	3	1	1	1	1	1	31	High
ACLAD-02	3	3	3	3	1	1	1	1	3	3	3	3	1	1	1	31	High
ACLAD-03	3	3	3	3	3	1	3	0	1	3	3	3	1	1	1	32	High
ACLAD-04	3	3	3	3	3	1	0	1	1	3	3	3	3	1	1	32	High
ACLAD-05	1	1	1	3	3	3	0	1	1	1	3	3	3	3	1	28	Medium
ACLAD-06	3	3	3	3	3	3	0	0	1	1	3	1	3	1	1	29	Medium
ACLAD-07	3	3	3	3	1	1	1	1	3	3	3	3	1	3	1	33	High
ACLAD-08	3	3	3	3	1	1	1	1	3	3	3	3	1	1	1	31	High
ACLAD-09	3	3	3	3	3	3	2	1	3	3	3	2	3	1	3	39	High
ACLAD-10	3	3	2	2	2	1	2	2	3	2	2	3	3	2	3	35	High
ACLAD-11	3	3	3	2	2	1	2	2	3	3	1	3	3	2	3	36	High

Note: 31 or more = High Priority  
 15 to 30 = Medium Priority  
 0 to 14 = Low Priority

Table 6-11 Mitigation Action Classification and Natural Hazards Addressed

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
ACLAD-01	■	■			■		■	■	■	■	■	■	■	■	■
ACLAD-02		■			■	■			■	■					
ACLAD-03		■			■	■	■	■	■			■	■		■
ACLAD-04	■					■	■	■	■	■	■	■	■	■	■
ACLAD-05	■					■		■	■	■					
ACLAD-06	■	■	■			■			■						
ACLAD-07	■	■			■			■	■						
ACLAD-08		■			■	■			■	■					
ACLAD-09		■			■				■	■					
ACLAD-10		■			■				■	■					
ACLAD-11		■			■				■	■					

## 6.7 Public Outreach

Table 6-12 Public Outreach

Local Outreach Activity	Date	Number of People Involved
Supported combined Planning Partner Outreach – see Volume 1	Throughout the planning process	300+

## 6.8 Information Sources Used for This Annex

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

- **District Website.** The District website was used to populate sections of the annex.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit.** The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

## 7. KLONDIKE CANYON GEOLOGIC HAZARD ABATEMENT DISTRICT



**Figure 7-1 Klondike Pump Readings**

Source: (Klondike Canyon Geologic Hazard Abatement District 2025)

### 7.1 Local Hazard Mitigation Planning Team

**Table 7-1 Local Planning Team**

	Primary Point of Contact	Alternate Point of Contact
Name and Title:	Steve Cummins, Engineer	Nic Grillo, Engineer
Address	PO Box 3675 Rolling Hills Estates, CA 90274	PO Box 3675 Rolling Hills Estates, CA 90274
Phone Number:	(310) 327-0018	(323) 286-8918
Email:	scummins@dcacivileng.com	nsgriilo@gmail.com

Contributors:	
Name and Title:	Steve Cummins, Chair KCGHAD
Method of Participation:	Input from District records, attended and participated in annex development meeting
Name and Title:	Nic Grillo, Board Member
Method of Participation:	Input from District records, attended and participated in Planning Committee meeting, and annex development meeting
Name and Title:	Coleen Miller, Clerk
Method of Participation:	Assisted with District Board meetings to present the plan

## 7.2 Jurisdictional Profile

### 7.2.1 Overview

Klondike Canyon Geologic Hazard Abatement District (KCGHAD, aka KCLAD) was formed to manage landslide mitigation measures in the Klondike Canyon landslide area which lies within the greater Portuguese Bend Ancient Landslide Complex in Rancho Palos Verdes, CA (Klondike Canyon Geologic Hazard Abatement District 2025).

Geologic Hazard Abatement Districts (GHADs) enabled by the Beverly Act of 1979 (SB 1195), are useful financial mechanisms for reducing hillslope hazards (Kockelman 1986). The enabling statute (Division 17 of the Public Resources Code, Sections 26500 – 26654) provides for the formation of local assessment districts for the purpose of prevention, mitigation, abatement, or control of geologic hazards. The Act broadly defines “geologic hazard” as “an actual or threatened landslide, land subsidence, soil erosion, earthquake, or any other natural or unnatural movement of land or earth” (Klondike Canyon Geologic Hazard Abatement District 2025).

### 7.2.2 Assets

Table 7-2 summarizes the critical assets of the district and their value.

**Table 7-2 Klondike Canyon Geologic Hazard Abatement District Assets**

Asset	Value
<b>Property</b>	
None	\$0
<b>Critical Infrastructure and Equipment</b>	
4 Wells	\$1,000,000
Pumps – 3 deep and 1 surface (480 volts)	\$860,000
Power sub-station	\$100,000
Storm drain (construction in progress – to be completed in late Summer early Fall 2026) from Palos Verdes Drive to Pacific Ocean	\$1,200,000
<b>TOTAL:</b>	<b>\$3.16 million</b>

## 7.3 Capability Assessment

### 7.3.1 Planning and Regulatory Capabilities

Jurisdictions develop plans and programs and implement rules and regulations to protect and serve residents. When effectively prepared and administered, these plans, programs and regulations can support the implementation of mitigation actions.

Note that special-purpose districts do not have the regulatory authority to adopt or enforce building codes as part of their regulatory capabilities, but any repair or replacement of assets will be governed by codes and standards applied by the municipality where KCGHAD is located (City of Rancho Palos Verdes), including the current California Building Code. See Section 3.4.1 in this Volume for other codes and regulations enforced by the City that may apply to development of assets owned by the Klondike Canyon Geologic Hazard Abatement District.

Additionally, special-purpose districts are not eligible to participate in the NFIP. However, any new assets or infrastructure developed by KCGHAD are in compliance with the floodplain regulations established by the City of Rancho Palos Verdes.

The following existing codes, ordinances, policies, programs, or plans are applicable to this hazard mitigation plan:

- Annual Budget

**Opportunities to Expand Planning and Regulatory Capabilities**

The District has identified Mitigation Action KCGHAD-10: Integrate the hazard mitigation plan into other local plans and programs including Engineer Reports.

**7.3.2 Fiscal Capabilities**

Assessing a jurisdiction’s fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant funding eligibility, and local jurisdictional authority to generate internal financial capability, such as through impact fees. An assessment of fiscal capabilities is presented in Table 7-3.

**Table 7-3 Fiscal Capabilities**

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	No
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Federal Grant Programs	Yes
Other	No

**Opportunities to Expand Fiscal Capabilities**

The District has identified Mitigation Action KCGHAD-10: Integrate the hazard mitigation plan into other local plans and programs including annual budgets.

**7.3.3 Administrative and Technical Capabilities**

Planning, regulatory, and fiscal capabilities provide the backbone for successfully developing a mitigation strategy; however, without the appropriate personnel, the strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard

mitigation. These resources include technical experts, such as engineers and scientists, as well as personnel with capabilities that may be found in multiple departments, such as grant writers. An assessment of administrative and technical capabilities is presented in Table 7-4.

**Table 7-4 Administrative and Technical Capabilities**

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	One geologist
Engineers or professionals trained in building or infrastructure construction practices	Yes	Contract consultants (heavy equipment, electrical, plumbing, etc.)
Planners or engineers with an understanding of natural hazards	Yes	Clerk
Staff with training in benefit-cost analysis	Yes	Can use a contract consultant
Surveyors	Yes	Contract consultant
Personnel skilled or trained in GIS applications	No	-
Scientist familiar with natural hazards in local area	Yes	Rely on the City of RPV
Emergency manager	No	-
Grant writers	Yes	Local volunteers
Procurement Services and Management	Yes	District Board

**Opportunities to Expand Administrative and Technical Capabilities**

The District has not identified opportunities to expand administrative and technical capabilities.

**7.3.4 Education and Outreach Capabilities**

Regular engagement with the public on issues regarding hazard mitigation provides an opportunity to directly interface with community members. Assessing the education and outreach capability illustrates the connection between the government and community members, which opens a two-way dialogue that can result in a more resilient community, based on awareness and engagement. An assessment of education and outreach capabilities is presented in Table 7-5.

**Table 7-5 Education and Outreach Capabilities**

Criterion	Response
Do you have a public information officer or communications office?	Attorney on contract, works with the District Board
Do you have personnel skilled or trained in website development?	District Board member
Do you have hazard mitigation information available on your website?	Yes
<i>If yes, briefly describe:</i>	The District maintains a website that provides information about the District, the services they provide, and the projects they are working on.
Do you use social media for hazard mitigation education and outreach?	Instagram, Facebook
Do you have any citizen boards or commissions that address issues related to hazard mitigation?	Participate in local homeowner associations
Do you have any other programs in place that could be used to communicate hazard-related information?	No
Do you have any established warning systems for hazard events?	No

### Opportunities to Expand Education and Outreach Capabilities

The District is committed to supporting the City of Rancho Palos Verdes’ hazard education and outreach efforts. The District has identified Mitigation Action KCGHAD-06: Expand current public outreach programs to residents regarding restraint of overwatering and how to report fissuring or other land movement to the District.

### 7.3.5 Adaptive Capacity for Climate Change

Table 7-6 Adaptive Capacity for Climate Change

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

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

### Opportunities to Expand Adaptive Capacity Capabilities

The District has identified Mitigation Action KCGHAD-11: Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following:

- Integrate climate change projections into the design of projects to increase their project useful life.
- Elevate electrical equipment above the base flood elevation.

## 7.4 Integration

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are

opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

### 7.4.1 Existing Integration

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

- **Maintenance and Improvements**—KCGHAD has maintenance and improvement measures in place that help reduce land movement within their district. This includes installing and maintaining dewatering wells, dirt removal to reduce soil pressure, monitoring dewatering wells, public education and outreach to residents, and collaboration with local, state, and federal partners.

### 7.4.2 Opportunities for Future Integration

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

- **Annual Budget**—Prior to the development of the annual budget, the District will review the MJLHMP to identify projects to include in the budget.
- **Engineer Reports**—The District will review and use to enhance the mitigation strategies and priorities for implementation.

## 7.5 Risk Assessment

### 7.5.1 Jurisdiction-Specific Natural Hazard Event History

Table 7-7 lists past occurrences of natural hazards, resulting in a disaster declaration, for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 7-7 Past Natural Hazard Events

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Flood	Severe Winter Storms, Flooding, and Mudslides	EM-3591-CA	January 9, 2023	Triggered earth movement in the District
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	DR-4683-CA CA23-1	January 14, 2023 January 4, 2023	Triggered earth movement in the District
Flood	Severe Winter Storms, Flooding, Landslides, and Mudslides	EM-3592-CA CA23-3	March 10, 2023 March 1, 2023	Triggered earth movement in the District

Type of Event	Declaration Title	State or Federal Disaster #	Declaration Date	Damage Assessment
Severe Storm	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	DR-4699-CA	April 3, 2023	Triggered earth movement in the District
Severe Storm	Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides	DR-4769-CA	April 13, 2024	Triggered earth movement in the District

### 7.5.2 Hazard Ranking

The prioritization and categorization of identified hazards for KCGHAD is based principally on the Priority Risk Index (PRI), a tool used to measure the degree of risk for identified hazards in a particular planning area. The PRI was used to assist the City in identifying hazards that pose the most significant threat. Table 7-8 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy.

**Table 7-8 Hazard Risk Ranking Summary**

Hazard	Weighted Risk Factors					PRI	Risk Ranking
	Probability	Impact	Spatial Extent	Warning Time	Climate Change		
Drought	1.2	0.3	0.8	0.1	0.4	2.8	Medium
Earthquake	0.9	0.9	0.8	0.4	0.2	3.2	High
Flood	0.9	0.3	0.2	0.1	0.4	1.9	Low
Landslide	1.2	0.6	0.6	0.4	0.4	3.2	High
Sea Level Rise	0.9	0.3	0.2	0.1	0.4	1.9	Low
Severe Weather - Heat Wave	0.9	0.6	0.8	0.1	0.4	2.8	Medium
Severe Weather - Strong Wind	1.2	0.6	0.8	0.1	0.4	3.1	High
Tsunami	0.6	0.3	0.4	0.1	0.2	1.6	Low
Wildfire	0.9	0.9	0.6	0.4	0.4	3.2	High

Note: PRI Value 1 to 1.9 = Low Hazard Risk Ranking  
 PRI Value 2.0 to 2.9 = Medium Hazard Risk Ranking  
 PRI Value 3.0 to 4.0 = High Hazard Risk Ranking

### 7.5.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Storm drainage improvements to avoid stormwater runoff (Action KCGHAD-04 and 07 in Table 3-14).
- Backup power needed at dewatering wells (Action KCGHAD-05 in Table 3-14).
- Additional dewatering wells are needed (Action KCGHAD-03 in Table 3-14).
- Ongoing monitoring of district (Action KCGHAD-06, 07, and 08 in Table 3-14).

## 7.6 Hazard Mitigation Strategy

This section includes the following components of the mitigation strategy for this jurisdiction:

- Hazard Mitigation Action Plan Matrix
- Mitigation Action Prioritization
- Mitigation Action Classification and Natural Hazards Addressed

**Table 7-9 Hazard Mitigation Action Plan Matrix**

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
KCGHAD-01	Identify areas in need of stability improvements. Once identified, apply for grants and loans to fund the construction of the projects.	Safety and Security; Water Systems; Transportation	Both	1, 4, 5	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	Yes	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short-Term (less than 5 years)
KCGHAD-02	Expand coordination efforts with the City to identify and implement improvements to the upper canyon for the monitoring of drainage and fissures.	Safety and Security	Both	1, 3, 4	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	No	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short-Term (less than 5 years)
KCGHAD-03	Install two dewatering wells at the base of the slide on the beach.	Safety and Security; Water Systems; Transportation	Both	1, 4	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	Yes	Moderate (\$50,001 - \$250,000)	Annual Budget, FEMA HMGP	Short-Term (less than 5 years)
KCGHAD-04	Design and construct the replacement and realignment of the storm drain system. This will replace the existing 48" pipe that was destroyed with the land movement.	Safety and Security; Water Systems; Transportation	Both	1, 4	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	Yes	High (\$250,000-\$1 million)	Annual Budget, FEMA HMGP, City CIP	Long-Term (5 years or more)
KCGHAD-05	Purchase and install backup generators at dewatering wells which will provide continuity of operations and eliminate downtime during power outages.	Safety and Security; Water Systems; Transportation	Both	1, 4	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	Yes	Moderate (\$50,001 - \$250,000)	Annual Budget, FEMA HMGP	Short-Term (less than 5 years)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
KCGHAD-06	Expand current public outreach programs to residents regarding restraint of overwatering and how to report fissuring or other land movement to the District.	N/A	Both	1, 2, 3	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	Yes	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short-Term (less than 5 years)
KCGHAD-07	Conduct a feasibility study to identify areas in need of drainage systems. This will include coordination with the City, County Flood Control District, United States Army Corps of Engineers, LA County Sanitation District, and other agencies. Once the study is complete, the District will work with the agencies to develop a timeline and prioritize projects to begin implementation. These improvements will help stabilize the Klondike Landslide.	Safety and Security; Water Systems; Transportation	Both	1, 3, 4	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes, County Flood Control District, Corp of Engineers, LA County Sanitation District	Yes	Very High (\$1,000,000 and above)	Staff Time, Rancho Palos Verdes, Annual Budget	Long-Term (5 years or more)
KCGHAD-08	Install rain gauges throughout the District to assist in monitoring the weather and to identify which areas need to be monitored for any signs of movement.	Safety and Security; Water Systems	Both	1, 4	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	Yes	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short-Term (less than 5 years)
KCGHAD-09	Where appropriate, support retrofitting, purchase or relocation of district structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are in high- or medium-risk hazard areas.	N/A	Existing	1	Lead: KCGHAD Board of Directors	Yes	Very High (\$1,000,000 and above)	Annual Budget, FEMA HMGP	Long-Term (5 years or more)

Action Number	Action Description	Community Lifeline Addressed	Benefits New or Existing Assets	Goals Met	Lead and Support Implementers	Benefits Equity Priority Community?	Estimated Cost	Potential Funding Sources	Timeline
KCGHAD-10	Integrate the hazard mitigation plan into other local plans and programs including: <ul style="list-style-type: none"> <li>• Annual budgets</li> <li>• Engineer Reports</li> </ul>	N/A	N/A	4	Lead: KCGHAD Board of Directors	No	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short-Term (less than 5 years)
KCGHAD-11	Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following: <ul style="list-style-type: none"> <li>• Integrate climate change projections into the design of projects to increase their project useful life.</li> <li>• Elevate electrical equipment above the base flood elevation.</li> </ul>	N/A	N/A	4, 5	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	No	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short-Term (less than 5 years)
KCGHAD-12	Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.	N/A	N/A	3	Lead: KCGHAD Board of Directors Support: Rancho Palos Verdes	No	Low (\$0-\$50,000)	Staff Time, Annual Budget	Short-Term (less than 5 years)

Table 7-10 Mitigation Action Prioritization

Action Number	Life Safety	Property Protection	Cost-Effectiveness	Technically Feasible	Legal Authority	Funding Available	Grant Eligible	Environmental	Climate Change	Equity Priority Community	Administrative Capacity	Multi-Hazard	Timeline	Other Local Objective	Support Policies	Total Score	Priority
KCGHAD-01	3	3	3	3	1	1	1	3	3	3	1	3	3	1	1	33	High
KCGHAD-02	3	3	3	3	1	1	3	1	3	0	3	3	3	1	1	32	High
KCGHAD-03	3	3	3	3	1	1	3	1	1	3	3	3	3	1	1	33	High
KCGHAD-04	3	3	3	3	1	1	3	1	1	3	3	3	1	1	1	31	High
KCGHAD-05	3	3	3	3	1	1	3	1	1	3	3	1	3	1	1	31	High
KCGHAD-06	3	1	3	3	1	1	1	1	1	3	3	1	3	1	3	29	Medium
KCGHAD-07	3	3	3	3	1	1	1	1	1	3	3	3	0	1	3	30	Medium
KCGHAD-08	3	3	3	3	1	1	1	1	1	3	3	1	3	1	1	29	Medium
KCGHAD-09	3	3	3	3	1	1	3	1	1	3	1	3	1	1	1	29	Medium
KCGHAD-10	3	1	3	3	1	1	1	0	0	0	3	3	3	1	1	24	Medium
KCGHAD-11	3	1	3	3	1	1	0	1	3	0	1	1	3	1	1	23	Medium
KCGHAD-12	3	1	3	3	1	1	0	0	0	0	3	3	3	1	1	23	Medium

Note: 31 or more = High Priority  
 15 to 30 = Medium Priority  
 0 to 14 = Low Priority

Table 7-11 Mitigation Action Classification and Natural Hazards Addressed

Action	Mitigation Classification						Natural Hazards								
	Local Plans and Regulations	Structure and Infrastructure Projects	Education and Awareness Programs	Natural Systems Protection	Climate Resiliency	Community Capacity Building	Drought	Earthquake	Flood	Landslide	Sea Level Rise	Severe Weather – Heat Wave	Severe Weather – Strong Wind	Tsunami	Wildfire
KCGHAD-01	■	■		■		■			■	■					
KCGHAD-02	■			■		■				■					
KCGHAD-03		■							■	■					
KCGHAD-04		■		■					■	■					
KCGHAD-05		■				■		■	■	■		■	■	■	■
KCGHAD-06	■		■			■			■	■					
KCGHAD-07	■	■				■			■	■					
KCGHAD-08		■	■		■	■			■	■					
KCGHAD-09		■				■		■	■	■				■	■
KCGHAD-10	■					■	■	■	■	■	■	■	■	■	■
KCGHAD-11	■				■		■		■	■	■				■
KCGHAD-12	■						■	■	■	■	■	■	■	■	■

## 7.7 Public Outreach

Table 7-12 Public Outreach

Local Outreach Activity	Date	Number of People Involved
Supported combined Planning Partner Outreach – see Volume 1	Throughout the planning process	300+

## 7.8 Information Sources Used for This Annex

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

- **District Website.** The District website was used to populate sections of the annex.
- **District Budget.** The District’s 2025-2026 budget was reviewed to identify mitigation strategies for the annex.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit.** The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.