

PUBLIC  
SAFETY

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# PUBLIC SAFETY

## Introduction

The Laguna Niguel Public Safety Element focuses on identifying and reducing risks from various natural and manmade hazards, including those heightened by change in climate, to reduce the potential for injury, loss of life, property damage, and environmental damage.

As a state-mandated element, it addresses potential short- and long-term risks from fires, floods, earthquakes, landslides, change in climate, and other hazards, consistent with California Government Code Section 65302(g). Hazards such as tsunamis and dam failures are not included, as the City is not susceptible to these risks. Other locally relevant safety issues important to Laguna Niguel, such as emergency response, hazardous materials, and crime reduction, are also addressed.

This Element aligns with related topics also mandated in the Land Use, Resource Management, and Mobility Elements, and includes specific goals and policies for identifying hazards, reducing their risks, and ensuring public safety considerations are a part of the City's planning and development review processes.

## Organization of Element

The Public Safety Element addresses each of the topics below as they relate to Laguna Niguel. The goals and policies of this Element are organized around the following topics:

- Seismic and Geologic Hazards
- Hazardous Waste and Materials
- Flood Hazards
- Fire Hazards
- Emergency Preparedness
- Resiliency Planning
- Police Protection

# SEISMIC AND GEOLOGIC HAZARDS

## Goal PS-1

Minimize the risk of injury and damage to property and the environment caused by seismic and geologic hazards.

Southern California is a region of high seismic activity. Like most cities in the area, Laguna Niguel faces risks from potentially destructive earthquakes. While there are no active or potentially active faults in the City, there are several active faults located within Orange County. Faults are mapped by the United States Geological Survey (<https://www.usgs.gov/>). Figure PS-1 illustrates the location of nearby fault zones surrounding the City.

The Newport-Inglewood Fault angles from offshore near Dana Point and passes through the northwestern portion of the County and is believed capable of producing a maximum credible earthquake of 7.5 magnitude. The Whittier Fault roughly parallels the Newport-Inglewood Fault across the northeasterly edge of the County and the maximum credible earthquake estimated is 7.0 magnitude. The San Joaquin Hills Thrust Fault is a southwest-trending blind thrust fault believed to underlie the San Joaquin Hills that could generate an earthquake as large as 7.3 magnitude. Earthquakes from faults located outside Orange County can also impact Laguna Niguel. Depending on their magnitude, earthquakes can cause minor to severe damage within a 50-mile radius of their epicenter. Active faults that could impact the City include the San Andreas, San Jacinto, Malibu-Coast, Palos Verdes, San Gabriel, and Sierra Madre-Santa Susana-Cucamonga faults.

In addition to strong ground shaking from an earthquake, regional seismic



activity can result in secondary impacts to Laguna Niguel, including seismically-induced landslides, ground failure, and liquefaction. Figure PS-2 illustrates areas of known seismic hazards within the City.

Both the federal and state governments have established regulations and standards related to seismic safety and structural integrity, including the California Building Standards Code, the Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazards Mapping Act. The risk of exposure to seismic and geologic hazards can be reduced by adhering to these regulations, strategic land use planning and building construction practices, and implementation of the following policies.

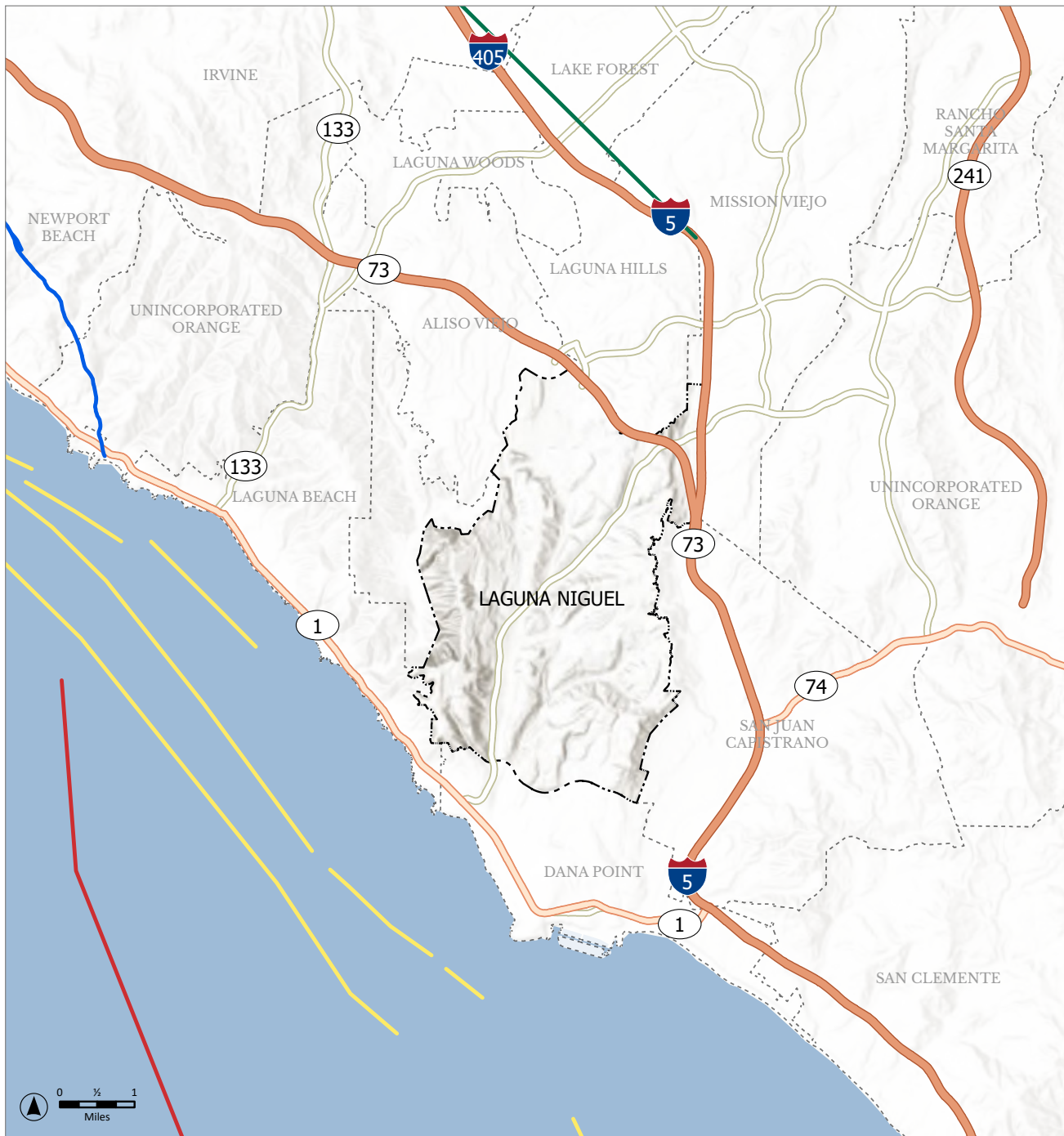




## PS-1 Policies

- PS-1.1 Geologic and Seismic Hazard Mapping.** Maintain Laguna Niguel's geologic and seismic hazards maps in the City's geographic information system in concert with updates from the California Geologic Survey and local surveys and update as appropriate.
- PS-1.2 Geologic and Seismic Assessments.** For development projects in areas of potential seismic or geologic hazards, require geological and geotechnical assessments and compliance with applicable codes and standards.
- PS-1.3 Geologic and Seismic Regulatory Compliance.** Ensure compliance with the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts and applicable grading, excavation, and building codes to minimize the risks of erosion, slope failure, landslides, and other seismic and geologic hazards.
- PS-1.4 Public Education (Geologic and Seismic Hazard).** Promote public awareness of seismic and geologic hazards in the community, including associated risks and preparedness strategies.

## PS-1 Geologic Faults



Data sources: USGS; City of Laguna Niguel; Orange County GIS.

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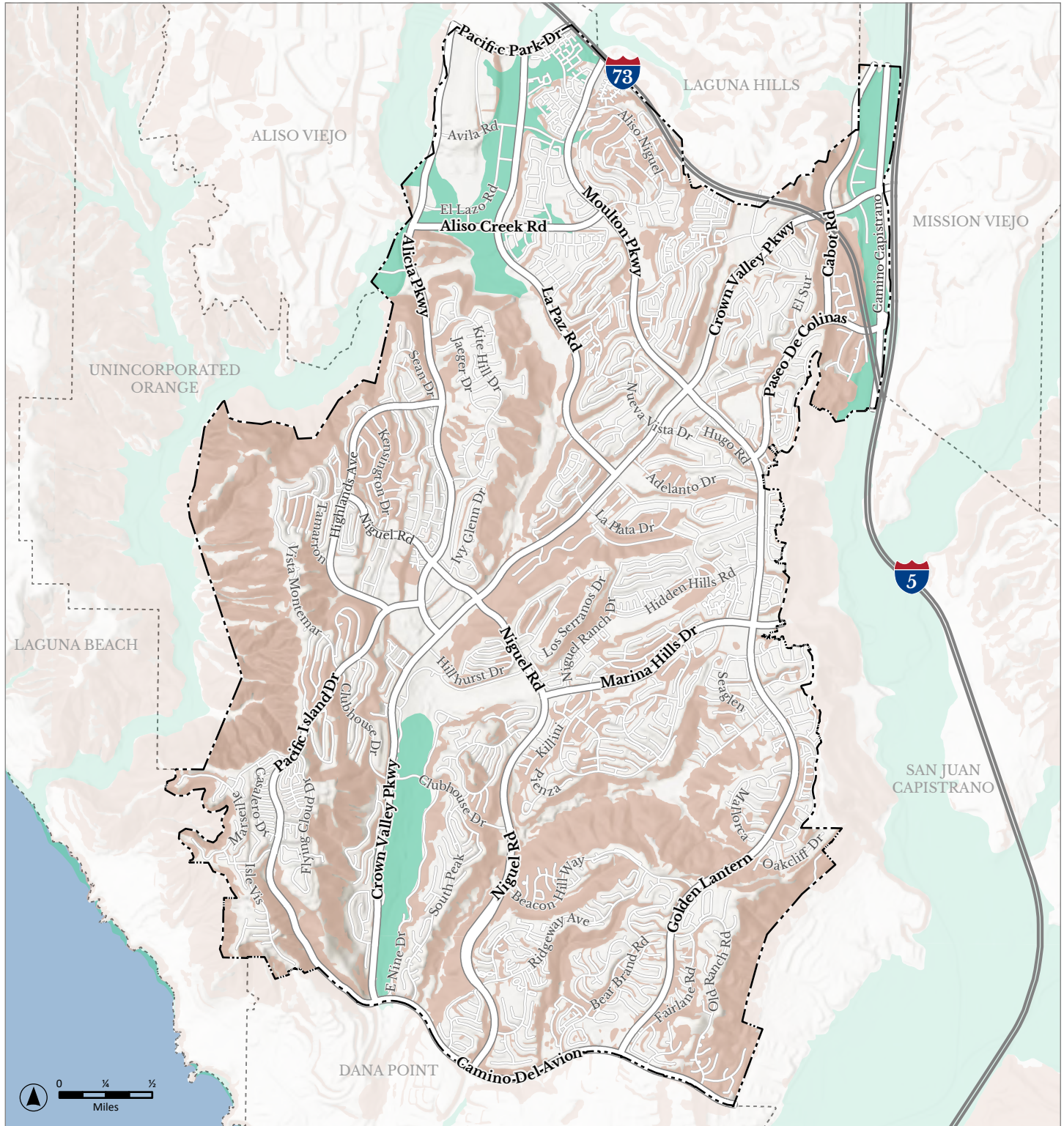
- Laguna Niguel City Boundary
- Other Jurisdictions

- Newport-Inglewood-Rose Canyon fault zone
- Oceanside fault

- Pelican Hill fault
- San Joaquin Hills thrust



## PS-2 Seismic Hazard Zones



Data sources: CGS Information Warehouse, Seismic Hazards Zonation Program (Dana Point/San Juan Capistrano/Laguna Beach quads); City of Laguna Niguel; Orange County GIS.

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Laguna Niguel City Boundary
  Other Jurisdictions
  Liquefaction Zone
  Landslide Zone



# HAZARDOUS WASTE AND MATERIALS



## Goal PS-2

Minimize the risk of injury and damage to property and the environment caused by hazardous waste and materials contamination.

Hazardous materials include a wide range of substances, such as pesticides, herbicides, toxic metals and chemicals, explosives, and nuclear materials that can pose significant risks to human health and the environment. These materials are commonly used in commercial, industrial, and manufacturing activities. Because these materials are increasingly used in urban areas, there are activities within the City that could expose residents, properties, and sensitive environmental resources to certain risks associated with hazardous materials.


The use, transport, and disposal of hazardous and toxic substances pose potential risks to the general population. Hazardous materials require special methods of

disposal, storage, and treatment. The release of hazardous materials requires immediate action to protect human health and safety and/or the environment.

Household hazardous waste (HHW) includes hazardous materials generated from residential activities, such as paints, solvents, varnishes, acids, flammables, acrylics, resins, batteries, and electronics (e-waste). E-waste such as televisions, tablets, cell phones and computers can also be taken to a HHW Collection Center. The County of Orange operates several HHW Collection Centers to facilitate proper HHW disposal. Orange County residents, including those in Laguna Niguel, can dispose of their HHW items at any of the County's HHW Collection Centers.



## PS-2 Policies

- PS-2.1 Hazardous Materials Regulatory Compliance.** Promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, state, and local regulations.
- PS-2.2 Hazardous Materials Emergency Plan.** Coordinate with the Orange County Fire Authority to ensure that businesses that handle hazardous materials or extremely hazardous substances at reportable quantities prepare, submit, and maintain required disclosures and emergency plans in compliance with state, county, and local regulations.
- PS-2.3 Hazardous Materials Emergency Response.** Collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and response strategies are in place to effectively address hazardous materials incidents in the City.
- PS-2.4 Public Education (Hazardous Waste Disposal).** Collaborate with the City's waste service provider(s) and the County of Orange to increase public awareness about the importance of proper household hazardous waste disposal. This includes educational materials on available services, programs, and disposal methods, while highlighting the environmental impacts of improper disposal.
- PS-2.5 Uses Involving Hazardous Materials.** Ensure land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk to nearby sensitive uses.
-  **PS-2.6 Hazardous Materials Cleanup.** Ensure that hazardous waste cleanup sites are remediated in compliance with all applicable regulatory agencies or requirements, such as Orange County Health Care Agency, Department of Toxic Substance Control, and/or Orange County Fire Authority, prior to any reuse or redevelopment of the subject site.





# FLOOD HAZARDS

## Goal PS-3

Minimize the risk of injury and damage to property and the environment caused by flooding hazards.

Flooding is a temporary rise in water levels that cause rivers, streams, or drainage systems to overflow and inundate adjacent areas not normally covered by water. The City's Local Hazard Mitigation Plan (LHMP) identifies the greatest flood risks in the community, which are typically caused by damaged, under-engineered, and/or obstructed infrastructure.

The Federal Emergency Management Agency (FEMA) maintains a database that maps flood potential across the United States, which helps cities in planning for flood events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance Program (NFIP) encourages state and local governments to adopt floodplain management programs and mitigation measures. As part of the program, the NFIP defines floodplain and floodway boundaries on Flood Insurance Rate Maps (FIRMs).

Areas with a 1% annual chance of flooding are designated as 100-year flood zones by FEMA, referred to as Special Flood Hazard Areas (SFHA). These zones exist in several locations across Laguna Niguel, as illustrated in Figure PS-3. A few areas in the north have a lower flood risk (0.2% annually) and are designated as 500-year flood zones. The remainder of the City is outside of the flood hazards zones and have minimal flood risk. Floodplain mapping for the City can be obtained through the FEMA Flood Map Service Center (<https://www.fema.gov/>).



## PS-3 Policies



**PS-3.1 Flood Control Regulatory Compliance.** Ensure that City regulations related to flood control align with federal, state, and county requirements. This includes monitoring changes in laws and regulations related to local flood protection (e.g., National Flood Insurance Program) and updating the Laguna Niguel Municipal Code and/or the City's Emergency Operations Plan, as needed.



**PS-3.2 Maintain and Monitor Flood Capacity.** Coordinate with the Orange County Flood Control District to ensure flood control facilities are properly maintained and functioning. This includes assessing the potential need for increased flood control capacity in response to changing environment and extreme weather, in order to protect the community from flood hazards.

**PS-3.3 Storm Drainage Infrastructure.** Regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure the system is functioning properly.

**PS-3.4 Development in Flood Zones.** Ensure all development projects in designated Special Flood Hazard Zones prone to flooding incorporate design features that minimize health, safety, and property risks both on-site and off-site due to flooding.



**PS-3.5 Flood Control and Stormwater Management.** Ensure development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

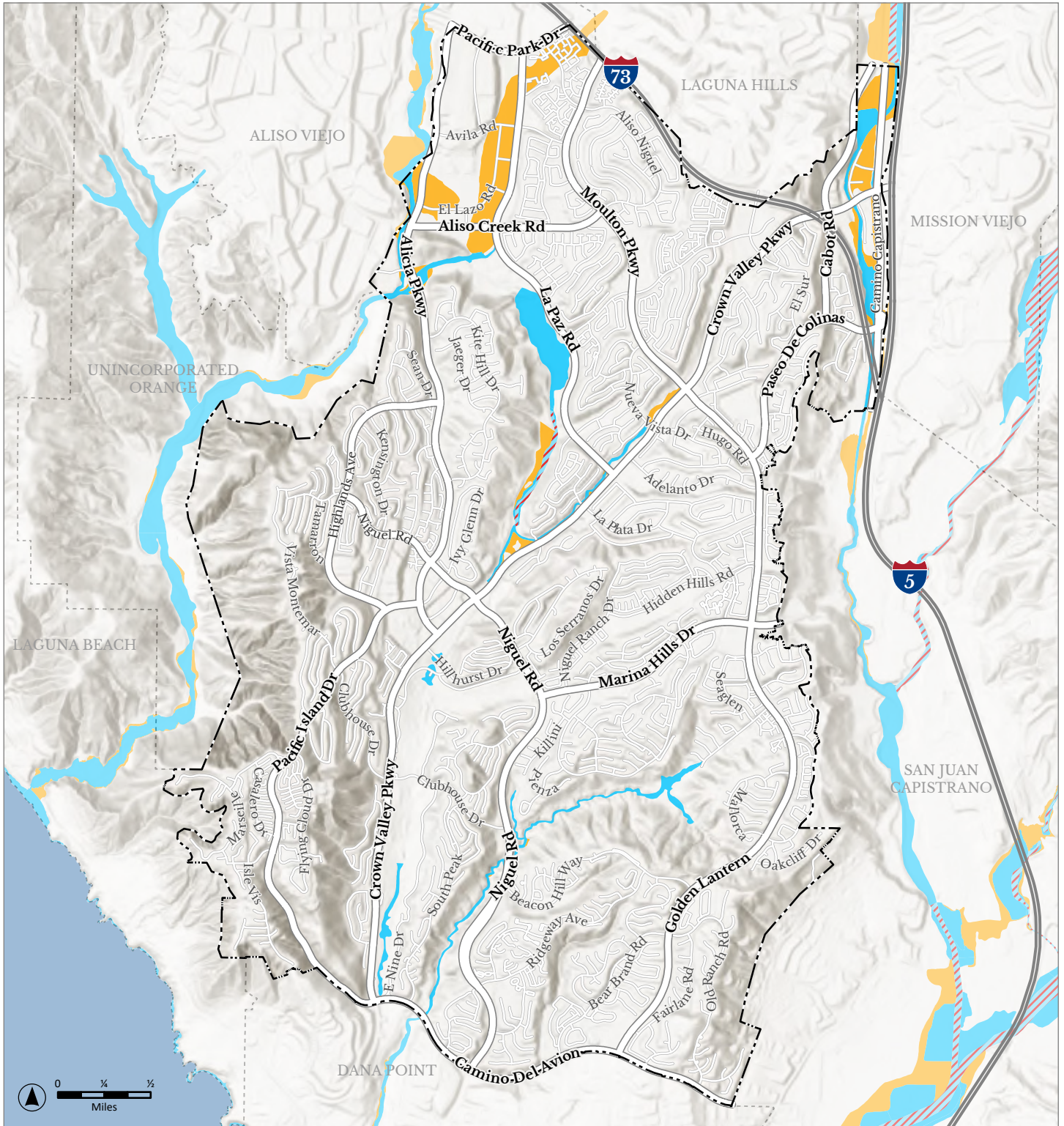
**PS-3.6 Flood Zone Mapping.** Coordinate with the Federal Emergency Management Agency to ensure that Federal Insurance Rate Maps are current and accurately depict flood hazards in the City.

**PS-3.7 Flood Hazard Funding Opportunities.** Collaborate with the Orange County Flood Control District to pursue funding for local drainage improvements, including Federal Emergency Management Agency's Hazard Mitigation Grants, Flood Mitigation Assistance Program, and the Pre-disaster Mitigation Program, as well as state grants from the California Environmental Protection Agency and the California State Water Resources Control Board.

**PS-3.8 Public Education (Flood Hazards).** Promote public awareness about flood risks, preparedness strategies, and response measures.



## PS-3 Flood Zones



Data sources: FEMA NFHL\_06059C 03/12/2021, ; City of Laguna Niguel; Orange County GIS.

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— Laguna Niguel City Boundary

100-year Flood Zone

Regulatory Floodway

— Other Jurisdictions

500-year Flood Zone

unshaded Area of Minimal Flood Hazard



# FIRE HAZARDS

## Goal PS-4

Minimize the risk of injury and damage to property and the environment caused by urban and wildland fire hazards.

The combination of varied topography, regional climate, and vegetation renders Laguna Niguel and surrounding areas vulnerable to wildfires. These risks are heightened by factors such as high seasonal temperatures, low humidity, dry vegetation, and strong winds.

The California Department of Forestry and Fire Protection (CAL FIRE) is responsible for identifying Fire Hazard Severity Zones (FHSZ) to assess wildfire risk statewide. These zones are developed using a science-based and field-tested modeling that considers factors influencing fire likelihood and behavior. There are three designated levels of hazard: moderate, high, and very high.

Laguna Niguel, as an incorporated city, is classified as a Local Responsibility Area (LRA), meaning it is responsible for fire protection. Figure PS-4 illustrates the current FHSZ within the City, as identified by CAL FIRE and adopted by the City Council. As shown in Figure PS-4, these zones include Very High, High, and Moderate designations located in the western and southern portions of Laguna Niguel, as well as an area south of Aliso Creek Road and east of Alicia Parkway.

In addition to wildland fire risk, the City is also susceptible to urban fires, which can start when a structure's flammable materials ignite and spread quickly, posing a significant threat to life, property, and the environment.



Urban fire risk is particularly high in older structures and neighborhoods built before the adoption of modern building codes for fire safety. Other contributing factors to this risk include the height and use of buildings, storage of combustible materials, the types of construction materials used, and whether or not there are sprinkler systems in place.

Orange County Fire Authority (OCFA) services Laguna Niguel to provide fire prevention, protection, and response services. This also includes community outreach programs and educational initiatives promoting fire safety awareness and prevention. Three stations are located within the City boundaries (refer to Figure 3-5 in the ECR for their locations). The City benefits from access to all of OCFA's resources, including service calls from stations located outside of the City.

## PS-4 Policies

- PS-4.1 Fire Authority Staffing and Resources.** Ensure Orange County Fire Authority staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively address the community's evolving needs while providing adequate fire prevention services.
- PS-4.2 Wildfire Hazard Mapping.** Maintain accurate and current geographic information system mapping of the City's Fire Hazard Severity Zones. Upon any designation changes by California Department of Forestry and Fire Protection, update the City's geographic information system mapping accordingly.
- PS-4.3 Fire-Safe Design.** Ensure Orange County Fire Authority review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, emergency vehicle access, and visible home and street addressing and signage, in accordance with current California Building and Fire Codes, including local amendments adopted by the City.
- PS-4.4 Fuel Management/Modification.** Support fuel management/modification requirements consistent with state law and Orange County Fire Authority requirements, and other fuel reduction and weed abatement approaches to reduce significant fire risk. When fuel modification or reduction is required, ensure a balance between fuel management for the benefit of structures and preserving vegetation and sensitive habitats.
- PS-4.5 Urban Fire Risks.** Coordinate with Orange County Fire Authority to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily developments, critical facilities, public assembly facilities, industrial buildings, and other nonresidential buildings.
- PS-4.6 Critical Facilities (Fire Hazard Zones).** When feasible, locate new essential public facilities and infrastructure (e.g., hospitals, emergency shelters, fire and police stations, emergency command centers, communication facilities, and





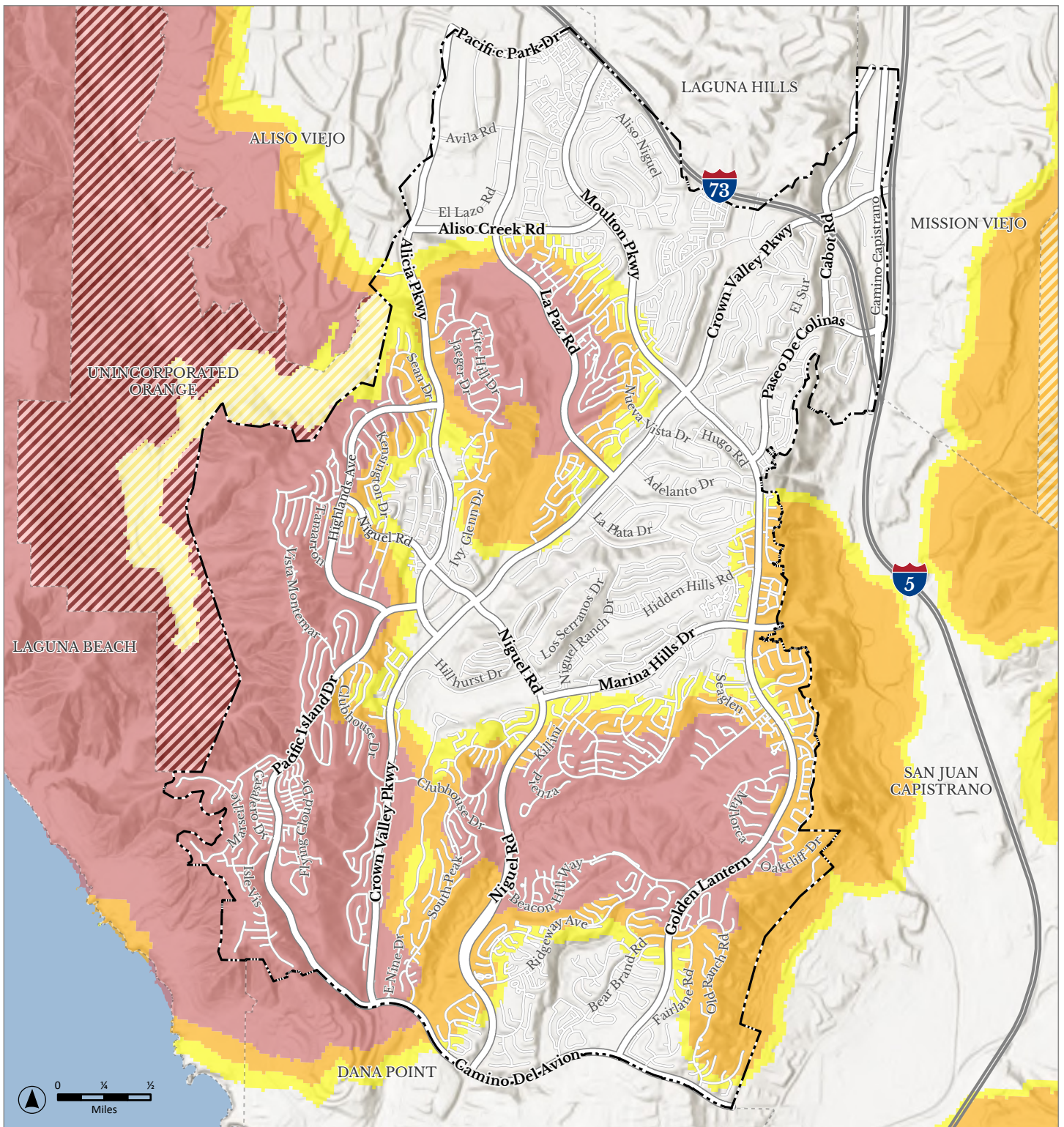


utilities) outside of Very High Fire Hazard Severity Zones. If located within these zones, utilize construction methods or other measures to minimize risk.

- PS-4.7 Post-Fire Recovery Plan.** Collaborate with agencies such as the California Department of Forestry and Fire Protection, Orange County Fire Authority, and other applicable government and nongovernmental organizations to create a post-fire recovery plan that addresses the full recovery of burned areas and minimizes the risk of future fire damage, mud flows, and repetitive losses.
- PS-4.8 Water Supply Systems.** Coordinate with Moulton Niguel Water District to ensure the availability and maintenance of adequate water supply systems and fire flow for structural fire suppression.
- PS-4.9 Fire Hazards Agency Coordination.** Coordinate with federal, state, and regional fire protection agencies on fire suppression, rescue, training, education and to update emergency evacuation and hazard mitigation plans, as necessary.
- PS-4.10 Public Education (Fire Safety).** Collaborate with the Orange County Fire Authority on public education and outreach programs on fire safety awareness and prevention to minimize risks and potential damage to life, property, and the environment. This includes an emphasis on defensible space and on protecting vulnerable and at-risk populations, such as seniors and those with limited mobility.
- PS-4.11 Fire Protection Plans.** Require adequate fire protection plans and emergency vehicle access for new development in VHFHSZs.
- PS-4.12 Non-conforming Development.** Mitigate, as feasible, existing non-conforming development to contemporary fire safe standards, including building design, road standards, and vegetative hazards.
- PS-4.13 Access.** Require sufficient ingress/egress access points in all new development to support firefighting activities, as determined by the Orange County Fire Authority.
- PS-4.14 Fire Hazard Reduction Projects.** Coordinate with Orange County Fire Authority to identify and maintain fire hazard reduction projects, including community fire breaks and public and private road vegetation clearance.
- PS-4.15 Development in Very High Fire Hazard Severity Zones.** Avoid or minimize new residential development in VHFHSZs as feasible.



## PS-4 Fire Hazard Severity Zones



Data sources: CALFIRE/State Office of the Fire Marshall, State Responsibility Areas effective April 1, 2024 and Local Responsibility Areas effective March 24, 2025; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group  
April 24, 2025

- Laguna Niguel City Boundary
- Other Jurisdictions

### Fire Hazard Severity Zones in State Responsibility Areas

- Very High
- High
- Moderate

### Fire Hazard Severity Zones in Local Responsibility Areas

- Very High
- High
- Moderate



# EMERGENCY PREPARATION AND RESPONSIVENESS

## Goal PS-5

A community that is well-prepared for emergency response and disaster management to minimize impacts on persons, property, the environment, and essential services.

Laguna Niguel contracts with the Orange County Sheriff's Department (OCSD) and Orange County Fire Authority (OCFA) for emergency services and programs.

The City is a member of the Orange County Operational Area and the Orange County Emergency Management Organization. Both entities provide "mutual aid" to communities via OCSD, OCFA, and the State of California Office of Emergency Services.

The City's Emergency Operations Plan (EOP) outlines the actions to be taken by applicable staff to prevent disasters where possible, reduce the community's vulnerability to unavoidable disasters, establish clear actions for protecting citizens during disasters, respond effectively to disasters, and facilitate community recovery in the aftermath of disasters.

The City's Local Hazard Mitigation Plan (LHMP) was developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and FEMA's 2023 Local Hazard Mitigation Plan guidance. The LHMP includes a process for identifying and profiling hazards, analyzing the risks to people and facilities, and outlines mitigation actions to reduce or eliminate those risks. The Local Hazard Mitigation Plan can be found at this location: Document Center (<https://cityoflagunaniguel.org/1485/Local-Hazard-Mitigation-Plan>). The Public Safety Element incorporates and builds upon the LHMP's mitigation policies. The LHMP is required to be updated at least every five years to maintain eligibility for FEMA mitigation project grants, pursuant to DMA 2000.



## PS-5 Policies

- PS-5.1 Emergency Services Staffing and Resources.** Ensure emergency and disaster staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely responses, and effectively address the community's evolving needs.
- PS-5.2 Emergency Preparedness.** Ensure the City's adopted emergency plans, policies, and procedures, including both the Local Hazard Mitigation Plan and Emergency Operations Plan, are maintained and updated to reflect changing conditions, best practices, and the regulatory environment. This includes ensuring City compliance with Assembly Bill 2140, Senate Bill 379, and any subsequent federal or state legislation. These efforts are necessary to maintaining eligibility for public assistance grants and support the City's ability to respond effectively to emergencies.
- PS-5.3 Emergency Response and Evacuation.** Assess emergency response and evacuation capabilities to address potential disruptions from current and future hazards that may affect the community. If areas with inadequate evacuation routes are identified (see SB 99 Evacuation Routes Analysis), develop appropriate mitigation measures, improvement plans, or education programs to ensure safe evacuation.
- PS-5.4 Emergency Transportation Routes.** Maintain a transportation network that supports effective emergency response and evacuation operations. This includes maintaining both a primary and alternative mobile Emergency Operations Center.
- PS-5.5 Disaster Response and Recovery (Critical Facilities).** Coordinate with agencies and service providers to ensure the resilience of essential public facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.
- PS-5.6 Disaster Response and Recovery (Coordination).** Coordinate disaster preparedness and recovery with local key stakeholders (officials, schools, businesses, and organizations), neighboring jurisdictions, other governmental agencies, and utility providers, including through mutual aid agreements with other agencies, to ensure efficient and adequate resources, facilities, and support services during and after emergencies.
-  **PS-5.7 Resiliency Infrastructure.** Maintain a local system of public and private resilience hubs, cooling centers, and emergency shelters to provide safe places for residents during hazard events or emergency conditions.
- PS-5.8 Public Education (Emergency Preparedness).** Sponsor and promote public awareness and training programs focused on emergency and disaster preparedness, as well as response protocols and procedures.
- PS-5.9 Emergency Preparedness Information.** Maintain an Emergency Preparedness page on the City's website that provides links to other resources, such as the Evacuation Zones, Earthquake Preparedness, and other emergency preparedness information.
- PS-5.10 School Safety (Emergency Preparedness).** Coordinate with local schools on their emergency and disaster preparedness programs and response protocols and procedures.

# RESILIENCY PLANNING

## Goal PS-6

A community that is resilient to changing environmental patterns, including extreme weather events and other adverse effects on public health, wellbeing, and safety.

As Laguna Niguel plans for the future, state law requires the City to consider climate impacts facing California as well as strategies to adapt and be more resilient to change in climate effects. Due to change in climate, Laguna Niguel may experience more intense and frequent heat waves, droughts, wildfires, severe storms, and extreme weather events. Exposure to these events can leave a community vulnerable to increased occurrences of wildland fires, flooding, reduced air quality, decreased availability of fresh water, and negative impacts on wildlife. These effects can potentially generate multiple interconnected challenges for public health and safety.

## PS-6 Policies

-  **PS-6.1 Change in Climate Coordination.** Participate in regional discussions and initiatives aimed at reducing impacts from change in climate.
-  **PS-6.2 Flood Protection Resources.** Provide flood protection resources and services (signage, sandbags, etc.) at designated public facilities before, during, and after extreme weather events, as feasible.
-  **PS-6.3 Open Space Land.** Maintain designated open space land and natural systems as part of a comprehensive strategy to increase climate resilience.
-  **PS-6.4 Energy Supply.** Promote plans and programs that increase energy conservation and the use of sustainable energy sources.
-  **PS-6.5 Severe Weather Preparedness.** Support individuals with limited mobility or transportation access to emergency shelters during extreme heat or other severe weather events.
-  **PS-6.6 Sustainable City Facilities.** Prioritize sustainable and resilient building practices and upgrades for City facilities, infrastructure, and equipment.
-  **PS-6.7 Essential Infrastructure Collaboration.** Collaborate with federal, state, regional, and/or local partners to monitor changing weather patterns and evaluate the effectiveness and resilience of existing essential infrastructure and programs in adapting to changing environmental conditions.
-  **PS-6.8 Public Education (Resilient Planning).** Promote community awareness of climate-resilient actions that can be implemented by citizens and businesses, such as water conservation, on-site water collection, passive solar designs, and alternative energy strategies.
-  **PS-6.9 Open Space Resilience.** Encourage plans and programs that enhance climate resilience through open space strategies.





## POLICE PROTECTION

### Goal PS-7

High standards of public safety through effective police services, community outreach, and ongoing evaluation of programs and practices.

Laguna Niguel contracts with the Orange County Sheriff's Department (OCSD) for police services, which operates from the Laguna Niguel substation at City Hall. OCSD's primary responsibilities include crime prevention, proactive field patrol, crime investigation, and traffic enforcement. Additionally, the department is actively involved in community outreach programs and educational initiatives aimed at promoting effective crime prevention strategies.

Laguna Niguel has established high standards for public safety and protection, making it one of the safest cities of its size in the nation. To maintain these high levels of safety, it is essential to continually assess programs, meet response time objectives, and support crime prevention efforts through education and thoughtful project design practices.







## PS-7 Policies

- PS-7.1 Police Services Staffing and Resources.** Ensure police staffing levels, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively address the community's evolving needs.
- PS-7.2 Monitoring Statistics and Trends.** Evaluate the City's population growth, development trends, and crime and service statistics to ensure that adequate police service levels are maintained.
- PS-7.3 Public Education (Crime Prevention).** Support community outreach programs and educational initiatives aimed at informing residents and businesses about crime prevention strategies, fostering a collaborative relationship between police services and the community to enhance safety and reduce crime.
- PS-7.4 Crime Prevention Through Environmental Design.** Consider Crime Prevention Through Environmental Design principles for crime-reduction and public safety benefits in the design and planning of development projects.
- PS-7.5 Transportation Safety Programs.** Support transportation safety campaigns and enforcement efforts for motorists, bicyclists, and pedestrians to reduce accidents and promote safe behaviors throughout the community.

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