



Wildfire Mitigation and Fire Safety Report

2025 Update



Intentionally left blank



Dear Community Members,

The community of Laguna Beach is known for our breathtaking coastline, coastal hills, village atmosphere, and arts and cultural heritage. However, the natural beauty that makes Laguna Beach such a special place also presents one of our greatest challenges - the risk of wildfire.

Nearly all of Laguna Beach falls within a Very High Fire Hazard Severity Zone as designated by CalFire. Our steep canyons, coastal hillsides, and thousands of acres of open space, combined with dry conditions and powerful Santa Ana winds, make our community especially vulnerable to wildfires. We have seen firsthand how quickly fire can threaten lives, homes, and businesses, as witnessed in the devastating 1993 Laguna Fire and more recently in 2022, with the Coastal Fire and Emerald Fire.

We note that following the City Council adoption of the 2019 Wildfire Mitigation and Fire Safety Report (“2019 Report”), the City of Laguna Beach has spent approximately \$25 million to complete and implement 24 of the 2019 Report’s recommended action items, which has significantly improved public safety. An additional 16 action items from the 2019 Report are currently in progress.

In response to the massive wildfires that devastated our neighbors in Los Angeles County in January 2025, the City Council reestablished the Wildfire Mitigation and Fire Safety Ad Hoc Committee and asked the two of us to serve as the members of the Subcommittee as we did in 2019. Over the last three months, the Ad Hoc Committee has collaborated with City Staff and several outside agencies to review the status of the action items recommended in the 2019 Report and to identify additional measures that could further reduce wildfire risks. The attached report (“2025 Update”) is an update to the 2019 Report.

Key new initiatives recommended in this update include:

- Additional improvements to and hardening of public infrastructure
- Expanded undergrounding along key evacuation routes
- Enhanced community preparedness for evacuation

Transmittal Letter

- Expanded fuel modification on public lands
- Home hardening and vegetation management by residents on private property

The update primarily focuses on action items that the City, our Water Districts and electric utility companies can implement; however, the Ad Hoc Committee strongly believes that one of the most important steps to improving wildfire safety in the city is for the owners of private property to reduce fire risks on their property. This can best be accomplished by properly maintaining vegetation and trees on private property and by taking steps to make residences more fire resistant through home hardening. The City stands ready to assist our residents by identifying the best practices for home hardening and the necessary protocols for vegetation management.

Wildfire threat is a reality for Laguna Beach, but through prevention, preparedness, and community action, we can reduce the risk and safeguard our city. As we continue to strengthen our wildfire mitigation efforts, we encourage you to prepare by taking several simple but important steps: Assemble and maintain a disaster preparedness go-bag, register for our alert systems such as AlertOC and Nixle, familiarize yourself with evacuation routes (including a practice run or two) and contact our staff at the Laguna Beach Fire Department for a free fire inspection of your property.

For more information, please visit our website at lagunabeachcity.net/GetPrepared for preparedness guides and resources.

Thank you for being a part of this effort. Together, we can protect our beautiful hometown for generations to come.

Very truly yours,



Bob Whalen
Councilmember



Sue Kempf
Councilmember

Wildfire Mitigation and Fire Safety Report

2025 Update



505 Forest Avenue
Laguna Beach, CA 92651
(949) 497-3311
lagunabeachcity.net

Prepared By:

Ad Hoc Committee Members -

Bob Whalen, Councilmember
Sue Kempf, Councilmember

In collaboration with -

Dave Kiff, City Manager
Gavin Curran, Assistant City Manager
Jeremy Frimond, Assistant City Manager
Niko King, Fire Chief
Andrew Hill, Acting Deputy Fire Chief
Jeff Calvert, Police Chief
Michael Peters, Police Captain
Sarah Limones, Emergency Operations Coordinator
Mark McAvoy, Director of Public Works
Tom Perez, City Engineer
Michelle Bannigan, Finance Director
Shannon Espinoza, Finance Manager
Shelly Bennecke, Chair - Emergency Disaster Preparedness Committee
Rick Shintaku, South Coast Water District
Keith Van Der Maaten, Laguna Beach County Water District
Susan Thomas, Board Member - Emerald Bay Services District
Mike Dunbar, General Manager - Emerald Bay Services District
Jordan Villwock, Consultant

Intentionally left blank

Table of Contents

Executive Summary	1
Summary of Risk Factors	3
Update to the Fire Hazard Severity Zones by CalFire	4
Existing Programs and Resources to Mitigate Risks	6
Coordination With Other Agencies	8
Additional Mitigation Measures to be Considered	11
Recommended Action Items – 2025	14
Section 1: Status of 2019 Wildfire Mitigation and Fire Safety Report Action Items	28
2019 Wildfire Mitigation and Fire Safety Report Action Items - Status as of Sept 2025 ...	29
Section 2: Evacuation and Alert & Warning	35
Evacuation Planning	35
Alert and Warning Systems	44
Evacuations and Alert & Warning – Recommended Action Items	45
Section 3: Fuel Modification	47
Fuel Modification Expansion Strategy Under Governor’s Executive Order	50
Fuel Modification Schedule for 2025	51
Fuel Modification – Recommended Action Items	53
Section 4: Infrastructure	55
Electrical System	55
Undergrounding	57
Southern California Edison Circuits	59
San Diego Gas and Electric Circuits	64
Water Systems	65
Public Safety Radio Facilities Circuits	65
Telecommunications Facilities	66
Infrastructure – Recommended Action Items	71
Section 5: Public Safety Technology	77
Public Safety Technology – Recommended Action Items	79
Section 6: Community Preparedness	82
Community Preparedness – Recommended Action Items	86
Section 7: Funding	90
Funding Strategies	90
Funding Strategies for Possible Action Items Categorized as “Short-Term”	91
Conceptual Funding Strategies for Action Items Categorized as “Medium-Term”	91
Conceptual Funding Strategies for Action Items Categorized as “Long-Term”	92
Financial Impacts of Previous Disasters	92

Executive Summary



Intentionally left blank



Summary of Risk Factors

The City of Laguna Beach is a well-known coastal community with a population of just over 23,000 residents that is surrounded by over 16,000 acres of open space. The 2025 CalFire Fire Hazard Severity Zone map places nearly the entire city within a Very High Fire Hazard Severity Zone, the highest risk designation possible. The city's topography is made up of coastal cliffs and hilly terrain that contains significant vegetation making wildfires the city's largest public safety threat.

Laguna Beach is no stranger to wildfire. The city's most devastating wildfire occurred on October 27, 1993, when a Santa Ana wind-driven wildfire, known as the Laguna Fire, consumed over 14,000 acres and forced the evacuation of the entire city. In total, the Laguna Fire destroyed 441 homes and structures in less than 24 hours.

In the last ten years, the city has experienced five wildfires:

1. Canyon Fire - July 3, 2015, on Laguna Canyon Road and Canyon Acres
2. Aliso Fire – June 2, 2018, in Aliso Woods Canyon Park
3. Emerald Fire – February 10, 2022, in Emerald Canyon above Emerald Bay
4. Coastal Fire – May 12, 2022, in South Laguna behind Aliso Creek
5. Rancho Fire – July 7, 2025, in open space near Arch Beach Heights

Each of these wildfires forced immediate evacuations and burned vegetation in the city's open space while the Coastal Fire also destroyed homes in neighboring Laguna Niguel.

The wildfire risks from the natural environment in Laguna Beach are compounded by certain constraints and limitations in the city which include the following:

1. Limited Evacuation Routes: There are only three evacuation routes out of the city: North Coast Highway, South Coast Highway, and Laguna Canyon Road.
2. Overhead Electrical Utilities: Overhead electrical lines present at least two significant threats to public safety. First, these lines can ignite wildfires. Downed or sparking power lines have caused wildfires in the city and in many major wildfires in the state. Second, these lines, if downed during an emergency, can block key evacuation routes and impede access by first responders. While the City and residents continue to underground electrical utilities, specific evacuation routes such as Laguna Canyon Road, which is also surrounded by open space, remain above-ground.

3. Neighborhoods with Impaired Access: Many streets are narrow, others are dead-end, and certain areas are interior box canyons and only have one way in and out. These areas create challenges both for evacuation (egress) and access by first responders (ingress).
4. Older Structures/Buildings: As significant number of structures in Laguna Beach were built prior to 2008, when new building standards took effect to increase building safety in the wildland-urban interface. Therefore, Laguna Beach has a predominance of structures/buildings lacking fire resistive characteristics. While the City's building codes are now as advanced as possible and many homes are built to the highest codes, these do not apply retroactively.
5. Visitor Impact: Laguna Beach has a daytime population of over 28,000 and receives between six and seven million visitors per year, which complicates evacuation efforts and requires planning to consider a much larger volume of evacuees than just residents. Many visitors will be unfamiliar with the City's evacuation plans and the available alert and warning systems.

Update to the Fire Hazard Severity Zones by CalFire

On March 24, 2025, the California Office of the State Fire Marshal (OSFM) issued its 2025 Recommended Local Responsibility Area (LRA) Fire Hazard Severity Zone (FHSZ) maps for the City of Laguna Beach. The 2025 maps updated the previous version of the maps from 2011. The FHSZ maps identify areas of Moderate, High, and Very High fire hazard and are a critical tool in California's wildfire preparedness and land-use planning strategy. Developed through robust fire science and risk analysis, these maps help guide building standards, defensible space requirements, and emergency response planning. The 2025 FHSZ maps for Laguna Beach are available at lagunabeachcity.net/FHSZMap.

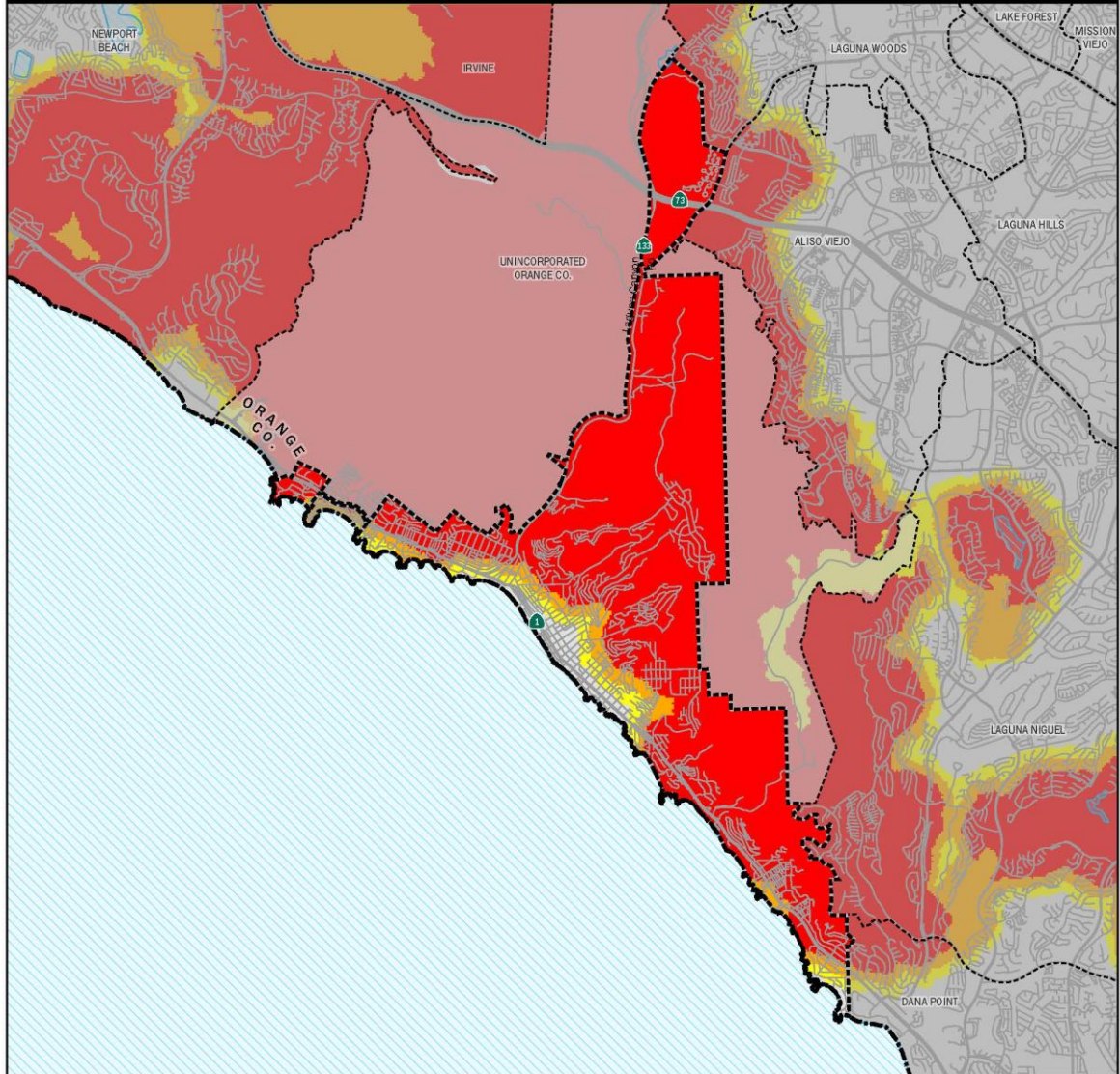
When comparing the 2025 map with the 2011 maps, the city has an increased area within the Very High, High, and Moderate severity zones. More information on the maps and an interactive tool to compare the 2011 and 2025 maps can be found on CalFire's website: osfm.fire.ca.gov/FHSZ. The 2025 map of the city is below.

CITY OF LAGUNA BEACH – ORANGE COUNTY



Local Responsibility Area Fire Hazard Severity Zones

As Identified by the
State Fire Marshal
March 24, 2025



Fire Hazard Severity Zones (FHSZ) in Local Responsibility Area (LRA), as Identified by the State Fire Marshal

Very High High Moderate

Fire Hazard Severity Zones in State Responsibility Area (SRA), Effective April 1, 2024

Very High High Moderate



Projection: NAD 83 California Teale Albers
Scale: 1:61,000 at 11" x 17"

--- Incorporated City Waterbody
Unzoned LRA

Government Code section 51178 requires the State Fire Marshal to identify areas in the state as moderate, high, and very high fire hazard severity zones based on consistent

statewide criteria and based on the severity of fire hazard that is expected to prevail in those areas. Moderate, high, and very high fire hazard severity zones shall be based on fuel loading, slope, fire weather,

and other relevant factors including areas where winds have been identified by the Office of the State Fire Marshal as a major cause of wildfire spread.

The State of California and the Department of Forestry and Fire Protection make no representations or warranties regarding the accuracy of data or maps. Neither the State nor the Department shall be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any claim by any user or third party on account of, or arising from, the use of data or maps.

Gavin Newsom, Governor, State of California
Wade Crowfoot, Secretary for Natural Resources, CA Natural Resources Agency
Joe Tyler, Director/Fire Chief, CA Department of Forestry and Fire Protection
Daniel Berlant, State Fire Marshal, CA Department of Forestry and Fire Protection

Data Sources:
CAL FIRE Fire Hazard Severity Zones (FHSZSRA23_3, FHSZLRA_25_1)
CAL FIRE State Responsibility Areas (SRA25_1)
City and County boundaries as of 10/22/24 (CA Board of Equalization)

Existing Programs and Resources to Mitigate Risks

To reduce the threat of wildfire, in July of 2019, the City of Laguna Beach approved its inaugural Wildfire Mitigation and Fire Safety Report (“2019 Report”) which included 29 short term (1-2 years) recommendations, 6 medium term (3-5 years) recommendations, and 7 long term (5+ years) recommendations. The City has completed 24 recommendations and 16 are in progress. To date the City has invested approximately \$25 million to implement the recommendations and enhance the safety of the community since the 2019 Report. A complete list of implemented recommendations can be found in Section 1.

Some of the City’s completed and ongoing actions from the 2019 Report are summarized below:

1. Fuel Modification: The City has a well-established fuel modification program in place to help create defensible space at the wildland-urban interface. This perimeter helps protect structures, lives, and property. There are 27 fuel modification zones (FMZs”) which cover about 480 acres. The City continues to implement the fuel break program using goat grazing and hand crews to create a strip of land with reduced vegetation around most exterior parts of the city, and some interior canyons. Generally, this program creates a fuel break of about 100 feet between structures and vegetation in the open space. The City also implements a weed abatement program to address invasive weeds and grasses on properties throughout the city. The program reduces the potential fire ignition source with approximately 400 properties in the program.



Goat grazing behind City Hall

LBFD reviews plans and conducts inspections for new construction and remodels of multi-family, commercial and industrial occupancies for compliance with all applicable state, federal and municipal codes. This includes fuel modification in landscapes and fire / life safety in multi-family and commercial buildings. Maps of the fuel modification zones are available on the City website and may be found at lagunabeachcity.net/FirePrevention.

2. Evacuation and Alert & Warning: The City has an established Evacuation Plan and an Alert and Warning Plan that is highlighted by the city-wide Outdoor Warning System

(OWS) which are speakers that are strategically placed throughout the city. The OWS has redundant alerting through solar power and satellite activation capabilities. Additionally, in 2021 an Evacuation Time Study was completed which provided projected evacuation times based on multiple different scenarios, including wildfire. The city has 22 pre-established evacuation management zones with public-facing evacuation maps. The City also created an interactive evacuation mapping system using GIS so that the public can see what zones are under evacuation orders or warnings in real-time. Maps of the evacuation zones are available on the City website at lagunabeachcity.net/Evacuation.

3. Public Safety Resources: The City of Laguna Beach has its own Police Department, Fire Department, Public Works Department, Marine Safety Department, and a full-time Emergency Operations Coordinator that are valuable assets during any emergency, particularly wildfire. These local resources are augmented by mutual aid agreements with surrounding agencies and provide access to specialty equipment such as firefighting aircraft and heavy equipment. The City maintains contracts with landscape contractors and arborists for tree removal and heavy equipment which can provide additional resources during an emergency. Additionally, the City has an executed Memorandum of Agreement with surrounding cities for emergency management resources including back up Emergency Operations Center capabilities.
4. Utility Undergrounding: Since 2019, the City has created six underground utility districts using local funds, California Public Utility Commission (CPUC) Rule 20A credits, and property owner self-assessments. Construction has been completed on three of the districts resulting in approximately 2,500 feet of overhead lines being undergrounded and 20 poles removed. Coast Highway, Laguna Canyon Road, Park Avenue, and Bluebird Canyon Drive were specifically identified in the 2019 Report as key evacuation routes. The poles and wires along Park Avenue have been removed, and the poles and wires along Bluebird Canyon Drive are scheduled to be removed by Summer 2025. The lines along Coast Highway are planned to be placed underground by SCE as part of the CPUC Rule 20A program. The City and CalTrans are continuing work on Laguna Canyon Road in two components: overhead lines recently have been taken down between El Toro Road and State Route 73, and the “Protect and Connect” project between El Toro Road and Canyon Acres is working

to underground the remaining 2.5 miles of overhead utilities along this critical evacuation route.

Coordination with Other Agencies

In 2019 the City included both the Laguna Beach County Water District and the South Coast Water District in the creation of the 2019 Report which included recommended improvements by each water district to its system. In crafting the 2025 Update, the Ad Hoc Committee has again involved the water districts and invited the Emerald Bay Service District and the Emerald Bay Community Association to participate in the preparation of the report. Below is a summary of past and planned actions by these agencies to improve wildfire resilience.

1. Laguna Beach County Water District: The Laguna Beach County Water District (LBCWD) continues to enhance wildfire resilience and emergency readiness. Since 1993, the District has added two reservoirs with 8 million gallons of additional storage, upgraded its technology for remote operations, and enhanced emergency response with portable pumps and generators. The District has installed two helicopter refilling facilities along the ridgelines of the City that enhance aerial firefighting operations. In partnership with the Orange County Fire Authority, the City of Laguna Beach, and the University of California, San Diego, two artificial intelligence (AI) fire detection cameras have been installed at the District's Ridge Reservoir site with plans to expand camera coverage.

LBCWD is planning additional projects to improve water system performance and reliability during emergencies including: the installation of a third helicopter refilling station; additional AI cameras at the District's Rimrock, Jahraus, Sweany, and El Morro Reservoir sites; diversifying water supply through a new well for increased groundwater; participating in the South Coast Water District planned desalination plant at Doheny Beach; boosting backup power; evaluating subgrade hydrants and the need for additional hydrants in certain locations; and supporting Emerald Bay's hydrant expansion.

2. South Coast Water District: South Coast Water District (SCWD) has been actively implementing and planning various infrastructure projects that will help improve water reliability and resilience. Construction on SCWD's Potable Water Reservoir 2B Replacement Project (Reservoir 2B Project) recommended in the 2019 Report was completed in May 2025. Reservoir 2B is located off Ceanothus Drive, in a hilly

wildland-urban interface above the South Laguna Beach residential neighborhood and is a critical water storage facility that not only serves local customers with continued potable water supplies but also supports maintaining critical water pressure in the event of local wildfires. The Reservoir 2B Project has doubled previous water storage capacity by demolishing an existing 100,000-gallon potable water reservoir built in the 1940s and replacing it with two (2) 100,000-gallon reservoirs.

SCWD will also begin construction later this year to upsize existing 6-inch and 8-inch diameter potable water pipelines in Sunset Avenue above Mission Hospital (Mission Hospital Pipeline Project). This Pipeline Project will provide increased hydraulic capabilities within SCWD's distribution system to maximize available storage capacity in the 490 Pressure Zone, support wildfire mitigation efforts, and increase availability of water supplies and system pressure resulting from the Reservoir 2B Project. The Project will also improve fire flow capacity within the adjacent areas and provide up to 4,000 gallons per minute (GPM) of fire flow at 20 pounds per square inch (PSI) residual for institutional and commercial properties in compliance with SCWD's Infrastructure Master Plan.

SCWD recently issued a Notice to Proceed to a joint venture team to begin Phase 1 design services for the Doheny Ocean Desalination Project. Once completed, this Project will produce up to 5 million gallons per day of new local drinking water supply for the region, reduce reliance on imported water supplies, and substantially enhance reliability and quality of water supply to the SCWD service area and Laguna Beach. SCWD has also implemented reliability enhancements at various pump stations, including the purchase of portable generators and installation of quick connects, along with ongoing implementation of fire hardening projects at various District facilities, including pump stations, lift stations, and SCWD's headquarters on West Street in Laguna Beach.

3. Emerald Bay Service District (EBSD) and Emerald Bay Community Association (EBCA): Although Emerald Bay is unincorporated County territory, its geographic proximity, history of wildfires, and the inevitability of the City's fire and police response being first on scene to a wildfire that threatens Emerald Bay, it is important that the City works closely with EBSD and EBCA on mitigation and preparedness. The

EBSD and EBCA have completed the following efforts to better mitigate and prepare for wildfires:

Wildfire Preparation Town Hall

- January 17, 2025, held a community town hall with presentations by the Orange County Fire Authority (OCFA). (recorded and sent to entire community)
- Homeowners were encouraged to take advantage of complementary wildfire assessment of individual homes by OCFA.

Wildfire Task Force

- Formed Joint EBSD and EBCA Wildfire Task Force after the Palisades fire to explore ways to harden the community from wildland fires.
- Retained consultant to advise a committee on prioritizing actions. The consultant recommended:
 - Creating a Community Wildfire Prevention Plan
 - Greater fuel management
 - EBCA and homeowner structure hardening efforts
 - Expand community notification system
 - Refine evacuation plan

Community Wildfire Protection Plan

- Retained Dudek to prepare a report on Fire Modeling

Fuel Modification Actions

- Retained contractor to aggressively modify any fuel on EBCA property
- Continuing fuel modification 170 feet beyond community boundary
- Working with California State Parks and OC Parks to expand fuel modification beyond 170 feet
- Working with Irvine Cove to expand fuel modification beyond both boundaries

Community Notification System

- Installation of an emergency siren to notify entire community
- Since Emerald Fire in February 2022, EBSD has been working to install a siren at the Sweany Reservoir in cooperation with LBCWD
- Met with Assembly Member Dixon to request assistance

- Developing campaign to encourage homeowners to harden homes via intra community messaging system
- Plan to provide access to siren to City of Laguna Beach emergency personnel

Community Emergency Response Team

- CERT was formed in approximately 1994
- Active CERT conducts community wide drills two times each year and radio drills for leaders monthly
- CERT will be engaged to encourage home hardening and refine evacuation plans
- Plan to work with City of Laguna Beach Community Emergency Coordinator to familiarize EBCA staff and CERT with City operations

Water Supply and Accessibility

- Evaluating installation of additional hydrants near “gateway properties”
- Evaluating additional water lines for firefighting

Additional Mitigation Measures to be Considered

Since the original Wildfire Mitigation and Fire Safety Report was approved in 2019, there have been several large wildfires in communities similar to Laguna Beach that face ingress and egress challenges like those faced by the City. Below is a partial list of recent wildfires that remind us of the potential for destruction of property and loss of life that is possible in Laguna Beach. Both the City and our residents have a collective responsibility to further reduce the probability of wildfire loss in our community.

Date	Fire Name	County	Cause	Acres	Deaths	Structures Lost
Aug 2020	North Complex	Butte	Lightning Activity	318,935	15	2,352
Aug 2023	Lahaina	Maui	Electrical Lines	2,170	102	2,200
Jan 2025	Palisades	Los Angeles	Human Activity	23,713	11	6,000+
Jan 2025	Eaton	Los Angeles	Electrical Lines	14,117	16	7,000+

These wildfires transitioned into areas of dense structures due to key vulnerabilities that enabled devastating fire behavior. Common factors included widespread pre-2008 construction which lacks modern fire-resistant standards as found in the California Building Code, lack of home hardening measures to retrofit these vulnerable structures; delays in

Wildfire Mitigation and Fire Safety Report 2025 Update

statewide adoption of ember resistant zone “Zone 0”, (the first five feet surrounding each structure should be cleared of anything not resistant to fire) and the need for more stringent and focused fire prevention measures in vulnerable neighborhoods particularly at points where wildfire pathways enter communities.

These factors have, again and again, contributed to vegetative wildfires penetrating communities, igniting structures, and transitioning into a wind driven structure to structure conflagration, which can overwhelm available firefighting resources.

On January 12, 2025, Laguna Beach Mayor Alex Rounaghi, Laguna Beach Fire Chief Niko King, and Laguna Beach City Manager Dave Kiff toured areas of the Palisades Fire in Los Angeles. This tour, led by Laguna Beach Fire Department personnel who provided mutual aid for the incident, provided valuable insight into how vulnerable Laguna Beach is to a similar devastating wildfire event given our similarities to Palisades in terrain, vegetation, age of the housing stock commercial buildings and limited evacuation routes. During the Palisades Fire, residents experienced traffic congestion, communication gaps, and resource allocation challenges.

Like Laguna Beach, Palisades experiences high wind conditions, has heavy vegetation and has limited evacuation routes and impaired access areas. The events that occurred during the wildfire that destroyed major parts of the Palisades community could occur at any time in Laguna Beach under certain weather conditions.

In response to the unprecedented wildfires that occurred in January 2025 in Southern California, the City Council at its January 28, 2025 meeting, reestablished the Wildfire Mitigation and Fire Safety Ad Hoc Committee comprised of Councilmember Sue Kempf and Councilmember Bob Whalen. The Ad Hoc Committee was directed to work with the City Manager, key staff members, and relevant external entities to undertake the following tasks:

1. Update the 2019 Wildfire Mitigation and Fire Safety Report
2. Review the Current Evacuation Zones, Routes, and Procedures
3. Prioritize Undergrounding Projects for Critical Utility Lines
4. Assess the Capacity and Reliability of Existing Water Supply
5. Expand and Improve Fuel Modification and Vegetation Management
6. Promote Home Hardening and Defensible Space
7. Enhance Wildfire Mitigation and Fire Safety through Artificial Intelligence
8. Update City Policies, Ordinances, and Practices to Enhance Wildfire Safety
9. Develop Funding Strategies to Implement Recommended Actions

Wildfire Mitigation and Fire Safety Report 2025 Update

To complete these tasks, the Ad Hoc Committee met twice a month from January - April 2025. The Ad Hoc Committee worked to evaluate and, where feasible, include suggestions from the public. Public input was received throughout the process. The Laguna Beach Fire Department and Laguna Beach Police Department held two town hall meetings: a virtual meeting on the topics of Home Hardening and Firewise Communities and an in-person meeting on Evacuations and Alert & Warning. Both were recorded and posted to the City's website.

This report includes an updated chart of recommended action items related to the following categories:

- Evacuation and Alert & Warning,
- Fuel Modification
- Infrastructure
- Public Safety Technology
- Community Preparedness.

The 2025 Update contains a funding section to capture possible funding sources and timeframes for funding: short, medium, and long term. There is also a section with the status of the 2019 Report's recommended action items.

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
Short Term Projects								
1	Evacuation	Update the Emergency Operations Plan including the City's Evacuation Annex	Hire a planning consultant to update the citywide Emergency Operations Plan to incorporate lessons learned from past incidents, mitigation efforts, and technological improvements that have occurred since it was last updated. Revise the Evacuation Annex to include the Marine Safety Department for evacuations onto the beach; Animal Control for the evacuation of animals; and Transportation and Community Services for the evacuation of seniors and others needing assistance.	Short	\$100,000	Wildfire Safety Fund		Fire / Police / Marine Safety / Transit & Community Services
2	Evacuation	Evaluate evacuation route signage plan	Evaluate whether an effective evacuation route signage plan could be installed to assist visitors and residents unfamiliar with certain parts of the city.	Short	\$0			Public Works / Police / Fire
3	Evacuation	Establish a list of residents who may need assistance with evacuations	There are numerous residents who may be unable to self-evacuate and will require assistance. The City should work to create a list of those residents, determine what the City is able to provide the residents, and determine how the list will be maintained.	Short	\$0			Fire / Police / Transit & Community Services
4	Evacuation	Stage bull dozers on Red Flag Days	Determine the feasibility of staging bull dozers on Red Flag Days to clear evacuation routes.	Short	\$0			Public Works
5	Evacuation	Mutual Aid Coordination and Planning	Continue to coordinate with Orange County Sheriff's Department (Aliso Viejo, Dana Point, Laguna Niguel, Laguna Woods, and OCSD Mutual Aid Bureau), Irvine, and Newport Beach mutual aid for traffic control and evacuations. Add mutual aid procedures to the update of the City's evacuation plan. Conduct a tabletop exercise on evacuations.	Short - ongoing	\$0			Police
6	Alert & Warning	Test the City-wide Outdoor Warning System	Conduct semi-annual or quarterly testing of the Outdoor Warning System	Short - ongoing	\$0			Fire

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
7	Alert & Warning	Evaluate the reach of the Outdoor Warning System	Evaluate coverage of the Outdoor Warning System and expand the system with the addition of more speakers, if needed, to ensure alerts can be heard by all areas of the City.	Short	\$200,000	Wildfire Safety Fund	Possibly	Fire
8	Fuel Modification	Expand weed abatement program to enforce property maintenance ordinance	Expand the City's current weed abatement program by hiring more personnel to conduct inspections.	Short	\$200,000	General Fund – Funded FY26		Fire
9	Fuel Modification	Expand Fuel Modification Zones	Create a plan to conduct deadwood maintenance on areas adjacent to fuel modification zones and other areas that need vegetation management.	Short	\$50,000	Wildfire Safety Fund		Fire
10	Fuel Modification	Streamline the Coastal Development Permit Process	Obtain a multi-year, multi-phase, "blanket" permit for the creation of fuel modification zones.	Short/Medium	\$30,000	Wildfire Safety Fund		Community Development
11	Fuel Modification	Streamline the California Environmental Quality Act Process	Streamlined California Environmental Quality Act (CEQA) permitting would allow for faster expansion of fuel modification zones and ease the maintenance requirements.	Short/Medium	\$0			Community Development
12	Fuel Modification	Seek to maximize brush clearance around critical infrastructure.	Ensure defensible space of 50 - 100 feet around critical infrastructure including communications equipment and cell towers. Determine if this clearance qualifies for the Governor's emergency proclamation on March 1, 2025 to waive CEQA and California Coastal Act.	Short	\$0			Fire
13	Fuel Modification	Expand Fuel Modification Zones	Apply to establish new and expand existing fuel modification zones up to 300 feet under the Governor's Executive Order for Wildfire Prevention Projects.	Short	TBD	Wildfire Safety Fund		Fire

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
14	Fuel Modification	Maintain the Fuel Modification Zones	Maintain the Fuel Modification Zones.	Short - Ongoing	\$770,000	General Fund – Funded FY26		Fire
15	Public Safety Technology	Install a traffic signal priority system	Install a remote-controlled traffic signal system (Opticom) that prioritizes emergency vehicle access on Coast Highway and Laguna Canyon Road. This system is designed to expedite evacuation during emergencies, such as Fire and Police Code 3 responses, while also supporting low-priority transit vehicles. Coordination with Caltrans is necessary for permitting and operational cooperation. This ensures that traffic lights prioritize emergency vehicles, reducing their delays and lowering the risk of intersection collisions. Similar systems are already operational in Dana Point and Newport Beach, though not specifically configured for evacuation purposes.	Short	\$350,000	Wildfire Safety Fund		Police
16	Public Safety Technology	Drone as First Responder	Determine the feasibility of a drone as first responder that could be launched when AI sensors receive a fire notification.	Short	\$375,000	\$375,000 from Wildfire Safety Fund, \$125,000 TBD	Possibly	Police
17	Public Safety Technology	Explore a neighboring City partnership to share public safety technology	Determine the feasibility of sharing a Real Time Information Center to monitor AI Cameras, make emergency notifications, launch drone as first responder, and control traffic signals.	Short	\$0			Police

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
18	Public Safety Technology	Work with CalFire Chief of Intelligence on pre and post fire analysis	Work with CalFire Chief of Intelligence on pre and post fire analysis that can be incorporated into mitigation, preparedness, response, and recovery efforts. Determine feasibility of a system like Technosylvania that CalFire uses for AI predictive analytics on historical fire patterns, weather patterns, and vegetation types to provide context and a potential roadmap for how fires can spread.	Short	\$70,000	Wildfire Safety Fund		Fire
19	Public Safety Technology	Determine possible use of Fumis system for wildfires	Determine the possibility and effectiveness of utilizing the Fumis system to assist in wildfire preparedness, response, and/or recovery. Fumis integrates camera feeds, both public and private cameras with permission from the camera owner, into a unified and AI powered system for public safety personnel to utilize.	Short	\$0			Police
20	Public Safety Technology	Explore new technology for wildfire suppression	Explore new suppression technology for open space areas where interrupting the spread of fire would be most impactful to property and life conservation.	Short	TBD	Wildfire Safety Fund		Fire
21	Public Safety Technology	Explore the use of new technology and applications to track evacuations	Explore the feasibility of using new technology and applications to track evacuations and more quickly and accurately share evacuation information with the Emergency Operations Center and Incident Command Post.	Short	TBD	Wildfire Safety Fund		Police
22	Public Safety Technology	Explore the use of new technology and applications to track evacuations	Explore the feasibility of using new technology and applications to track evacuations and more quickly and accurately share evacuation information with the Emergency Operations Center and Incident Command Post.	Short	TBD	Wildfire Safety Fund		Police
23	Public Safety Technology	Emergency Operations Center (EOC) Dispatch Console	Update current dispatch console in City Hall EOC to include PD and FD radios for better situational awareness and dispatch redundancy. After-action item from Rancho Fire.	Short	\$175,000	Wildfire Safety Fund		Police

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
24	Public Safety Technology	Create Dispatch Redundancy	Install standalone dispatch console at the CRC to serve as the dispatch station in the new EOC and provide redundant dispatch capabilities.	Short	\$424,000	Wildfire Safety Fund		Police
25	Public Safety Technology	Field Response Resource Management Solution	Purchase Tablet Command and iPads for incident management tracking in the field and situational awareness in the Emergency Operations Center (EOC).	Short	\$105,000	Wildfire Safety Fund		Fire
26	Public Safety Technology	Field Response Cellular Coverage and Connectivity	Purchase StarLink for Primary Fire Units to ensure cell coverage and network connectivity for first responders, public works, and mutual aid in the field.	Short	\$10,000 + annual fee	Wildfire Safety Fund		Fire
27	Public Safety Technology	Emergency Operations Center (EOC) IT equipment and cabling	Purchase IT equipment and cabling in new Emergency Operations Center.	Short	\$180,000	Wildfire Safety Fund		Fire
28	Community Preparedness	Community Preparedness Educator	Hire a Community Preparedness Educator to educate the public on emergency preparedness, fire safety, neighborhood/FireWise preparedness, and home hardening inspections. The Public Educator can work to expand the CERT program by offering more academies and providing continuous training to engage and retain volunteers.	Short	PT: \$70,000	Wildfire Safety Fund		Fire
29	Community Preparedness	Expand the Red Flag Restriction Program	Prohibit on-street construction during Red Flag days to ensure roadways are clear and equipment does not start a fire.	Short - ongoing	\$0			Fire / Public Works / Police
30	Community Preparedness	Expand the Red Flag Parking Restriction Program	Expand the Red Flag Parking Program into additional neighborhoods. Start with the neighborhoods that are identified in the Evacuation Time Study as having impaired access.	Short	\$30,000	Wildfire Safety Fund		Fire / Public Works / Police
31	Community Preparedness	Evacuation Drills	Identify ways to encourage neighborhood evacuation drills utilizing public education, possible incentives from the City, and having the drills coincide with scheduled tests of the emergency alert systems.	Short	\$5,000	Wildfire Safety Fund		Fire / Police
32	Community Preparedness	Door-to-door Community	Conduct a door-to-door community preparedness campaign utilizing CERT volunteers and interested City Council members. Campaign	Short	\$0			Fire

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
		Preparedness Campaign	can be used to distribute zone specific evacuation maps, assist residents in signing up for alert and warning, and providing education on home hardening.					
33	Community Preparedness	Engage with the Real Estate Community on Preparedness for New Residents	Work with the local real estate community to provide new residents with information on evacuation zones, how to sign up for alert and warning, home hardening, and other preparedness skills.	Short - ongoing	TBD	Wildfire Safety Fund		Fire / Police
34	Community Preparedness	School Preparedness	Continue to coordinate with Laguna Beach USD and other schools for emergency preparedness and evacuations.	Short - ongoing	\$0			Fire / Police
35	Community Preparedness	FireWise Program	Educate the public on the FireWise Program to increase participation by more neighborhoods. Having more FireWise neighborhoods would result in self-regulation of vegetation management and self-sufficient neighborhood emergency planning. Being a FireWise Community may also help in lowering insurance rates or qualifying for insurance.	Short - ongoing	\$0			Fire
36	Community Preparedness	FireRisk Reduction Communities	Educate the public on the FireRisk Reduction Communities to increase participation by more neighborhoods to potentially help lower insurance rates or qualify for insurance.	Short - ongoing	\$0			Fire
37	Community Preparedness	PSPS Education	Collaborate with SCE and SDG&E to educate the public on PSPS, outage preparedness and SCE/SDG&E resources available.	Short - ongoing	\$0			Fire
38	Community Preparedness	Evacuation Zone Maps	Update the public-facing evacuation zone maps to align with common evacuation terminology and incorporate lessons learned from evacuations since the 2019 iteration of the maps.	Short	\$15,000	Wildfire Safety Fund		Fire / Police
39	Community Preparedness	All Hazard Preparedness Guide	Update the all-hazard emergency preparedness guide and distribute it to the public.	Short	\$15,000	Wildfire Safety Fund		Fire

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
40	Community Preparedness	Annual Insurance Townhall	Host an annual insurance town hall with the CA Department of Insurance for residents. The most recent Insurance Town Hall was held on September 18, 2025. Hold the next town hall in September 2026.	Short - ongoing	\$0			Fire / City Manager's Office
41	Community Preparedness	LBDP and LBFD partnership with SCWD, LBCWD, and LBUSD	Continue to grow cooperative working relationship between LBDP/LBFD, SCWD and LBCWD for emergency preparedness, response, and recovery. LBFD should continue to conduct wildfire inspections of water properties annually and upon request; both water districts should have a seat in the City's EOC; water districts and school districts should be included in emergency exercises and drills; etc.	Short	\$0			Fire / Police / SCWD / LBCWD
42	Community Preparedness	City should continue partnership with Emerald Bay Service District	The City should continue to build a cooperative relationship with Emerald Bay Service District (EBSD) and include a representative from EBSD in the EOC.	Short	\$0			Fire
43	Community Preparedness	Provide the public with up-to-date information on home hardening laws and vetted vendors by CalFire	Ensure the public is informed of updates to laws as they pertain to home hardening i.e. Zone 0 laws. Share with the public the State Fire Marshal's list of Wildland Urban Interface (WUI) Products for Home Hardening.	Short - ongoing	\$0			Fire
44	Community Preparedness	Community Wildfire Protection Plan (CWPP)	Hire a consultant to lead development, facilitate public workshops, administer online surveys, and provide content and format the CWPP. Finalizing the CWPP assists with eligibility in becoming a CalFire designated Fire Risk Reduction Community.	Short	\$100,000	Wildfire Safety Fund		Fire
45	Infrastructure	Investigate fire resistive improvements to emergency radio facilities	Conduct an analysis of the fire hardening/structural improvements to the Moorhead Radio Repeater to improve the survivability of the radio equipment and a similar study for the radio equipment at Fire Station #3 and recommend necessary upgrades/improvements.	Short	TBD			Fire

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
46	Infrastructure	Add sprinkler system to areas of high fire risk determined by AI software	Utilizing AI technology and satellite imagery, determine which areas would benefit from added moisture. Determine if feasible to add sprinkler systems to increase moisture of the vegetation to slow down or decrease the chance of fire spread.	Short	\$70,000	Wildfire Safety Fund		Fire
47	Infrastructure	Improving Cell Coverage	Review possible LBMC changes as suggested by cell phone carriers.	Short (by September 2025)	\$0			City Attorney
48	Infrastructure	Improving Cell Coverage	Review possible Macro Sites to improve reliability (macros have battery or generator backup)	Short (by September 2025)	\$0			City Manager's Office
49	Infrastructure	Improving Cell Coverage	Review site opportunities and coverage maps via semi-annual meetings with Verizon, ATT - do this 2x a year	Short - ongoing	\$0			City Manager's Office
50	Infrastructure	Reducing Scope of PSPS	Review hardening efforts and circuit division via semi-annual meetings with SCE, SDG&E - do this 2x a year	Short - ongoing	\$0			City Manager's Office
51	Infrastructure	Reducing Scope of PSPS	Continue efforts to underground/harden transmission lines in critical open space areas	Short - ongoing	\$0			Public Works, with SCE and SDGE
52	Infrastructure	Undergrounding: Coast Highway between Agate Street and Arch Street	Coast Highway is a primary evacuation route. Coast Highway Utility Underground District 2019-1 was formed on April 16, 2019 as a Rule 20A project using Rule 20A credits for funding. Continue coordination with SCE and Caltrans to construct the project.	Short	\$3.7 million	Rule 20A Credits		Public Works
53	Infrastructure	Undergrounding: Coast Highway remaining overhead facilities	Coast Highway is a primary evacuation route. Coast Highway Utility Underground District 2020-2 was formed on September 22, 2020 as a Rule 20A project using Rule 20A credits for funding. Continue coordination with SCE and Caltrans to construct the project.	Short	\$3.6 million	Rule 20A Credits		Public Works

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
54	Infrastructure	Repair gate at Balboa Fire Road	Repair Balboa Fire Road gate after Rancho Fire.	Short	\$15,000	Wildfire Safety Fund		Public Works / Fire
Wildfire Safety Fund:					\$2,389,000			
Already Funded:					\$970,000			
Rule 20A Credits:					\$7,300,000			
Grand Total:					\$10,659,000			
Medium Term Projects								
55	Fuel Modification	Complete the Fuel Modification Zones in the remainder of the City	Utilize the completed study in 2019 to complete the remaining one-third of the defensible space breaks around the City.	Medium	\$2,000,000	Already Funded		Fire
56	Community Preparedness	Investigate grant opportunities to improve the wildfire resistance of existing residences	Investigate grant opportunities that will encourage and support residents in making improvements to harden their homes and mitigate wildfire risks.	Medium	TBD		Possibly	Fire
57	Infrastructure	Install an additional fire heli-hydrant filling station	Explore installing a third location. Perform an assessment/study on needs/options and then work with LBFD and OCFA on feasibility of an additional location. If feasible and needed within the District's service area, complete construction of the new additional heli-hydrant filling station.	Medium	TBD			Laguna Beach County Water District / Fire

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
58	Infrastructure	Determine feasibility of creating new roads or leveraging existing trails for evacuations.	There are currently areas within and adjacent to the city that can be assessed for feasibility to utilize in an evacuation or for resources to have a road to access harder to reach neighborhoods.	Medium	\$100,000	TBD	Yes	Public Works
59	Infrastructure	Evaluate additional reservoir feasibility	Evaluate the addition of a reservoir at Moulton Meadows concurrently with the pipeline evaluations to improve system performance and water supply reliability under both normal and emergency situations.	Medium	Non-City Funded			Laguna Beach County Water District
60	Infrastructure	Add pipelines and pumps that go direct to the wildland urban interface areas	Evaluate adding direct pipelines (and pumping facilities) from our water supply transmission main in the Canyon to the Jahraus Reservoir (Top of the World) and from the water supply transmission main in Coast Highway to our Sweany and/or Zitnik reservoirs to increase system performance and water supply reliability under both normal and emergency situations (i.e. Seismic, Wildfire, Power loss, etc.). Determine feasibility of other system piping projects to improve system performance and reliability	Medium	Non-City Funded			Laguna Beach County Water District
61	Infrastructure	Utilize Title 22 Recycled Water for firefighting efforts	Determine feasibility of using Title 22 recycled water from Coastal Treatment Plant. Research what will be needed i.e. storage and hydrants specifically for recycled water	Medium	Non-City Funded			South Coast Water District
62	Infrastructure	Collaborate with utilities to support legislation that includes undergrounding and grid resiliency	Provide support for legislation and collaborate with utility partners to push forward legislation that expedites the process to underground and increase grid resilience.	Medium	\$100,000	TBD		City Manager's Office
63	Infrastructure	Undergrounding: Crestview	Underground Crestview overhead lines.	Medium	\$1.4 million	TBD	No	Public Works

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
64	Infrastructure	Install new gate at Balboa Fire Road	Install a new gate at the Balboa Fire Road with remote operating or keypad capability.	Medium	\$85,000	Wildfire Safety Fund		Public Works / Fire
65	Infrastructure	Add additional fire hydrant	Add additional fire hydrant near the intersection of Rancho Laguna and Morningside.	Medium	Non-City Funded	TBD		Laguna Beach County Water District / Fire
Wildfire Safety Fund:					\$85,000			
Already Funded:					\$2,000,000			
Funding Source TBD:					\$1,600,000			
Grand Total:					\$3,685,000			
Long Term Projects								
66	Infrastructure	Undergrounding: Top of the World to Alta Laguna Blvd	Underground Top of the World to Alta Laguna overhead lines.	Long	TBD		No	Public Works
67	Infrastructure	Undergrounding: SOCWA Coastal Treatment Plant to Laguna Niguel	Underground area from SOCWA Coastal Treatment Plan to Laguna Niguel. This area is where the Coastal Fire occurred in May 2022.	Long	TBD		No	Public Works

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
68	Infrastructure	Undergrounding: Laguna Canyon Road between the electrical substation westerly of Canyon Acres to El Toro Road	Laguna Canyon Road is a primary route for evacuation and emergency/mutual aid resources to access the City. The poles and wires are adjacent to 16,000 acres of open space creating a fire risk from failures due to wind or vehicle impact. Pole or wire failures from a wildfire could also block emergency access. In addition, the failure of communication wires could disrupt emergency communications through loss of fiber optic cable damage. Undergrounding the utilities may require significant road improvements to accommodate the underground facilities. The conceptual cost estimate is approximately \$60 million for undergrounding and \$60 million for roadway improvements. Grant funds are being pursued to cover the costs of the project. On January 9, 2024, City Council initiated the relinquishment process to take ownership of the roadway.	Long	\$60 million	TBD	Yes	Public Works
69	Infrastructure	Undergrounding: Glenneyre Street between Laguna Avenue and Thalia Street, and between Calliope Street and Agate Street	Glenneyre Street is a high-volume roadway that serves as a secondary emergency access and evacuation route paralleling Coast Highway and serves a significant portion of the City. Poles and wires blocking the road could significantly delay emergency access or evacuation.	Long	TBD		No	Public Works
70	Infrastructure	Undergrounding: Neighborhoods	Work with neighborhoods to develop plans and incentives to underground utilities through assessment districts and other methods.	Long	TBD		No	Public Works
71	Infrastructure	Undergrounding: Monterey Drive, Hawthorne to Linden Street	This section of Monterey Drive was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
72	Infrastructure	Undergrounding: Thalia Street, Temple Terrace to 350 feet southwest of Glenneyre Street	This section of Thalia Street was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works
73	Infrastructure	Undergrounding: Monterey Street/Virginia Way, West Street to 5 th Avenue	This section of Monterey Street/Virginia Way was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available. West Street Assessment District 2021-1 will go to vote this summer. If successful, the project will underground Monterey Street from West Street to Eagle Rock Way.	Long	TBD		No	Public Works
74	Infrastructure	Undergrounding: Temple Hills Drive, northeast and southwest of San Remo Drive	This section of Temple Hills Drive was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works
75	Infrastructure	Undergrounding: Virginia Way, 7 th Avenue to 9 th Avenue	This section of Virginia Way was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works
76	Infrastructure	Undergrounding: San Joaquin Street, Hillcrest Drive to alley 100 feet northeast of N. Coast Highway	This section of Joaquin Street was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works
Funding Source TBD:					\$60,000,000			
Grand Total:					\$60,000,000			

Recommended Action Items – 2025

Sorted by Term

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
Total for All Action Items (Short, Medium, Long Term)								
Wildfire Safety Fund:					\$2,474,000			
Already Funded:					\$2,970,000			
Rule 20A Credits:					\$7,300,000			
Funding Source TBD:					\$61,600,000			
Grand Total:					\$74,344,000			

Section 1: Status of 2019 Wildfire Mitigation and Fire Safety Report Action Items

For many years, the City of Laguna Beach has taken steps to reduce the threat of wildfire within the community. However, following the 2018 Paradise Fire in Northern California which devastated the Paradise community, the City Council in Laguna Beach prioritized wildfire mitigation and fire safety locally, and completed the first Wildfire Mitigation and Fire Safety Report which was formally approved in 2019.

The 2019 Report contained multiple action items to consider for mitigating the threat of wildfire. The City is pleased to report that 24 recommendations have been completed/ongoing and 16 are in progress. The chart outlines the status of the action items as of September 2025.

**2019 Wildfire Mitigation and Fire Safety Report Action Items
Status as of September 2025**

Column	ID	Category	Opportunity	Status	Disposition as of April 2025
1	1	Notification	Conduct a neighborhood outreach program	Completed/Ongoing	Public safety departments continually pursue opportunities to educate the public.
2	2	Notification	Install a City-wide Outdoor Warning System	Completed/Ongoing	Initial sites identified in 2019 report installed. Two additional sites in Bluebird Canyon installed after completion of the initial sites. One additional site at Canyon Acres was proposed but not approved by PC. Potential expansion included in the 2025 update.
3	3	Notification	Conduct outreach to art venues for evacuation	Completed/Ongoing	Outreach scheduled annually in April/May for the art festivals/venues which will be done at the same as their annual fire inspection.
4	4	Notification	Develop an interactive evacuation map using GPS	Completed	Type "evacuation" into the search bar on the City's website to view neighborhood evacuation maps and routes.
5	5	Evacuation	Prepare an evacuation modeling study	Completed	The City Council received a presentation about the results of the Evacuation Time Study at its August 24, 2021 meeting.
6	6	Evacuation	Install evacuation route signage	In Progress	Included in the 2025 update to continue working on.
7	7	Evacuation	Install a traffic signal priority system	In Progress	In 2019, the Opticom equipment didn't have the capability to integrate effectively with the Cal Trans equipment. We recently met with them at the IACP (International Association of Chiefs of Police) conference, and they have since enhanced their capabilities. PD will be exploring this possibility again in 2025.
8	8	Evacuation	Permanently stage evacuation traffic control devices	On Hold	This has been discussed with adjacent cities and deemed not practical. An updated evacuation traffic control plan will be developed in 2025.

2019 Wildfire Mitigation and Fire Safety Report Action Items
Status as of September 2025

Column	ID	Category	Opportunity	Status	Disposition as of April 2025
9	9	Evacuation	Coordinate Mutual Aid for Traffic Control in Dana Point and Newport Beach	Completed	Staff scheduled a joint agency meeting with Dana Point and Newport Beach to discuss procedure in June 2021.
10	10	Fuel Modification	Streamline the Coastal Development Permit Process	In Progress	Staff met with Coastal Commission staff in January 2025 to discuss incorporating a fuel modification program into the City's Local Coastal Program and the subsequent benefits and implications for doing so. The results will be shared with the City Council to determine next steps.
11	11	Fuel Modification	Streamline the CEQA Process	In Progress	Have not previously received support from Sacramento to eliminate CEQA from the fuel modification program but legislation has been introduced and is being supported by the City. This opportunity may be revised based on discussions with the Coastal Commission regarding the LCP amendment. The report identified this as short term. It should be regarded as a long-term opportunity.
12	12	Fuel Modification	Maintain existing fuel modification zones	Completed	The City has met its fire safety objectives by implementing 27 fuel modification zones covering approximately 480 acres. The City is piloting a mechanical only treatment protocol and will report back to the City Council in 2026 as to its environmental and fire safety efficacy. The mechanical treatment option is meeting the fire safety objectives of the fuel modification program. The environmental objectives require more time for observation.

**2019 Wildfire Mitigation and Fire Safety Report Action Items
Status as of September 2025**

Column	ID	Category	Opportunity	Status	Disposition as of April 2025
13	13	Fuel Modification	Complete the fuel modification at Laguna Canyon & Canyon Acres	Completed	FMA 23 and 24 have been implemented and are being maintained within the treatment protocol parameters.
14	14	Fuel Modification	Residential Program for fuel mod including: (a) inspection of permit requirements (b) enforcement of City codes	In Progress	The City Council adopted Ordinance 1664 at its October 5, 2021 meeting which implemented residential defensible space guidelines and requirements.
15	15	Fuel Modification	Vegetation management in Bluebird Canyon	Completed	18 trees in the horseshoe area were trimmed in 2021. The area is maintained on an ongoing basis. FMZ 17 (upper Bluebird) and FMZ 18 (South Bluebird) received Federal authorization to be implemented, and it is anticipated that these zones will be implemented in 2025. There is an opportunity to explore additional fire safety opportunities in the Bluebird horseshoe area.
16	16	Infrastructure	Install two fire detection cameras	Completed	Fire detection cameras are installed in the City's open space.
17	17	Infrastructure	Install two helicopter fire hydrant filling stations	In Progress	One location is installed along the Fire Road and a second in North Laguna. Staff are exploring a third location near Alta Laguna.
18	18	Infrastructure	Underground - Coast Hwy between Agate and Arch Street	In Progress	City approval completed. Awaiting permitting process between Caltrans and Edison.
19	19	Infrastructure	Plan a temporary safe refuge and egress route for Bluebird Canyon	Completed	The roadway at lower Bluebird Canyon adjacent to the horseshoe has been widened to improve egress in an emergency.
20	20	Infrastructure	Underground - Coast Hwy remaining overhead electrical lines	In Progress	City approval completed. Awaiting permitting process between Caltrans and Edison.
21	21	Infrastructure	Adopt the revised 2019 CA Building Code Section 7A	Completed	

**2019 Wildfire Mitigation and Fire Safety Report Action Items
Status as of September 2025**

Column	ID	Category	Opportunity	Status	Disposition as of April 2025
22	22	Infrastructure	Improve the fire resistivity of water pumps and generator enclosures	Completed	Implemented a program to actively manage landscaping on all Water District properties (fuel modification); Built defensible space and enclosed any exposed pumps/generators.
23	23	Infrastructure	Install an emergency generator at Pump Station 3 SCWD	Completed	
24	24	Infrastructure	Create fuel mod zones around telecomm/radio facilities at Moorhead and Ridge Reservoir sites	Completed/Ongoing	FMZ 14 Moorhead implemented and maintained by Laguna Beach County Water District.
25	25	Infrastructure	Improve emergency radio reception at Moorhead Reservoir site	Completed	Radio repeater installed at the Animal Shelter to increase coverage in the Canyon.
26	26	Infrastructure	Investigate fire resistive improvements to emergency radio facilities	In Progress	Moorhead completed. A vulnerability assessment of Fire Station 3 was completed. Improvements to this location are still pending and not planned.
27	27	Infrastructure	Identify an alternate Emergency Operations Center location	Completed	A Memorandum of Agreement has been approved by the cities of Irvine, Newport Beach, and Laguna Beach which allows for the sharing of emergency management personnel, alternate EOCs, Community Centers for shelters, and the ability to alert and warn into each other's jurisdictions. This agreement was approved by City Council on October 29, 2019 and updated on December 20, 2023 to include the University of California at Irvine.
28	28	Infrastructure	Underground - Bluebird Canyon Drive from Cress/Bluebird to Rancho Laguna Road	Completed	Poles will be removed in the summer of 2025.
29	29	Infrastructure	Underground - Park Ave between Wendt Terrace to 500 feet easterly of St. Anns Drive	Completed	Completed in February 2025.
30	32	Fuel Mod	Complete the fuel modification zones on Park Ave	Completed	Park Avenue (FMZ 22) has received permits, been implemented, and is maintained annually as part of the City's fuel mod program.

2019 Wildfire Mitigation and Fire Safety Report Action Items
Status as of September 2025

Column	ID	Category	Opportunity	Status	Disposition as of April 2025
31	33	Fuel Mod	Maintain existing fuel modification zones completed between years 2023-2030	In Progress	Zones are maintained per the City's treatment protocols.
32	34	Fuel Mod	Complete the fuel modification zones in the remainder of the City.	In Progress	<ul style="list-style-type: none"> • Permitting phase, including environmental analysis, for FMZ 16 (Hobo Canyon) and FMZ 19 (Diamond) underway. • FMZs 17 and 18 (N. & S. Bluebird) will be implemented in 2025.
33	35	Infrastructure	Investigate incentives to improve the wildfire resistance of existing residences	In Progress	The Climate Action and Adaptation Plan contemplates incentives and recommendations. This includes Firewise Program. Ultimately future actions will likely be considered based on insurance requirements
34	36	Resources	Develop a plan to augment current procedures for non-safety employees on Red Flag Days	Completed	The City has completed development of a Red Flag Plan & Checklist which includes additional staffing levels and action items for all departments (including non-public safety departments) during declared Red Flag events.
35	37	Fuel Mod	Consider alternative staffing models to reduce fuel management zones construction / maintenance costs (i.e. hand crews)	Completed	Currently, contractual services meet the program's objectives and is a more cost-effective option.
36	40	Infrastructure	Underground - Laguna Canyon Road between the electrical substation westerly of Canyon Acres to El Toro Road	In Progress	The ad hoc committee continues to work with Edison, and other regional agencies to secure funding.
37	41	Fuel Mod	Maintain the fuel management zones completed after year 2030		This will be programmed into the annual City budget each year.
38	42	Infrastructure	Increase the capacity of water reservoirs 2B and 3B SCWD	Completed	SCWD's Reservoir 2B in South Laguna has been replaced to double capacity. 3B is no longer needed.

**2019 Wildfire Mitigation and Fire Safety Report Action Items
Status as of September 2025**

Column	ID	Category	Opportunity	Status	Disposition as of April 2025
39	43	Infrastructure	Maintain or improve water system inter-connections (with IRWD and MNWD)	In Progress	LBCWD intertie with El Toro Water District is complete; all SCWD interties are complete. Interties with MNWD are being discussed.
40	44	Infrastructure	Underground - Glenneyre Street between Laguna Avenue and Thalia Street, between Calliope Street and Arch Street	In Progress	Woods Cove utility underground district remove overhead line from Agate to Arch. No project is currently underway outside of this area.
41	45	Infrastructure	Create a fuel modification zone to improve the survivability of communication cables along Laguna Canyon Road	Completed	FMZ 24 (Laguna Canyon) was created and implemented into the City's Fuel Modification Program to help improve survivability of communication cables along LCR.
42	46	Infrastructure	Underground - Neighborhoods	In Progress	Included in the 2025 Update to continue working on.

Section 2: Evacuation and Alert & Warning

The City of Laguna Beach is recognized as a leader in evacuation planning and alert & warning systems. However, these life-saving functions are only effective if the public is aware of them and understands how to respond. Advancements in modern technology have significantly enhanced the efficiency of emergency alerts and evacuation planning, to provide timely and accurate information to residents during critical situations.

Evacuation Planning

Laguna Beach has a comprehensive Evacuation Plan designed to guide the evacuation and relocation of affected populations, typically involving 50 or more individuals. The plan includes detailed checklists applicable to various evacuation scenarios across multiple hazard events. These checklists are utilized by the City's Police, Fire, Marine Safety and Public Works Departments to implement evacuation warnings and orders.

The city is divided into 22 Evacuation Management Zones (EMZs), which enable tiered evacuations based on impacted areas. Each EMZ has an individual map outlining:

- The number of properties within the zone
- Critical infrastructure
- Designated evacuation routes

This structured approach is intended to allow for more efficient and organized evacuations. The Evacuation Plan has been successfully implemented by City staff in response to several emergencies, including the 2018 Aliso Fire, 2019 Winter Storms, 2022 Emerald Fire, 2022 Coastal Fire, and 2025 Rancho Fire.

In July 2021, the City published a comprehensive [Evacuation Time Study](#). To complete the study, an engineering firm, along with City staff, conducted site visits to Laguna Beach to gather roadway data; drive access impaired neighborhoods and streets; and to conduct

Wildfire Mitigation and Fire Safety Report

2025 Update

surveys to obtain demographic information as it relates to evacuations like travel patterns, car ownership, and household size. The study concluded that the entire city takes 4 hours and 20 minutes, on average under normal roadway conditions (no roadway hazards like stalled vehicles, trees/debris and/or power lines blocking the road, thick smoke limiting sight distance, etc.), to evacuate the entire city with no roadway closures. Some of the other notable findings are:

Wildfire Mitigation and Fire Safety Report
2025 Update

If a wildfire renders SR-133 (Laguna Canyon Rd) unavailable, the time to evacuate the entire City increases by as much as 40 minutes. See Table J-5.

Table J-5. 100th Percentile ETE – SR-133 Closure

	Summer		Summer	Fall		Fall	
	Midweek	Weekend	Midweek Weekend	Midweek		Weekend	Midweek Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Region	Midday		Evening	Midday		Midday	Evening
	Normal Conditions	Normal Conditions	Normal Conditions	Normal Conditions	Reduced Roadway Capacity	Normal Conditions	Normal Conditions
R26 - North and Central Laguna	4:05	4:05	3:35	3:50	4:10	3:35	3:35
R27 - South and Central Laguna	4:30	4:15	3:35	4:20	5:00	4:10	3:35
R28 – All EMZs + 100% of Shadow Region along Ridge Line	5:10	4:55	4:10	4:55	5:20	4:20	3:55
R29 - All EMZs + 100% of Shadow Region along Ridge Line to the North Only	5:00	4:55	4:10	4:45	5:15	4:20	3:55
R30 - All EMZs + 100% of Shadow Region along Ridge Line to the South Only	5:00	4:55	4:10	4:50	5:10	4:20	3:50

If a wildfire renders SR-133 and SR-73 unavailable, the time to evacuate the entire City increases by as much as 1 hour and 20 minutes. See Table J-7.

Table J-7. 100th Percentile ETE – SR-133 and SR-73 Closure

	Summer		Summer	Fall		Fall	
	Midweek	Weekend	Midweek Weekend	Midweek		Weekend	Midweek Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Region	Midday		Evening	Midday		Midday	Evening
	Normal Conditions	Normal Conditions	Normal Conditions	Normal Conditions	Reduced Roadway Capacity	Normal Conditions	Normal Conditions
R26 - North and Central Laguna	4:35	4:45	3:35	4:35	4:50	4:15	3:35
R27 - South and Central Laguna	4:55	4:35	3:35	4:45	5:00	4:10	3:35
R28 – All EMZs + 100% of Shadow Region along Ridge Line	5:45	5:25	4:45	5:30	5:40	4:45	4:30
R29 - All EMZs + 100% of Shadow Region along Ridge Line to the North Only	5:40	5:25	4:30	5:25	5:40	4:45	3:50
R30 - All EMZs + 100% of Shadow Region along Ridge Line to the South Only	5:10	4:50	4:20	5:00	5:10	4:45	4:00

Wildfire Mitigation and Fire Safety Report
2025 Update

If a wildfire renders SR-1 (Pacific Coast Highway) northbound and SR-133 unavailable, the time to evacuate the entire City increases by as much as 4 hours. See Table J-9.

Table J-9. 100th Percentile ETE – SR-133 and SR-1 Northbound

	Summer		Summer	Fall		Fall	
	Midweek	Weekend	Midweek Weekend	Midweek		Weekend	Midweek Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Region	Midday		Evening	Midday		Midday	Evening
	Normal Conditions	Normal Conditions	Normal Conditions	Normal Conditions	Reduced Roadway Capacity	Normal Conditions	Normal Conditions
R26 - North and Central Laguna	6:20	6:15	5:40	5:25	5:55	4:30	4:40
R27 - South and Central Laguna	7:35	7:30	6:40	6:30	7:05	5:15	5:25
R28 – All EMZs + 100% of Shadow Region along Ridge Line	8:20	8:05	7:30	7:30	8:05	6:20	6:35
R29 - All EMZs + 100% of Shadow Region along Ridge Line to the North Only	8:20	8:05	7:30	7:30	8:05	6:20	6:35
R30 - All EMZs + 100% of Shadow Region along Ridge Line to the South Only	8:20	8:05	7:30	7:30	8:05	6:20	6:35

If a wildfire renders SR-1 southbound and SR-133 unavailable, the time to evacuate the entire City increases by as much as 3 hours and 45 minutes. See Table J-11.

Table J-11. 100th Percentile ETE – SR-133 and SR-1 Southbound

	Summer		Summer	Fall		Fall	
	Midweek	Weekend	Midweek Weekend	Midweek		Weekend	Midweek Weekend
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Region	Midday		Evening	Midday		Midday	Evening
	Normal Conditions	Normal Conditions	Normal Conditions	Normal Conditions	Reduced Roadway Capacity	Normal Conditions	Normal Conditions
R26 - North and Central Laguna	6:15	5:50	5:55	6:05	6:10	4:30	5:00
R27 - South and Central Laguna	6:20	5:20	4:50	5:35	6:15	4:40	4:45
R28 – All EMZs + 100% of Shadow Region along Ridge Line	8:00	7:20	7:25	7:10	7:10	5:25	5:55
R29 - All EMZs + 100% of Shadow Region along Ridge Line to the North Only	7:50	7:45	7:00	7:00	7:00	5:35	5:40
R30 - All EMZs + 100% of Shadow Region along Ridge Line to the South Only	8:00	7:10	6:25	6:55	6:55	6:10	5:25

The Study analyzed whether allowing all lanes of traffic to flow in the outbound direction (contraflow) would improve evacuation timelines. The benefit gained by implementing contraflow (20 minutes or less) does not outweigh the danger and effort required to implement it. See Table J-12. Implementing contraflow is dangerous – potential for head-on collisions – and resource intensive – requires extensive equipment and personnel to block all roadways that could potentially turn into oncoming traffic.

Table J-12. Evacuation Time Estimates for Scenario 1 – Contraflow Sensitivity Study

Contraflowed Roadway	90th Percentile ETE	100th Percentile
Region R28 – All EMZs + 100% of Shadow Region along Ridge Line		
Base Case	3:45	4:50
SR-1 NB	3:35	4:35
SR-1 SB	3:25	4:50
SR-133 NB	3:45	4:35
R29 - All EMZs + 100% of Shadow Region along Ridge Line to the North Only		
Base Case	3:30	4:20
SR-1 NB	3:30	4:20
SR-1 SB	3:10	4:20
SR-133 NB	3:25	4:15
R30 - All EMZs + 100% of Shadow Region along Ridge Line to the South Only		
Base Case	3:35	4:50
SR-1 NB	3:35	4:35
SR-1 SB	3:25	4:50
SR-133 NB	3:35	4:40

Wildfire Mitigation and Fire Safety Report
2025 Update

A sensitivity study was performed to determine the impact of an additional 400 housing units being built along SR-1 in Laguna Beach. The increased number of evacuating vehicles from these additional housing units increases congestion and delays along SR-1 thereby increasing the 90th and 100th percentile ETE by 25 minutes and 40 minutes, respectively. See Tables J-13 and J-14.

Table J-13. 90th Percentile ETE – Additional Housing Units

Scenario:	Summer		Summer	Fall		Fall	
	Midweek	Weekend	Midweek Weekend	Midweek		Weekend	Midweek Weekend
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Region	Midday		Evening	Midday		Midday	Evening
	Normal Conditions	Normal Conditions	Normal Conditions	Normal Conditions	Reduced Roadway Capacity	Normal Conditions	Normal Conditions
	R26 - North and Central Laguna	3:00	2:45	2:10	2:45	2:50	2:25
R27 - South and Central Laguna	3:15	3:10	2:45	3:10	3:30	2:55	2:30
R28 – All EMZs + 100% of Shadow Region along Ridge Line	3:55	3:40	3:05	3:25	3:50	3:20	2:55
R29 - All EMZs + 100% of Shadow Region along Ridge Line to the North Only	3:35	3:35	3:05	3:25	3:40	3:20	2:40
R30 - All EMZs + 100% of Shadow Region along Ridge Line to the South Only	3:35	3:30	3:00	3:20	3:45	3:05	2:45

Table J-14. 100th Percentile ETE – Additional Housing Units

Scenario:	Summer		Summer	Fall		Fall	
	Midweek	Weekend	Midweek Weekend	Midweek		Weekend	Midweek Weekend
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Region	Midday		Evening	Midday		Midday	Evening
	Normal Conditions	Normal Conditions	Normal Conditions	Normal Conditions	Reduced Roadway Capacity	Normal Conditions	Normal Conditions
	R26 - North and Central Laguna	3:55	3:40	3:35	3:45	3:35	3:35
R27 - South and Central Laguna	4:30	4:35	3:35	4:20	5:00	4:10	3:35
R28 – All EMZs + 100% of Shadow Region along Ridge Line	5:00	4:50	3:55	4:45	5:30	4:30	3:40
R29 - All EMZs + 100% of Shadow Region along Ridge Line to the North Only	4:20	4:45	3:45	4:55	5:15	4:15	3:35
R30 - All EMZs + 100% of Shadow Region along Ridge Line to the South Only	4:50	5:00	3:40	4:40	5:20	4:10	3:45

Wildfire Mitigation and Fire Safety Report
2025 Update

Three neighborhoods were deemed to be access impaired: Canyon Acres Drive, Bluebird Canyon, and Diamond Street & Crestview Drive, as shown in Figure 8-3. These neighborhoods share several characteristics in common: they are surrounded by wooded areas (fuel consisting of tall trees that can burn easily), ingress/egress routes are very narrow at sections (often only the width of a single car), and ingress/egress routes follow a winding path with hairpin turns in some sections.

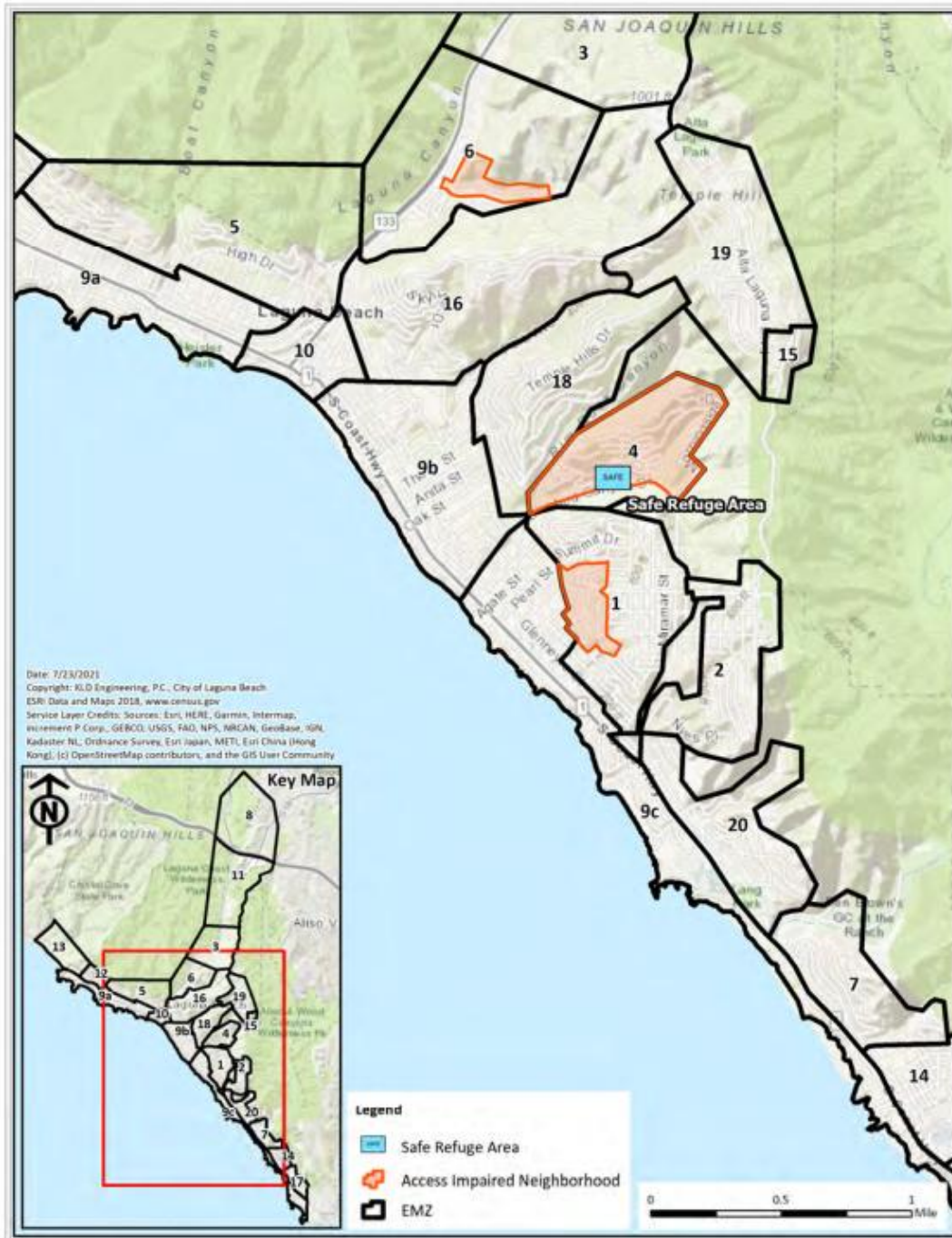


Figure 8-3. Access Impaired Neighborhoods – Final Analysis

Wildfire Mitigation and Fire Safety Report
2025 Update

According to the [2023 Community Risk Assessment](#), relative to Orange County as a whole, the population in Laguna Beach is older, with a median age of 51 instead of 37 years old in Orange County. In addition to having a higher median age, Laguna Beach has a higher percentage of the population over 65. Two groups identified by the National Fire Protection Association (NFPA) Urban Fire Safety Report as "at risk" populations include adults over 65 and persons with disabilities. According to the Risk Assessment, there are about 1,833 households in the city that identified someone in their household as having a disability and 405 households without vehicles. "At risk" populations and those without vehicles may require additional time and assistance when evacuating, creating further evacuation challenges with limited resources.

As discussed in Section 6 of this report, the effectiveness of the City's evacuation plan is dependent in large part on community preparedness



COMMUNITY PROFILE

Laguna Beach FD



23,080

Population

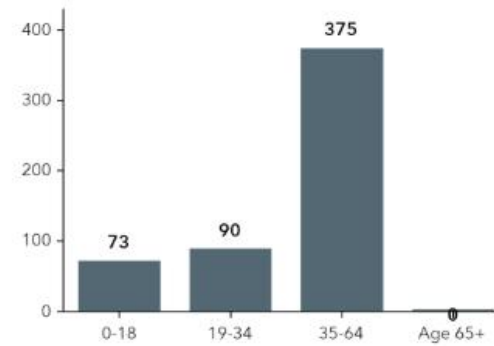
10,897

Households

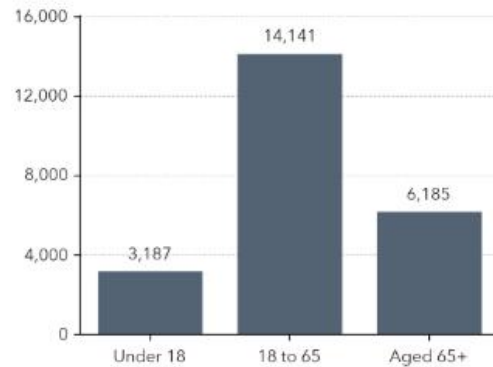
2.11

Avg Size Household

POPULATION NO HEALTH INSURANCE (ACS)



POPULATION BY AGE



AT RISK POPULATION



Alert & Warning Systems

Laguna Beach is the only city in Orange County, and one of the few in the entire state, to have a city-wide Outdoor Warning System (OWS). This advanced system is satellite-activated and can function on solar power for several hours in the event of a power outage. The OWS can be triggered locally or remotely, ensuring critical emergency alerts reach the community even when cell towers are down.

In addition to OWS, the City utilizes AlertOC, Nixle, and Wireless Emergency Alerts (WEA) which provide residents with real-time emergency notifications via text, phone calls, and emails. The OWS serves as an added layer of notification, especially for individuals who may not have access to mobile alerts. Additionally, the City can request that the County activate the Emergency Alert System (EAS), which broadcasts emergency alerts and warning messages to the public via cable, satellite and broadcast television and AM, FM and satellite radio.

While all alert systems have limitations, the City continuously looks for ways to enhance emergency alerts. Laguna Beach strives to remain at the forefront of community safety, ensuring residents are well-informed and prepared for any emergency.

The Ad Hoc Committee recommends that the City implement a regular testing schedule for the OWS and upgrade the system to fill any gaps in coverage in the city; that the City work aggressively with the telecommunications carriers to fill gaps in cellphone coverage in the city; and that the City work with SCE and SDGE to limit the impact of Public Safety Power Shutoffs (PSPSs) on alerting the public.

Additional recommended action items related to evacuations and alert and warning systems are listed in the table below.



One of the Outdoor Warning System loudspeakers strategically placed throughout the City.

2025 Recommended Action Items Evacuations and Alert and Warning

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
1	Evacuation	Update the Emergency Operations Plan including the City's Evacuation Annex	Hire a planning consultant to update the citywide Emergency Operations Plan to incorporate lessons learned from past incidents, mitigation efforts, and technological improvements that have occurred since it was last updated. Revise the Evacuation Annex to include the Marine Safety Department for evacuations onto the beach; Animal Control for the evacuation of animals; and Transportation and Community Services for the evacuation of seniors and others needing assistance.	Short	\$100,000	Wildfire Safety Fund		Fire / Police / Marine Safety / Transit & Community Services
2	Evacuation	Evaluate evacuation route signage plan	Evaluate whether an effective evacuation route signage plan could be installed to assist visitors and residents unfamiliar with certain parts of the city.	Short	\$0			Public Works / Police / Fire
3	Evacuation	Establish a list of residents who may need assistance with evacuations	There are numerous residents who may be unable to self-evacuate and will require assistance. The City should work to create a list of those residents, determine what the City is able to provide the residents, and determine how the list will be maintained.	Short	\$0			Fire / Police / Transit & Community Services
4	Evacuation	Stage bull dozers on Red Flag Days	Determine the feasibility of staging bull dozers on Red Flag Days to clear evacuation routes.	Short	\$0			Public Works
5	Evacuation	Mutual Aid Coordination and Planning	Continue to coordinate with Orange County Sheriff's Department (Aliso Viejo, Dana Point, Laguna Niguel, Laguna Woods, and OCSO Mutual Aid Bureau), Irvine, and Newport Beach mutual aid for traffic control and evacuations. Add mutual aid procedures to the update of the City's evacuation plan. Conduct a tabletop exercise on evacuations.	Short - ongoing	\$0			Police
6	Alert & Warning	Test the City-wide Outdoor Warning System	Conduct semi-annual or quarterly testing of the Outdoor Warning System	Short - ongoing	\$0			Fire

2025 Recommended Action Items Evacuations and Alert and Warning

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
7	Alert & Warning	Evaluate the reach of the Outdoor Warning System	Evaluate coverage of the Outdoor Warning System and expand the system with the addition of more speakers, if needed, to ensure alerts can be heard by all areas of the City.	Short	\$200,000	Wildfire Safety Fund	Possibly	Fire

Section 3: Fuel Modification

Fuel modification is a critical wildfire mitigation strategy that reduces the amount of vegetation available for combustion, thereby decreasing the size and intensity of wildfires in treated areas. This process also reduces ember showers, which are a leading cause of home ignitions during wildfires.

The City of Laguna Beach includes approximately 480 acres to mitigate the City's high fire risk. The City's [27 Fuel Modification Zones \(FMZs\)](#) create defensible space around homes, structures, critical infrastructure, and evacuation routes within the city's wildland-urban interface. By reducing thermal output from wildfires, FMZs enhance the effectiveness of structural defense efforts and improve evacuation safety.

The City's 27 FMZs are maintained through three primary systems:

1. **Coastal Development Permit (CDP) Areas** – These zones are maintained according to strict environmental regulations set by the CDP and the City's Fuel Modification Treatment Protocol. Fuel reduction in these areas is accomplished through either goat grazing or hand-crew removal of hazardous vegetation.
2. **Public Nuisance Abatement Law Areas** – These zones, historically managed through goat grazing, receive environmental oversight but are typically located in less critical habitats.
3. **Privately Maintained Areas** – Two zones in North Laguna Beach are managed by the Irvine Cove and Emerald Bay local homeowners' associations. In addition, the Emerald Bay Services District performs fuel modification surrounding Emerald Bay which is immediately adjacent to city properties in Irvine Cove and North Laguna.

As a result of these efforts, two-thirds of the city benefits from defensible space, with 481.59 acres receiving regular fuel modification treatment. Expanding and maintaining these efforts is essential for reducing the city's wildfire vulnerability and enhancing overall community safety.

Wildfire Mitigation and Fire Safety Report
2025 Update

Goat Grazing Zones		
FMZ	Area Name	Acres
FMZ 1	Dartmoor	31.2
FMZ 2	Skyline-Alta Laguna - (City Hall to Bermuda)	60.2
FMZ 2	Skyline-Alta Laguna - (Bermuda to Alta Laguna)	
FMZ 3	Hidden Valley/Pacific	43
FMZ 4	Bluebird Canyon	40
FMZ 5	Nestall - Top of the World	30.5
FMZ 6	Fire Road	37.8
FMZ 7	Ceanothus	10.3
FMZ 8	Three Arch Bay	15.9
FMZ 9	Del Mar	7.5
FMZ 10 (West)	Barracuda - West/Nyes	4.5
	Total	280.9

Wildfire Mitigation and Fire Safety Report
2025 Update

Hand Crew Zones		
FMZ	Area Name	Acres
FMZ10 (East)	Barracuda - East	3.76
FMZ 11	Driftwood	2.6
FMZ 12	Arch Beach Heights View Park	1.4
FMZ 13	Oro Canyon	6.7
FMZ 14	LBCWD Responsibility	3.63
FMZ 15	Nyes & Oro Canyons	24.1
FMZ 16	Hobo Canyon – In Permitting Process	18.8
FMZ 17	Upper Bluebird	8.6
FMZ 18	South Bluebird	8.7
FMZ 19	Diamond Canyon – In Permitting Process	26.9
FMZ 20	Sunset	7.02
FMZ 21	South Laguna	12.25
FMZ 22	Park Ave	7.16
FMZ 23	Canyon Acres	13.6
FMZ 24	Laguna Canyon	29
FMZ 25	Irvine Cove - HOA	7.57
FMZ 26	Emerald Bay - HOA	17.4
FMZ 27	City Corporate Yard	1.5
	Total	200.69
	Grand Total of all Fuel Mod Zones	
		481.59

Fuel Modification Expansion Strategy Under Governor’s Executive Order

In 2025, Governor Newsom issued an Executive Order allowing qualified public safety agencies to apply for temporary suspension of certain state regulations—such as CEQA and the Coastal Act—for critical wildfire prevention projects. This order presents a unique and time-sensitive opportunity for the City of Laguna Beach to more rapidly expand its fuel modification efforts in areas at risk of wildfire.

Following a comprehensive review of the Executive Order, staff identified an opportunity to expand existing Fuel Modification Zones (FMZs) up to 300 feet, significantly strengthening the City’s defensible space and wildfire risk reduction strategies. FMZs serve as critical buffers between wildland vegetation and developed areas, reducing the intensity and spread of wildfire near homes and infrastructure.

To maximize the impact of this initiative if it is approved by the state under the Executive Order, the City will identify and retain a qualified contractor to conduct fire behavior predictive analysis. This data will guide the prioritization and phased implementation of the 300-foot FMZ expansion, ensuring that resources are focused where they will have the greatest benefit to public safety.

The City is pursuing a phased approach:

- Apply for expansion of all existing FMZs under the Executive Order to secure the necessary permits before the December 2025 deadline.
- Use predictive fire modeling to identify the highest-priority areas for implementation.
- Advance FMZs 16 and 19 into the application process as early candidates for expansion under the order.

This strategic approach allows Laguna Beach to take full advantage of the temporary regulatory flexibility while maintaining environmental responsibility and aligning with the Statewide Fuels Reduction Environmental Protection Plan.

Fuel Modification Schedule for 2025

The tables below summarize the 2025 schedule for Fuel Modification Zones that are cleared through goat grazing and hand crews. The schedule is posted on the City’s [website](#) and subject to change based on environmental conditions and other unforeseen circumstances.

Goat Grazing		
FMZ	Area Name	Schedule
FMZ 1	Dartmoor	August 2025
FMZ 2	Skyline-Alta Laguna - (City Hall to Bermuda)	June – July 2025
FMZ 2	Skyline-Alta Laguna - (Bermuda to Alta Laguna)	September 2025
FMZ 3	Hidden Valley/Pacific	August – September 2025
FMZ 4	Bluebird Canyon	August – September 2025
FMZ 5	Nestall - Top of the World	July 2025
FMZ 6	Fire Road	July 2025
FMZ 7	Ceanothus	To Be Determined
FMZ 8	Three Arch Bay	May 2025
FMZ 9	Del Mar	June – July 2025
FMZ 10 (West)	Barracuda - West/Nyes	To Be Determined

Wildfire Mitigation and Fire Safety Report
2025 Update

Hand Crews				
FMZ	Area Name	First Pass	Second Pass	Third Pass (As Needed)
FMZ 10 (East)	Barracuda - East	April 2025	July 2025	
FMZ 11	Driftwood	March 2025	June 2025	Sept 2025
FMZ 12	Arch Beach Heights View Park	Jan 2025	June 2025	
FMZ 13	Oro Canyon	Jan 2025	June 2025	
FMZ 14	LBCWD Responsibility	N/A	N/A	N/A
FMZ 15	Nyes & Oro Canyons	April 2025	July-Aug 2025	
FMZ 16	Hobo Canyon - Permitting			
FMZ 17	Upper Bluebird -Initial Treatment	Sept-Oct 2025		
FMZ 18	South Bluebird -Initial Treatment	Feb - March 2025	August 2025	
FMZ 19	Diamond Canyon - Permitting			
FMZ 20	Sunset	May 2025	August 2025	
FMZ 21	South Laguna	May 2025	August 2025	
FMZ 22	Park Ave	March 2025	June 2025	Sept 2025
FMZ 23	Canyon Acres	March 2025	June 2025	
FMZ 24	Laguna Canyon	March - April 2025	June - July 2025	
FMZ 25	Irvine Cove - HOA	N/A	N/A	N/A
FMZ 26	Emerald Bay - HOA	N/A	N/A	N/A
FMZ 27	City Corporate Yard	March 2025	June 2025	

Additional recommended actions related to fuel modification are listed in the table below.

2025 Recommended Action Items

Fuel Modification

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
8	Fuel Modification	Expand weed abatement program to enforce property maintenance ordinance	Expand the City's current weed abatement program by hiring more personnel to conduct inspections.	Short	\$200,000	General Fund – Funded FY26		Fire
9	Fuel Modification	Expand Fuel Modification Zones	Create a plan to conduct deadwood maintenance on areas adjacent to fuel modification zones and other areas that need vegetation management.	Short	\$50,000	Wildfire Safety Fund		Fire
10	Fuel Modification	Streamline the Coastal Development Permit Process	Obtain a multi-year, multi-phase, "blanket" permit for the creation of fuel modification zones.	Short/Medium	\$30,000	Wildfire Safety Fund		Community Development
11	Fuel Modification	Streamline the California Environmental Quality Act Process	Streamlined California Environmental Quality Act (CEQA) permitting would allow for faster expansion of fuel modification zones and ease the maintenance requirements.	Short/Medium	\$0			Community Development
12	Fuel Modification	Seek to maximize brush clearance around critical infrastructure.	Ensure defensible space of 50 - 100 feet around critical infrastructure including communications equipment and cell towers. Determine if this clearance qualifies for the Governor's emergency proclamation on March 1, 2025 to waive CEQA and California Coastal Act.	Short	\$0			Fire
13	Fuel Modification	Expand Fuel Modification Zones	Apply to establish new and expand existing fuel modification zones up to 300 feet under the Governor's Executive Order for Wildfire Prevention Projects.	Short	TBD	Wildfire Safety Fund		Fire
14	Fuel Modification	Maintain the Fuel Modification Zones	Maintain the Fuel Modification Zones.	Short - Ongoing	\$770,000	General Fund – Funded FY26		Fire

2025 Recommended Action Items
Fuel Modification

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
55	Fuel Modification	Complete the Fuel Modification Zones in the remainder of the City	Utilize the completed study in 2019 to complete the remaining one-third of the defensible space breaks around the City.	Medium	\$2,000,000	Already Funded		Fire

Section 4: Infrastructure

A city's infrastructure plays a critical role in determining community risk and resilience during a wildfire. Key infrastructure components—including electrical systems, water systems, public safety radio facilities, and telecommunications—must be carefully managed to reduce fire hazards and ensure an effective emergency response. The City of Laguna Beach is served by two electricity providers and two water districts, each with unique challenges that impact fire safety and evacuation efforts.

Electrical System

Laguna Beach's electricity is provided by Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E). Approximately 11,000 properties north of Aliso Beach are served by SCE, while 2,000 properties south of Aliso Beach receive power from SDG&E.

Overhead power lines are a well-documented ignition source for wildfires. On April 3, 2025, CalFire published the table on the next page of the *Top 20 Most Destructive California Wildfires* with 8 out of the 20 starting from electrical equipment or powerlines. SCE has recently disclosed that its transmission lines may have been an ignition source for the Eaton Fire which, [per CalFire](#), destroyed 9,414 structures, damaged 1,074 structures, and resulted in 18 civilian fatalities and 9 firefighter injuries in Altadena in January 2025.

Top 20 Most Destructive California Wildfires

	FIRE NAME (CAUSE)	DATE	COUNTY	ACRES	STRUCTURES	DEATHS
1	CAMP (Powerlines)	November 2018	Butte	153,336	18,804	85
2	EATON (Under Investigation)*	January 2025	Los Angeles	14,021	9,413	18
3	PALISADES (Under Investigation)*	January 2025	Los Angeles	23,707	6,833	12
4	TUBBS (Electrical)	October 2017	Napa & Sonoma	36,807	5,636	22
5	TUNNEL - Oakland Hills (Rekindle)	October 1991	Alameda	1,600	2,900	25
6	CEDAR (Human Related)	October 2003	San Diego	273,246	2,820	15
7	NORTH COMPLEX (Lightning)	August, 2020	Butte, Plumas, & Yuba	318,935	2,352	15
8	VALLEY (Electrical)	September 2015	Lake, Napa & Sonoma	76,067	1,955	4
9	WITCH (Powerlines)	October 2007	San Diego	197,990	1,650	2
10	WOOLSEY (Electrical)	November 2018	Ventura	96,949	1,643	3
11	CARR (Human Related)	July 2018	Shasta County, Trinity	229,651	1,614	8
12	GLASS (Undetermined)	September 2020	Napa & Sonoma	67,484	1,520	0
13	LNU LIGHTNING COMPLEX (Lightning/Arson)	August 2020	Napa, Solano, Sonoma, Yolo, Lake, & Colusa	363,220	1,491	6
14	CZU LIGHTNING COMPLEX (Lightning)	August 2020	Santa Cruz, San Mateo	86,509	1,490	1
15	NUNS (Powerline)	October 2017	Sonoma	54,382	1,355	3
16	DIXIE (Powerline)	July 2021	Butte, Plumas, Lassen, & Tehama	963,309	1,311	1
17	THOMAS (Powerline)	December 2017	Ventura & Santa Barbara	281,893	1,063	2
18	CALDOR (Under Investigation)	September 2021	Alpine, Amador, & El Dorado	221,774	1,003	1
19	OLD (Human Related)	October 2003	San Bernardino	91,281	1,003	6
20	JONES (Undetermined)	October 1999	Shasta	26,200	954	1

"Structures" include homes, outbuildings (barns, garages, sheds, etc) and commercial properties destroyed.

This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, local or tribal responsibility.

*Numbers not final *DINS Disclaimer: These numbers are preliminary based on aerial assessments dedicating heat sources which can include chicken coops, outbuildings, sheds, water containers, etc. *Validated inspections are currently being ground-verified by Damage Assessment Teams.



SCE and SDG&E's service territories cover vast regions, including much of Southern California, where extreme weather events—particularly Santa Ana winds—can exacerbate wildfire risks. To mitigate these dangers, utility companies have implemented Public Safety Power Shutoffs (PSPSs) during severe weather conditions. In January 2025, Laguna Beach experienced its first PSPS, revealing additional hazards such as disruptions to cellular networks, which creates issues for emergency alerting capabilities. It also became an issue for residents who rely on power for medical equipment. The unknown duration of power loss during a PSPS creates another layer of difficulty.

Undergrounding

Converting overhead electrical lines to underground systems can significantly reduce wildfire risk, improve evacuation safety, and enhance emergency access. Laguna Beach has witnessed multiple wildfires caused by above-ground electrical infrastructure, including the 2012 vegetation fire near Ruby's Diner, the July 3, 2015 wildfire at Laguna Canyon and Canyon Acres Drive, the 2022 Emerald Fire, and the 2022 Coastal Fire.

Given this fire history, the City's goal should be to minimize the wildfire risk from above-ground electrical infrastructure by undergrounding all remaining distribution lines in the city and, where feasible, transmission lines and with respect to any lines not underground, ensuring that they are hardened with the latest technology and infrastructure upgrades to reduce wildfire risk to the greatest extent possible. Steps to achieve this goal include:

1. Working with the utility companies to have them underground as much of the remaining above ground infrastructure through their Targeted Undergrounding Programs (TUG).
2. Developing a City program to facilitate the undergrounding of the remaining above ground infrastructure that the utility companies will not be undergrounding. This may include a streamlined assessment district program with enhanced City financial participation and direct City funding for undergrounding along key evacuation routes and access impaired zones.
3. Working with the utility companies to ensure that all required inspections of and hardening of the above-ground infrastructure is completed in a timely manner.

Priority areas for undergrounding should include:

- 1. Electrical utilities along key evacuation routes** to ensure safe and unobstructed passage.
- 2. Electrical utilities in areas with impaired access and egress** to improve emergency response capabilities.

3. Electrical utilities adjacent to open space to reduce fire ignition risks.

SCE and SDGE have made progress in undergrounding utilities and overall grid resiliency. The City continues to support their efforts by supporting legislative efforts to speed up the process, provide financial assistance to pay for portions of the undergrounding projects, coordinating with outside agencies and jurisdictions, and continuing to press the issue until the city reaches 100% of all utility lines underground.

The maps below show the status of the electrical systems in Laguna Beach and the planned work for undergrounding and improving grid resiliency, including target deadlines. The timeframes can change based on factors like permitting, construction challenges, and feasibility.






Southern California Edison Circuits

Agate 12 kV out of Morro Substation

Total Circuitry ~35.5 miles
Overhead 21.1%
Underground 78.9%

Sectionalizing Device(s)

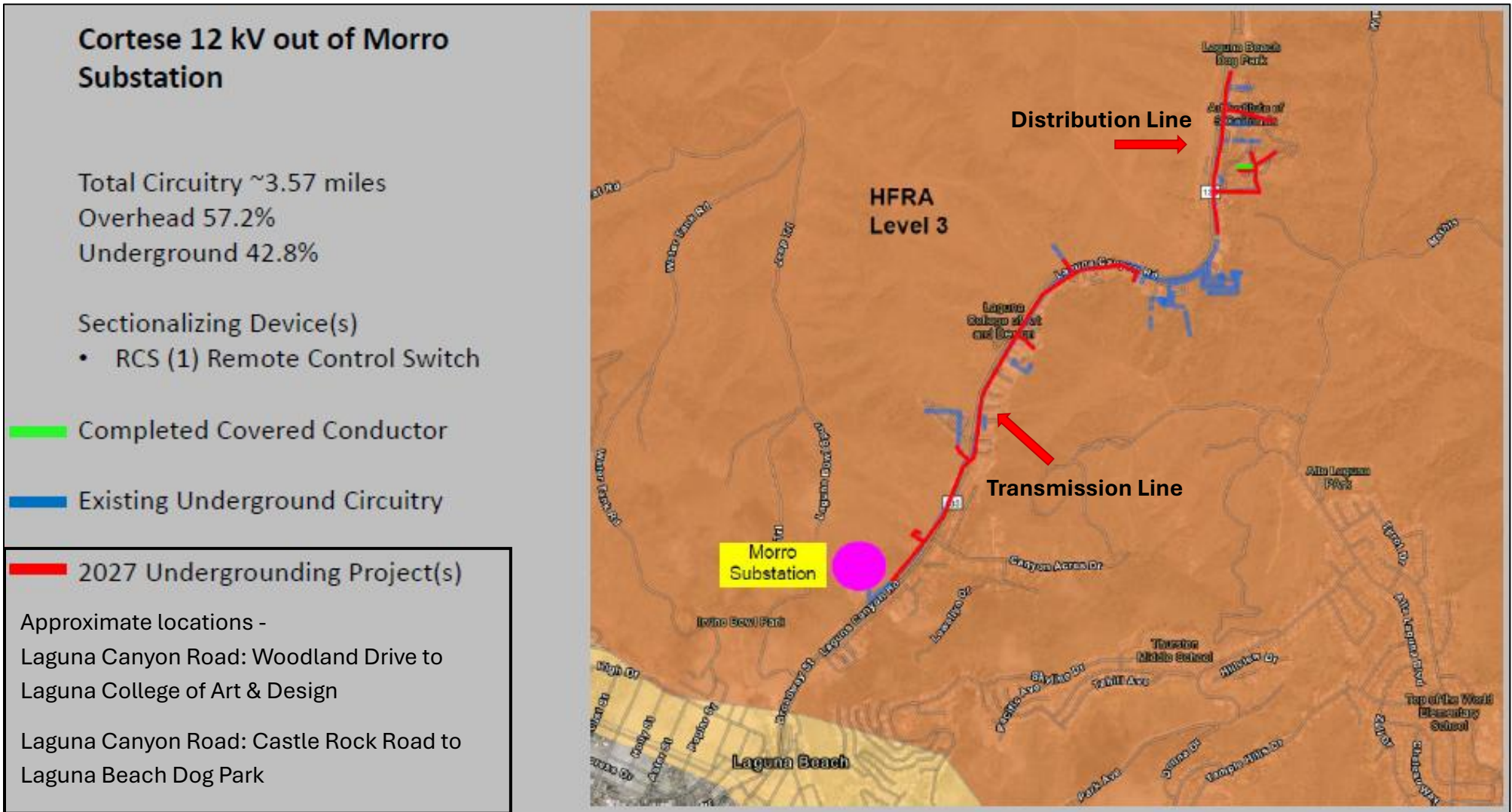
- RCS (2) Remote Control Switch
- RAR (2) Remote Automatic Recloser

-  Completed Covered Conductor
-  Non-Covered Conductor Overhead Section
-  Existing Underground Circuitry
-  2025 Covered Conductor Project(s)
-  2027 Undergrounding Project(s)

Approximate location -
Pacific Coast Highway to Aliso Canyon
Road/Aliso Water District Road



Southern California Edison Circuits



Southern California Edison Circuits

Artist 12 kV out of Morro Substation

Total Circuitry ~22.4 miles
Overhead 19.8%
Underground 80.2%

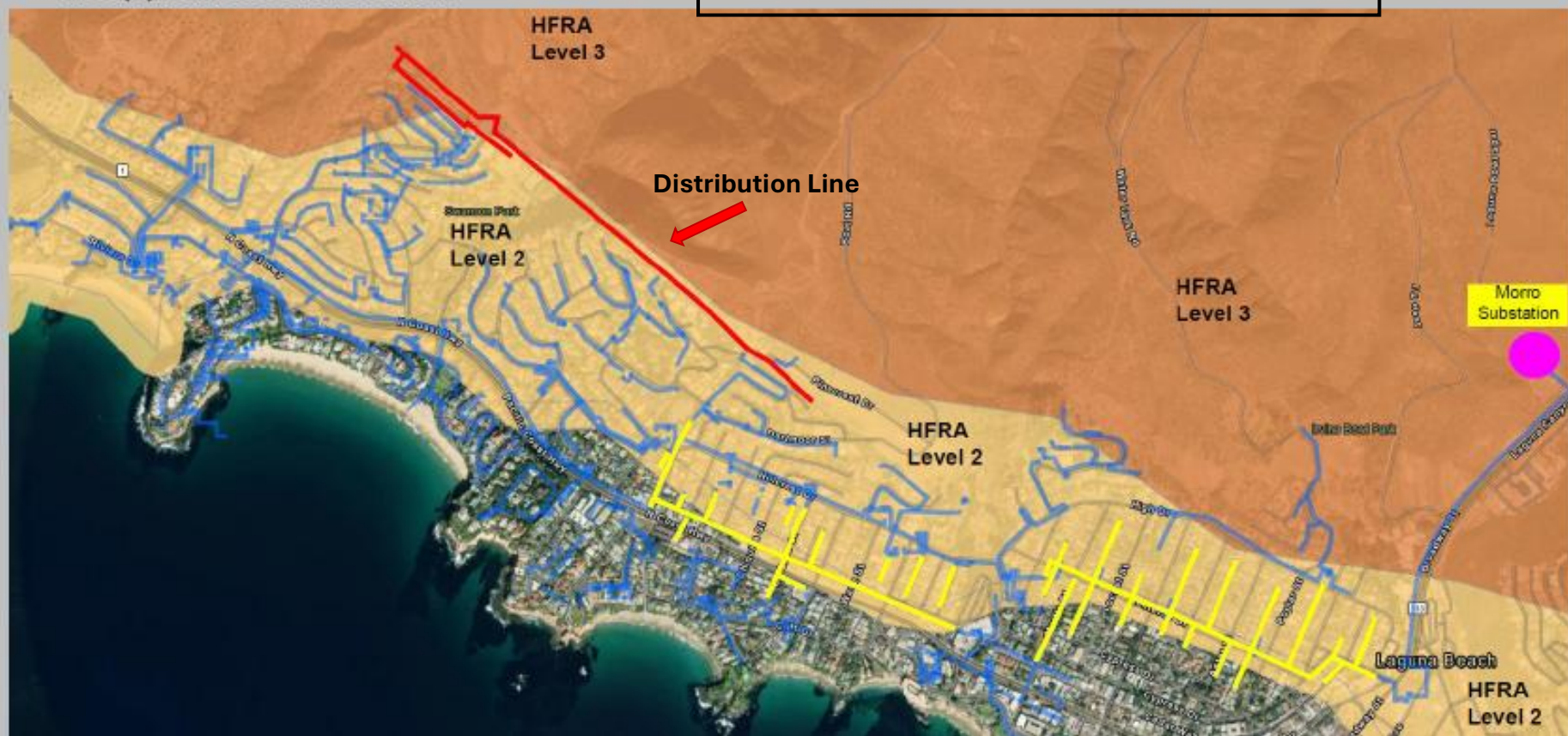
Sectionalizing Device(s)

- RCS (1) Remote Control Switch

Non-Covered Conductor Overhead Section

Existing Underground Circuitry



2028 Undergrounding Project(s)
Approximate location – Emerald Bay to Windsor Place



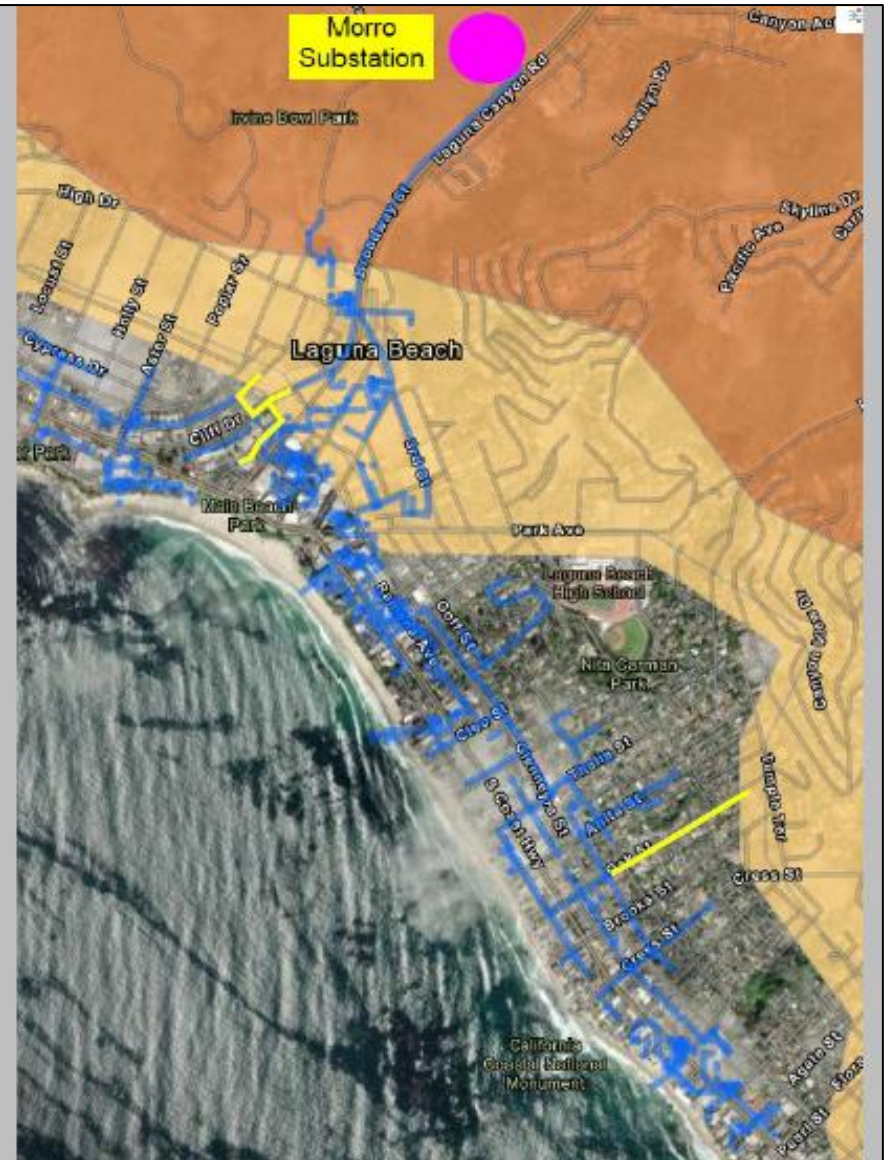
Southern California Edison Circuits

Rimrock 12 kV out of Morro Substation

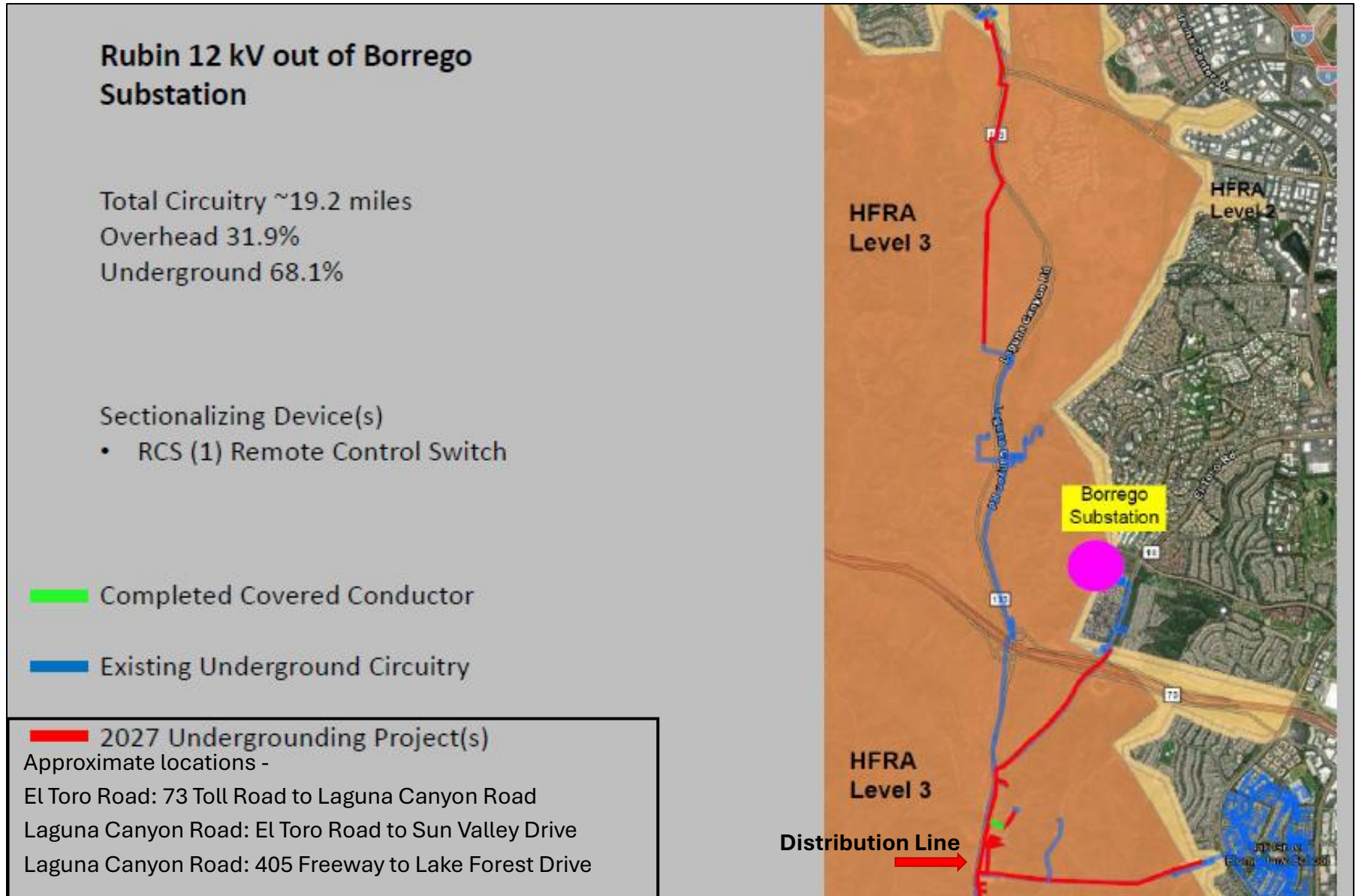
Total Circuitry ~11.4 miles
Overhead 41.2%
Underground 58.9%

-  Non-Covered Conductor Overhead Section
-  Existing Underground Circuitry

***No scheduled undergrounding projects**

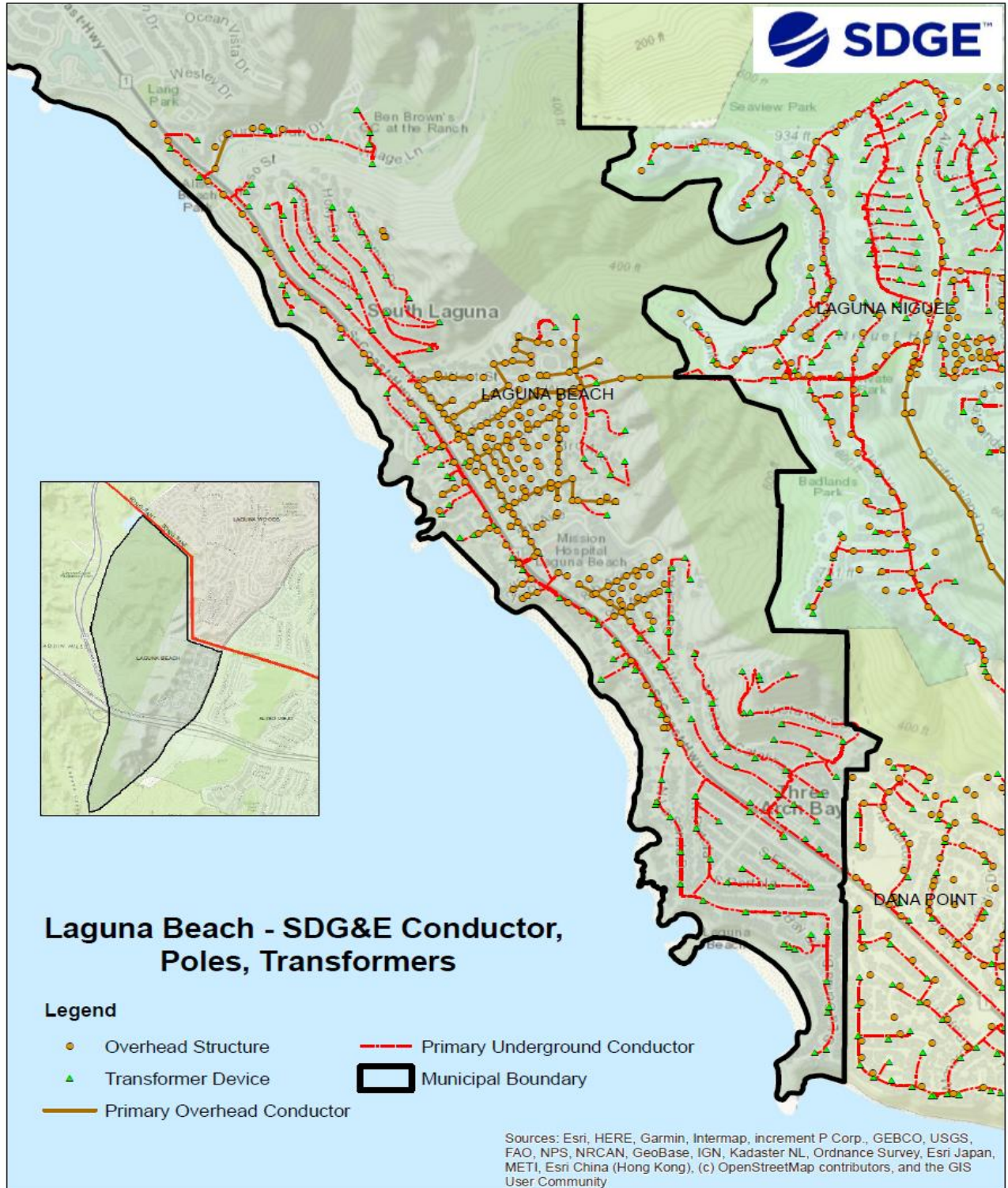


Southern California Edison Circuits



San Diego Gas and Electric Circuits

San Diego Gas and Electric does not have any undergrounding projects planned within the City of Laguna Beach. SDG&E is seeking California Public Utility Commission approval for additional funding for undergrounding beginning in 2027. The City will work with SDG&E to allocate funding for undergrounding projects in the city.



Water System

Laguna Beach is served by two water districts: the Laguna Beach County Water District (LBCWD) and the South Coast Water District (SCWD), separated approximately by Nyes Place. These districts currently rely on water sourced from groundwater, the Colorado River, and the State Water Project. Additionally, both districts maintain interconnections with neighboring districts to increase water flow during emergencies and are working on additional water sourced from ocean desalination.

Both districts are evaluating possible improvements to their systems to enhance water supply to fight a wildfire. Both districts rely on a gravity-fed system from hillside reservoirs to maintain pressure throughout the city. LBCWD stores approximately 35 million gallons of water within Laguna Beach. SCWD maintains over 29 million gallons within its service area and an additional 29 million gallons in emergency storage outside its service area.

LBCWD will be investigating ways to enhance its ability to pump water directly into its top reservoirs to maintain pressure in a wildfire event and will be investigating the feasibility of adding another reservoir in the Moulton Meadows area.

SCWD has recently completed its Reservoir 2B project in South Laguna doubling the storage capacity to 200,000 gallons. SCWD will also be exploring ways to utilize its recycled water system located at the Coastal Treatment Plant to increase water supply in a wildfire event.

Since 2019, both districts have hardened portions of their systems to reduce the impact on operations caused by a wildfire. These steps have included increased vegetation management around key facilities and expanding backup generator systems. The districts will continue to add to resiliency by actively managing vegetation on water district properties through landscape maintenance contracts and by working with the City Fire Department to conduct wildfire inspections of water district properties annually.

Public Safety Radio Facilities

Reliable radio communication is essential for Laguna Beach's Police, Fire, Marine Safety, and Public Works Departments, especially during wildfires. However, the city's topography creates coverage gaps in several areas. Nearly all radio transmissions are relayed through the repeater located at Moorhead Reservoir, northwest of the Festival of Arts. This facility, situated in a Very High Fire Severity Zone as determined by Cal Fire, is surrounded by open space and remains vulnerable to wildfire damage. Strengthening this critical communication hub should be a priority.

Telecommunications Facilities

Wireless communication is frequently compromised during wildfire events. For example, during the 2018 Camp Fire which destroyed Paradise, California, widespread telecommunications failures occurred, severely hampering evacuation efforts and emergency coordination.

The telecommunications infrastructure serving Laguna Beach is largely situated in open space areas, making it susceptible to fire damage. Most electronic equipment is housed in masonry or metal enclosures, often without additional fire-resistant features to protect antennas and wiring. This includes key telecommunications facilities, referred to as “macro sites,” which provide service coverage for large portions of the city. The City should continue to conduct fuel modification around the property lines of the critical infrastructure while the property owners should maintain fuel modification within the property line of where the infrastructure is housed. Inspections of the areas around the infrastructure should be done annually to ensure quality control and no gaps in fuel modification efforts. Strengthening fire protection measures for these facilities is crucial to maintaining emergency communications during disasters.

Following public input that noted significant concerns about lost cellular coverage during the January 2025 Public Safety Power Shutoff (PSPS) events, City staff interacted with carriers ATT and Verizon as a part of this 2025 update. The carriers were forthcoming and candid about service strengths and constraints. Here is what City staff heard and learned:

- Cellular phone service sites include either:
 - Macro sites – tall (50’ to 200’) and large, these are referred to as full cell sites, which have either a battery backup system (see Figure 1 as an example), a generator, or stand-by electrical systems that allow a generator to be quickly brought on-line.
 - DAS (Distributed Antenna Sites) – individual sites that are part of a network of multiple antennas strategically placed throughout an



Battery Backup for a Macro Site

Wildfire Mitigation and Fire Safety Report 2025 Update

area to provide strong coverage. Often used in a large building with high cellular demand.

- SCL (Small Cell Sites) – antennas on a pole, with no generator or batteries. Lower capacity than a DAS site within a DAS network.
- Some of the cellular service backbone in Laguna Beach does not have battery backup to supply auxiliary power in the event of a PSPS. Cellular companies state that California State law does NOT require each of their facilities to have backup power when site constraints (such as the type of antenna, physical space limitations, code limitations and placement concerns of the local government and neighbors) preclude the installation of a “macro” site (where battery or generator backup exists). In other words, those areas supported by DAS and SCL sites will generally not have any backup in the event power goes down, taking the cellular service down with it.

When a carrier identifies an area with less-than-optimal coverage, it typically follows this process to improve service quality and enhance coverage:

- Conducts detailed site surveys to understand the specific coverage gaps and the factors causing them. This involves assessing signal strength, identifying physical obstructions, and evaluating the demand for service in the area.
- May upgrade existing cell towers with advanced technology, such as adding new antennas, increasing the number of sectors, or implementing newer technologies like 5G to enhance capacity and coverage.
- Perform “continuous network optimization” that ensures that the network operates efficiently. This includes adjusting antenna orientations, optimizing power levels, and implementing advanced software features to enhance overall network performance.
- Collaborates with local governments, businesses, and other stakeholders to site new infrastructure to improve coverage.

Staff expressed to ATT and Verizon representatives the City’s interest in improving coverage as well as being open to more sites that could serve as macro sites in Laguna Beach, acknowledging that doing so will require additional neighborhood support and communications. On March 5, 2025, Verizon General Counsel Jesús G. Román sent Mayor Rounaghi a letter (March 5, 2025) suggesting how our codes and process could be more helpful in improving “readiness and resiliency” and that “it is critical to ensure network connectivity and to add resiliency for emergencies, like wildfires...”.

Wildfire Mitigation and Fire Safety Report
2025 Update

Among other things, the letter expressed Verizon’s concerns about the City’s then and current...:

...regulations that effectively restrict large parts of the City as off-limits for telecommunications facilities. Section 11.06.200 (regarding facility location restrictions and setbacks from certain zones and uses), Section 25.55.008(A) (regarding restricting wireless facilities in the OS/C zone, and “strongly discourag[ing]” such facilities in residential zones or adjacent to schools), Section 25.55.008(B) (height restrictions), and the City’s Guidelines for Site Selection and Visual Impact and Screening of Telecommunications Facilities (redlined), Site Selection Criteria (location preferences).

Application of the location restrictions, setbacks and strong preferences will make large swaths or areas of the City off limits to wireless sites, which will create many significant gaps in Verizon’s network coverage and capacity. The limitations will therefore result in a prohibition, or an effective prohibition, of wireless services in violation of the 1996 Telecommunications Act (TCA), 47 U.S.C. Section 332(c)(7)(B)(i)(II).

We asked these questions of staff representatives to the California Public Utilities Commission (CPUC). Erin Rodriguez of the CPUC responded on April 16, 2025 as follows:

- Cell Backup. Question: What does State law and/or the CPUC require regarding battery backup for cell sites? Because cell companies have noted that there are exceptions to this requirement, please explain how and why exceptions to this occur (cell companies mention physical space limitations, as well as neighborhood opposition and the use of plug-ins for generators as an alternative set up to battery backups).

Response: State law (PU Code § 776.2) requires mobile telephony service providers to maintain at least 72 hours of backup power at cell sites in Tier 2 and Tier 3 High Fire-Threat Districts, unless they can demonstrate that doing so is “factually infeasible.” The CPUC implemented this requirement through D.21-06-034.

Exceptions to the 72-hour requirement may be granted when providers face legitimate constraints, such as:

- *Physical limitations (e.g., insufficient space for equipment),*
- *Permitting or zoning barriers, often related to neighborhood opposition, or*

- *Alternative mitigation measures, such as quick-connect plug-ins for portable generators that can be deployed rapidly in emergencies.*

Providers seeking exceptions must submit documentation and justification to the CPUC. The CPUC reviews these requests on a case-by-case basis and can reject insufficient or unsubstantiated claims of infeasibility.

- **Utility Line Hardening.** Questions: What are the steps that utilities take to harden a transmission or distribution system (besides undergrounding). Are there levels of hardening - minimal, moderate, max?

Response: Utilities take a tiered approach to hardening electric infrastructure, especially in high fire-risk areas. Measures typically fall into three general levels:

- *Minimal: Installing covered conductors to prevent arcing and contact with vegetation; replacing fuses and fast-acting reclosers.*
- *Moderate: Pole replacements, increased conductor spacing, stronger hardware, and some remote switching.*
- *Maximum: Full system rebuilds with covered conductor, undergrounding (where feasible), strategic deployment of sectionalizers and switches, and installation of advanced sensors and grid automation.*

The CPUC requires utilities to identify and prioritize line segments for hardening based on risk assessment, customer impact, and cost-effectiveness, as part of their Wildfire Mitigation Plans (WMPs).

- **Utility Circuits for PSPSs.** Question: Is there an effort underway by the CPUC to break larger circuits down into smaller ones, and if so, what is the timing for that?

Response: The CPUC encourages utilities to take steps that can reduce the size and scope of Public Safety Power Shutoff (PSPS) events, including efforts to segment circuits so that smaller portions of a line can be de-energized rather than an entire circuit.

These efforts vary by utility and are subject to feasibility, cost, and system constraints, but may include:

- *Installing sectionalizing devices and automated switches,*
- *Enhancing situational awareness and weather monitoring,*

Wildfire Mitigation and Fire Safety Report
2025 Update

- *Collaborating with communities and local governments on local priorities.*

The CPUC reviews these activities through utilities' Wildfire Mitigation Plans and PSPS post-event reports. While specific timelines differ across service territories, utilities are expected to make continuous progress in reducing PSPS impacts where possible.

Additional recommended actions related to infrastructure are listed in the table below.

2025 Recommended Action Items Infrastructure

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
45	Infrastructure	Investigate fire resistive improvements to emergency radio facilities	Conduct an analysis of the fire hardening/structural improvements to the Moorhead Radio Repeater to improve the survivability of the radio equipment and a similar study for the radio equipment at Fire Station #3 and recommend necessary upgrades/improvements.	Short	TBD			Fire
46	Infrastructure	Add sprinkler system to areas of high fire risk determined by AI software	Utilizing AI technology and satellite imagery, determine which areas would benefit from added moisture. Determine if feasible to add sprinkler systems to increase moisture of the vegetation to slow down or decrease the chance of fire spread.	Short	\$70,000	Wildfire Safety Fund		Fire
47	Infrastructure	Improving Cell Coverage	Review possible LBMC changes as suggested by cell phone carriers.	Short (by September 2025)	\$0			City Attorney
48	Infrastructure	Improving Cell Coverage	Review possible Macro Sites to improve reliability (macros have battery or generator backup)	Short (by September 2025)	\$0			City Manager's Office
49	Infrastructure	Improving Cell Coverage	Review site opportunities and coverage maps via semi-annual meetings with Verizon, ATT - do this 2x a year	Short - ongoing	\$0			City Manager's Office
50	Infrastructure	Reducing Scope of PSPS	Review hardening efforts and circuit division via semi-annual meetings with SCE, SDG&E - do this 2x a year	Short - ongoing	\$0			City Manager's Office
51	Infrastructure	Reducing Scope of PSPS	Continue efforts to underground/harden transmission lines in critical open space areas	Short - ongoing	\$0			Public Works, with SCE and SDGE

2025 Recommended Action Items Infrastructure

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
52	Infrastructure	Undergrounding: Coast Highway between Agate Street and Arch Street	Coast Highway is a primary evacuation route. Coast Highway Utility Underground District 2019-1 was formed on April 16, 2019 as a Rule 20A project using Rule 20A credits for funding. Continue coordination with SCE and Caltrans to construct the project.	Short	\$3.7 million	Rule 20A Credits		Public Works
53	Infrastructure	Undergrounding: Coast Highway remaining overhead facilities	Coast Highway is a primary evacuation route. Coast Highway Utility Underground District 2020-2 was formed on September 22, 2020 as a Rule 20A project using Rule 20A credits for funding. Continue coordination with SCE and Caltrans to construct the project.	Short	\$3.6 million	Rule 20A Credits		Public Works
54	Infrastructure	Repair gate at Balboa Fire Road	Repair Balboa Fire Road gate after Rancho Fire.	Short	\$15,000	Wildfire Safety Fund		Public Works / Fire
57	Infrastructure	Install an additional fire heli-hydrant filling station	Explore installing a third location. Perform an assessment/study on needs/options and then work with LBFD and OCFA on feasibility of an additional location. If feasible and needed within the District's service area, complete construction of the new additional heli-hydrant filling station.	Medium	TBD			Laguna Beach County Water District / Fire
58	Infrastructure	Determine feasibility of creating new roads or leveraging existing trails for evacuations.	There are currently areas within and adjacent to the city that can be assessed for feasibility to utilize in an evacuation or for resources to have a road to access harder to reach neighborhoods.	Medium	\$100,000	TBD	Yes	Public Works
59	Infrastructure	Evaluate additional reservoir feasibility	Evaluate the addition of a reservoir at Moulton Meadows concurrently with the pipeline evaluations to improve system performance and water supply reliability under both normal and emergency situations.	Medium	Non-City Funded			Laguna Beach County Water District

2025 Recommended Action Items Infrastructure

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
60	Infrastructure	Add pipelines and pumps that go direct to the wildland urban interface areas	Evaluate adding direct pipelines (and pumping facilities) from our water supply transmission main in the Canyon to the Jahraus Reservoir (Top of the World) and from the water supply transmission main in Coast Highway to our Sweany and/or Zitnik reservoirs to increase system performance and water supply reliability under both normal and emergency situations (i.e. Seismic, Wildfire, Power loss, etc.). Determine feasibility of other system piping projects to improve system performance and reliability	Medium	Non-City Funded			Laguna Beach County Water District
61	Infrastructure	Utilize Title 22 Recycled Water for firefighting efforts	Determine feasibility of using Title 22 recycled water from Coastal Treatment Plant. Research what will be needed i.e. storage and hydrants specifically for recycled water	Medium	Non-City Funded			South Coast Water District
62	Infrastructure	Collaborate with utilities to support legislation that includes undergrounding and grid resiliency	Provide support for legislation and collaborate with utility partners to push forward legislation that expedites the process to underground and increase grid resilience.	Medium	\$100,000	TBD		City Manager's Office
63	Infrastructure	Undergrounding: Crestview	Underground Crestview overhead lines.	Medium	\$1.4 million	TBD	No	Public Works
64	Infrastructure	Install new gate at Balboa Fire Road	Install a new gate at the Balboa Fire Road with remote operating or keypad capability.	Medium	\$85,000	Wildfire Safety Fund		Public Works / Fire
65	Infrastructure	Add additional fire hydrant	Add additional fire hydrant near the intersection of Rancho Laguna and Morningside.	Medium	Non-City Funded	TBD		Laguna Beach County Water District / Fire

2025 Recommended Action Items Infrastructure

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
66	Infrastructure	Undergrounding: Top of the World to Alta Laguna Blvd	Underground Top of the World to Alta Laguna overhead lines.	Long	TBD		No	Public Works
67	Infrastructure	Undergrounding: SOCWA Coastal Treatment Plant to Laguna Niguel	Underground area from SOCWA Coastal Treatment Plant to Laguna Niguel. This area is where the Coastal Fire occurred in May 2022.	Long	TBD		No	Public Works
68	Infrastructure	Undergrounding: Laguna Canyon Road between the electrical substation westerly of Canyon Acres to El Toro Road	Laguna Canyon Road is a primary route for evacuation and emergency/mutual aid resources to access the City. The poles and wires are adjacent to 16,000 acres of open space creating a fire risk from failures due to wind or vehicle impact. Pole or wire failures from a wildfire could also block emergency access. In addition, the failure of communication wires could disrupt emergency communications through loss of fiber optic cable damage. Undergrounding the utilities may require significant road improvements to accommodate the underground facilities. The conceptual cost estimate is approximately \$60 million for undergrounding and \$60 million for roadway improvements. Grant funds are being pursued to cover the costs of the project. On January 9, 2024, City Council initiated the relinquishment process to take ownership of the roadway.	Long	\$60 million	TBD	Yes	Public Works
69	Infrastructure	Undergrounding: Glennestre Street between Laguna Avenue and Thalia Street, and	Glennestre Street is a high-volume roadway that serves as a secondary emergency access and evacuation route paralleling Coast Highway and serves a significant portion of the City. Poles and wires blocking the road could significantly delay emergency access or evacuation.	Long	TBD		No	Public Works

2025 Recommended Action Items Infrastructure

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
		between Calliope Street and Agate Street						
70	Infrastructure	Undergrounding: Neighborhoods	Work with neighborhoods to develop plans and incentives to underground utilities through assessment districts and other methods.	Long	TBD		No	Public Works
71	Infrastructure	Undergrounding: Monterey Drive, Hawthorne to Linden Street	This section of Monterey Drive was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works
72	Infrastructure	Undergrounding: Thalia Street, Temple Terrace to 350 feet southwest of Glenneyre Street	This section of Thalia Street was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works
73	Infrastructure	Undergrounding: Monterey Street/Virginia Way, West Street to 5 th Avenue	This section of Monterey Street/Virginia Way was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available. West Street Assessment District 2021-1 will go to vote this summer. If successful, the project will underground Monterey Street from West Street to Eagle Rock Way.	Long	TBD		No	Public Works

2025 Recommended Action Items Infrastructure

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
74	Infrastructure	Undergrounding: Temple Hills Drive, northeast and southwest of San Remo Drive	This section of Temple Hills Drive was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works
75	Infrastructure	Undergrounding: Virginia Way, 7 th Avenue to 9 th Avenue	This section of Virginia Way was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works
76	Infrastructure	Undergrounding: San Joaquin Street, Hillcrest Drive to alley 100 feet northeast of N. Coast Highway	This section of Joaquin Street was identified in the 2019 Report as a key evacuation route that should be prioritized as an undergrounding project when funding becomes available.	Long	TBD		No	Public Works

Section 5: Public Safety Technology

The City of Laguna Beach has long been recognized as a leader in leveraging innovative technology to enhance public safety. One of the latest advancements underway is the implementation of a next-generation computer-aided dispatch (CAD) system, which will utilize real-time GPS data to identify and deploy the nearest available emergency unit, improving response times and operational efficiency.

Since the release of the 2019 Report, technological advancements have continued to create new opportunities for strengthening the City's fire prevention and emergency response efforts. In 2025, Laguna Beach installed two artificial intelligence (AI) camera systems as part of the AlertCalifornia program led by UC San Diego. These AI-enhanced cameras monitor open space areas and provide early smoke and flame detection, real-time visual feeds, and automated alerts to emergency responders—tools that significantly improve situational awareness and wildfire response capabilities.

Looking ahead, the City plans to implement AI-based fire predictive analytics to model wildland fire behavior. This technology will help prioritize fuel modification projects and guide resource deployment in high-risk areas. In addition, the City will evaluate emerging wildland fire suppression technologies that can improve firefighting effectiveness and safety in challenging terrain. The City will also investigate new technology and applications to assist law enforcement in tracking evacuations, which allows the evacuation information to be more quickly and accurately shared with the Incident Command Post and Emergency Operations Center.

Along with the City's commitment to advancing field response technology, Laguna Beach is investing in its first standalone Emergency Operations Center (EOC). This facility will offer the space and technological infrastructure needed to bring together City staff and external partners in managing incidents of any scale. The EOC will integrate data from new technology platforms to establish a common operating picture, which will enhance resource allocation, policy-making, and public communication during emergencies. It will also serve

Wildfire Mitigation and Fire Safety Report
2025 Update

as the central hub for tracking resources and expenditures, supporting potential reimbursement from FEMA and CalOES following disasters.

The new EOC will also allow for redundant dispatch capabilities within City limits—a function not currently available but essential for resilient emergency response. The need for a dedicated EOC has been underscored by Laguna Beach’s frequency of hazard events, including two recent EOC activations in July 2025 for the Rancho Fire and Tsunami.

The City is also committed to strengthening regional partnerships, particularly with the Orange County Fire Authority (OCFA) and Orange County Sheriff’s Department (OCSD) to advance our response capabilities. Laguna Beach will continue to focus on enhancing resource sharing, adopting shared technologies, and aligning response strategies to improve overall regional readiness and coordination during wildfire events and other large-scale emergencies.

Additional recommended actions related to public safety technology are in the table below.

2025 Recommended Action Items Public Safety Technology

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
15	Public Safety Technology	Install a traffic signal priority system	Install a remote-controlled traffic signal system (Opticom) that prioritizes emergency vehicle access on Coast Highway and Laguna Canyon Road. This system is designed to expedite evacuation during emergencies, such as Fire and Police Code 3 responses, while also supporting low-priority transit vehicles. Coordination with Caltrans is necessary for permitting and operational cooperation. This ensures that traffic lights prioritize emergency vehicles, reducing their delays and lowering the risk of intersection collisions. Similar systems are already operational in Dana Point and Newport Beach, though not specifically configured for evacuation purposes.	Short	\$350,000	Wildfire Safety Fund		Police
16	Public Safety Technology	Drone as First Responder	Determine the feasibility of a drone as first responder that could be launched when AI sensors receive a fire notification.	Short	\$375,000	\$375,000 from Wildfire Safety Fund, \$125,000 TBD	Possibly	Police
17	Public Safety Technology	Explore a neighboring City partnership to share public safety technology	Determine the feasibility of sharing a Real Time Information Center to monitor AI Cameras, make emergency notifications, launch drone as first responder, and control traffic signals.	Short	\$0			Police

2025 Recommended Action Items Public Safety Technology

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
18	Public Safety Technology	Work with CalFire Chief of Intelligence on pre and post fire analysis	Work with CalFire Chief of Intelligence on pre and post fire analysis that can be incorporated into mitigation, preparedness, response, and recovery efforts. Determine feasibility of a system like Technosylvania that CalFire uses for AI predictive analytics on historical fire patterns, weather patterns, and vegetation types to provide context and a potential roadmap for how fires can spread.	Short	\$70,000	Wildfire Safety Fund		Fire
19	Public Safety Technology	Determine possible use of Fumis system for wildfires	Determine the possibility and effectiveness of utilizing the Fumis system to assist in wildfire preparedness, response, and/or recovery. Fumis integrates camera feeds, both public and private cameras with permission from the camera owner, into a unified and AI powered system for public safety personnel to utilize.	Short	\$0			Police
20	Public Safety Technology	Explore new technology for wildfire suppression	Explore new suppression technology for open space areas where interrupting the spread of fire would be most impactful to property and life conservation.	Short	TBD	Wildfire Safety Fund		Fire
21	Public Safety Technology	Explore the use of new technology and applications to track evacuations	Explore the feasibility of using new technology and applications to track evacuations and more quickly and accurately share evacuation information with the Emergency Operations Center and Incident Command Post.	Short	TBD	Wildfire Safety Fund		Police
22	Public Safety Technology	Explore the use of new technology and applications to track evacuations	Explore the feasibility of using new technology and applications to track evacuations and more quickly and accurately share evacuation information with the Emergency Operations Center and Incident Command Post.	Short	TBD	Wildfire Safety Fund		Police

2025 Recommended Action Items Public Safety Technology

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
23	Public Safety Technology	Emergency Operations Center (EOC) Dispatch Console	Update current dispatch console in City Hall EOC to include PD and FD radios for better situational awareness and dispatch redundancy. After-action item from Rancho Fire.	Short	\$175,000	Wildfire Safety Fund		Police
24	Public Safety Technology	Create Dispatch Redundancy	Install standalone dispatch console at the CRC to serve as the dispatch station in the new EOC and provide redundant dispatch capabilities.	Short	\$424,000	Wildfire Safety Fund		Police
25	Public Safety Technology	Field Response Resource Management Solution	Purchase Tablet Command and iPads for incident management tracking in the field and situational awareness in the Emergency Operations Center (EOC).	Short	\$105,000	Wildfire Safety Fund		Fire
26	Public Safety Technology	Field Response Cellular Coverage and Connectivity	Purchase StarLink for Primary Fire Units to ensure cell coverage and network connectivity for first responders, public works, and mutual aid in the field.	Short	\$10,000 + annual fee	Wildfire Safety Fund		Fire
27	Public Safety Technology	Emergency Operations Center (EOC) IT equipment and cabling	Purchase IT equipment and cabling in new Emergency Operations Center.	Short	\$180,000	Wildfire Safety Fund		Fire

Section 6: Community Preparedness

Community preparedness is essential for ensuring the safety and well-being of residents, particularly during high-risk disasters such as wildfires. In the event of a wildfire, residents must be well-informed on how to receive emergency alerts, identify evacuation routes, locate emergency shelters, and reunite with loved ones. The City of Laguna Beach has been proactive in disaster readiness through the creation and sustainment of the Emergency Disaster Preparedness Committee (EDPC) and the Community Emergency Response Team (CERT) program.

The EDPC is a 7-member committee made up of residents who advise City Council on how the community can best prepare for an emergency or disaster. The committee utilizes the Federal Emergency Management Agency’s (FEMA) Community Lifelines concept as the



Current and former EDPC Members and the Acting Deputy Fire Chief

framework for their workplan that is approved by City Council. The EDPC is involved in the city’s emergency planning efforts by sitting on working groups and ad hoc committees related to preparedness. They also review emergency plans and programs to provide feedback before going to City Council for approval, which most recently includes the Local Hazard Mitigation Plan, Red Flag Parking Restriction Program expansion, and the Safety Element.

In addition to EDPC, the city has regularly offered the Community Emergency Response Team (CERT) training program for over a decade. With hundreds of graduates, the program has made significant strides in strengthening community resilience. However, further enhancements and expansions in preparedness efforts remain necessary.



CERT volunteers deployed as Fire Watch during a Red Flag event

To elevate community preparedness, the City should consider initiatives such as assisting neighborhoods in becoming certified FireWise Communities; developing a plan to assist those with disabilities or access and functional needs and those with limited mobility in their evacuation planning; conducting periodic tests of the Outdoor Warning System; and finding new and innovative ways to reach more residents and visitors with preparedness information. Additionally, establishing a home hardening inspection program could provide homeowners with recommendations and guidance on fortifying their properties against wildfire threats. To encourage participation, the program should explore offering incentives for residents who implement home hardening measures.

Over the past decade, the Red Flag Parking Restriction Program has played a critical role in wildfire preparedness, initially introduced as a pilot program for the Diamond/Crestview neighborhood – a community of approximately 100 homes with only one access route. This program required an in-depth study of on-street parking to determine which spaces should

Wildfire Mitigation and Fire Safety Report
2025 Update

be restricted on Red Flag days to ensure smooth evacuation and emergency access. The City should consider expanding the program to additional neighborhoods and streets identified as being “access impaired” in the 2021 Evacuation Time Study to ensure residents can safely evacuate and first responders can enter these areas without issue. On average, the City of Laguna Beach has 3-5 Red Flag Events per year.

Furthermore, restricting outdoor construction during Red Flag Events should be considered to eliminate the potential for heavy equipment to unintentionally ignite a wildfire, which, per CalFire, is the cause of the Airport Fire in 2024 that burned over 23,000 acres in Orange and Riverside counties resulting in over 190 damaged or destroyed structures. Not having construction apparatus on the streets also improves mobility for both evacuees and emergency responders.

Beyond evacuation and home hardening strategies, emergency preparedness efforts should focus on updating neighborhood evacuation zone maps; revising the all-hazards emergency preparedness guide; collaborating with power companies to enhance public education on PSPSs; and continuing to hold town hall meetings on topics like insurance. Establishing a dedicated Community Preparedness Educator position to support the Emergency Operations Coordinator could also lead to the successful implementation of these expanded initiatives.

Additionally, strengthening the CERT program would further expand the number of disaster-prepared residents. CERT volunteers can assist in expanding the preparedness programs in



CERT volunteer educating the public on emergency preparedness at a community event.

Wildfire Mitigation and Fire Safety Report
2025 Update

the City and be utilized to assist with preparedness initiatives like door-to-door preparedness campaigns and community preparedness presentations.

By continuously refining and expanding emergency preparedness initiatives, Laguna Beach can build a more resilient community, ensuring that residents are informed and well-equipped to respond swiftly and effectively during a wildfire event.

Additional recommended actions related to community preparedness are set forth in the table below.

2025 Recommended Action Items Community Preparedness

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
28	Community Preparedness	Community Preparedness Educator	Hire a Community Preparedness Educator to educate the public on emergency preparedness, fire safety, neighborhood/FireWise preparedness, and home hardening inspections. The Public Educator can work to expand the CERT program by offering more academies and providing continuous training to engage and retain volunteers.	Short	PT: \$70,000	Wildfire Safety Fund		Fire
29	Community Preparedness	Expand the Red Flag Restriction Program	Prohibit on-street construction during Red Flag days to ensure roadways are clear and equipment does not start a fire.	Short - ongoing	\$0			Fire / Public Works / Police
30	Community Preparedness	Expand the Red Flag Parking Restriction Program	Expand the Red Flag Parking Program into additional neighborhoods. Start with the neighborhoods that are identified in the Evacuation Time Study as having impaired access.	Short	\$30,000	Wildfire Safety Fund		Fire / Public Works / Police
31	Community Preparedness	Evacuation Drills	Identify ways to encourage neighborhood evacuation drills utilizing public education, possible incentives from the City, and having the drills coincide with scheduled tests of the emergency alert systems.	Short	\$5,000	Wildfire Safety Fund		Fire / Police
32	Community Preparedness	Door-to-door Community Preparedness Campaign	Conduct a door-to-door community preparedness campaign utilizing CERT volunteers and interested City Council members. Campaign can be used to distribute zone specific evacuation maps, assist residents in signing up for alert and warning, and providing education on home hardening.	Short	\$0			Fire
33	Community Preparedness	Engage with the Real Estate Community on Preparedness for New Residents	Work with the local real estate community to provide new residents with information on evacuation zones, how to sign up for alert and warning, home hardening, and other preparedness skills.	Short - ongoing	TBD	Wildfire Safety Fund		Fire / Police
34	Community Preparedness	School Preparedness	Continue to coordinate with Laguna Beach USD and other schools for emergency preparedness and evacuations.	Short - ongoing	\$0			Fire / Police

2025 Recommended Action Items Community Preparedness

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
35	Community Preparedness	FireWise Program	Educate the public on the FireWise Program to increase participation by more neighborhoods. Having more FireWise neighborhoods would result in self-regulation of vegetation management and self-sufficient neighborhood emergency planning. Being a FireWise Community may also help in lowering insurance rates or qualifying for insurance.	Short - ongoing	\$0			Fire
36	Community Preparedness	FireRisk Reduction Communities	Educate the public on the FireRisk Reduction Communities to increase participation by more neighborhoods to potentially help lower insurance rates or qualify for insurance.	Short - ongoing	\$0			Fire
37	Community Preparedness	PSPS Education	Collaborate with SCE and SDG&E to educate the public on PSPS, outage preparedness and SCE/SDG&E resources available.	Short - ongoing	\$0			Fire
38	Community Preparedness	Evacuation Zone Maps	Update the public-facing evacuation zone maps to align with common evacuation terminology and incorporate lessons learned from evacuations since the 2019 iteration of the maps.	Short	\$15,000	Wildfire Safety Fund		Fire / Police
39	Community Preparedness	All Hazard Preparedness Guide	Update the all-hazard emergency preparedness guide and distribute it to the public.	Short	\$15,000	Wildfire Safety Fund		Fire
40	Community Preparedness	Annual Insurance Townhall	Host an annual insurance town hall with the CA Department of Insurance for residents. The most recent Insurance Town Hall was held on September 18, 2025. Hold the next town hall in September 2026.	Short - ongoing	\$0			Fire / City Manager's Office

2025 Recommended Action Items Community Preparedness

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
41	Community Preparedness	LBPD and LBFD partnership with SCWD, LBCWD, and LBUSD	Continue to grow cooperative working relationship between LBPD/LBFD, SCWD and LBCWD for emergency preparedness, response, and recovery. LBFD should continue to conduct wildfire inspections of water properties annually and upon request; both water districts should have a seat in the City's EOC; water districts and school districts should be included in emergency exercises and drills; etc.	Short	\$0			Fire / Police / SCWD / LBCWD
42	Community Preparedness	City should continue partnership with Emerald Bay Service District	The City should continue to build a cooperative relationship with Emerald Bay Service District (EBS) and include a representative from EBS in the EOC.	Short	\$0			Fire
43	Community Preparedness	Provide the public with up-to-date information on home hardening laws and vetted vendors by CalFire	Ensure the public is informed of updates to laws as they pertain to home hardening i.e. Zone 0 laws. Share with the public the State Fire Marshal's list of Wildland Urban Interface (WUI) Products for Home Hardening.	Short - ongoing	\$0			Fire
44	Community Preparedness	Community Wildfire Protection Plan (CWPP)	Hire a consultant to lead development, facilitate public workshops, administer online surveys, and provide content and format the CWPP. Finalizing the CWPP assists with eligibility in becoming a CalFire designated Fire Risk Reduction Community.	Short	\$100,000	Wildfire Safety Fund		

2025 Recommended Action Items Community Preparedness

Column	Category	Opportunity	Action	Term	Cost Estimate	Funding	Grant Eligible	Responsible Department
56	Community Preparedness	Investigate grant opportunities to improve the wildfire resistance of existing residences	Investigate grant opportunities that will encourage and support residents in making improvements to harden their homes and mitigate wildfire risks.	Medium	TBD		Possibly	Fire

Section 7: Funding

Funding Strategies

This section provides the financial plan and funding strategies needed to address the costs associated with the possible action items identified for the Short, Medium, and Long-Term categories.

The placement in these categories considers both the time necessary to plan and prepare for each opportunity and the time necessary to develop and implement a financial strategy to fund them. Descriptions of the proposed or potential funding sources are:

- ✓ **Short-Term (1-2 years):** Existing one-time and ongoing revenues and re-prioritization of current appropriations
- ✓ **Medium-Term (3-5 years):** Increases in existing revenues sources, such as parking fees; grant programs with matching funds from existing Capital Improvement Funds; available funding from Street Lighting and Utility Funds, Measure LL Fund, or other existing City Funds; and other external sources.
- ✓ **Long-Term (+5 years):** Possible voter-approved tax increases; grant programs; the creation of new assessment districts; and other internal or external sources

Each improvement may be assigned to a funding category that includes:

- **Wildfire Safety Fund:** Programs or project costs that will be funded by the Wildfire Safety Fund out of approximately \$4 million allocated in the Fiscal Year 2025-26 budget. These are mainly short-term projects.
- **Rule 20A Credits:** Programs or projects funded by utilities to convert overhead electric facilities to underground.

- **Already Funded:** Programs or projects that are already accounted for or in the upcoming two-year budget
- **Grant-Eligible:** Programs or projects could meet eligibility requirements to be funded by a future grant program. This is speculative and depends on the future availability of grant funds
- **Non-City Funded:** Programs or projects that may be included in the future capital improvement program of an external partner i.e. water districts
- **Funding Source TBD:** Program or project costs have not been identified so a funding source is TBD. Or a program or project cost has been identified, but the funding source has not yet been finalized.

Funding Strategies for Possible Action Items Categorized as “Short-Term”

Even as the Fiscal Year 2025-26 City Budget is constrained due to a possible recession including a flattening of hotel bed tax revenue and sales tax revenue, the City Manager presented a budget that includes up to \$4 million in funds for Wildfire Safety, given the essential nature of this work to the community’s long-term survival. The source of this \$4 million includes the Street Lighting Fund, residual amounts in a capital improvement project associated with FMZ maintenance, and more.

We are not optimistic that many grants will be available for short-term efforts, in large part due to the Federal government’s move to end, reduce or claw back the BRIC (Building Resilient Infrastructure and Communities) grant program. This program was essential in helping communities like ours spend modest amounts of resources to avoid catastrophic costs in life and dollars, yet FEMA now characterizes it as “wasteful and politicized.”

Conceptual Funding Strategies for Action Items Categorized as “Medium-Term”

This category of funds includes sources like the Street Lighting Fund, resident-driven assessment districts, utilities’ targeted undergrounding programs, and State and local grant funds that may be available in the coming years. The most reliable sources of funds will be the local ones that are based in part on local property taxes and local hotel bed taxes.

It's possible that a change in Congress or a change in approach in the executive branch may bring back federal sources of funds, but that is far from certain through at least 2028.

The City will be studying the mechanism and need for a revenue measure on the November 2026 ballot, one that could affect local sales tax, local hotel bed taxes, a vacancy tax, or some other revenue measure relating to commercial business operations. To have these taxes considered by local voters, the City would have to place a measure or measures on

the November 2026 general election ballot and would describe whether the revenue was intended to be used for a special, designated purpose (which requires 2/3rds voter approval) or a general tax for general government purposes (which requires majority voter approval).

Conceptual Funding Strategies for Action Items Categorized as “Long-Term”

Longer term sources include all the measures identified in the medium-term section, plus possibly the consideration of the formation of a larger assessment district to underground remaining areas of the city. It may also be more likely that following 2028, more federal dollars may be on the table to support other iterations of BRIC, climate change adaptation, and other disaster-related prevention and preparedness programs.

Financial Impacts from Previous Disasters

Disasters have a substantial adverse impact on local governments. Being financially prepared and proactive in identifying opportunities to prevent or limit the impacts of a disaster will help minimize the adverse financial impacts of disasters and restore more quickly the short and long-term financial position of the City when a disaster occurs.

Below are financial statistics from previous disasters that impacted Laguna Beach.

- October 1993 fire destroyed 441 structures. According to an LA Times article at the time, in the aftermath of the October 1993 Fire, insurance claims for Laguna Beach were expected to reach \$435 million in damages. This total did not include damage to public property or the cost of fighting the fire.
- On June 1, 2005, the Bluebird Canyon Landslide destroyed a 500-foot section of Flamingo Road, two large water mains and numerous sewer mains and storm drains. The repairs took three years to complete with a final cost of \$36 million. During this time, residents of Laguna Beach approved a ½ sales tax increase that contributed funding to the repair and to the Disaster Contingency Fund. The Disaster Contingency Fund has a balance of over \$6 million set aside for future emergencies.
- On December 22, 2010, the City experienced torrential rains damaging public and private properties throughout the City forcing the temporary closure of numerous streets. Laguna Canyon Road was closed for several days during the clean-up effort, the channel at Beach Street overflowed and many downtown businesses and City facilities were flooded. The City’s cost related to the cleanup and recovery was approximately \$6.7 million.

Wildfire Mitigation and Fire Safety Report
2025 Update

- From January 19 – 23, 2017, the City was hit by a series of 3 winter storms that resulted in damage throughout the city. Damage included downed trees and debris that blocked roadways and sidewalks impeding emergency vehicles; hillside sluffing resulting in damage to a retaining wall at City Hall; down power poles and lines resulting in power outages; damage to construction shoring; damage to tennis courts, play structure, and fencing at Lang Park; damage to SOCWA's road leading to critical infrastructure; yellow tagging of a residence due to mudslides; multiple beach closures due to surf and rain erosion; and damage to Main Beach Boardwalk. The Emergency Operations Center was activated, CERT volunteers were deployed, and ultimately the city sought reimbursement from CalOES and FEMA for the cost of emergency response and recovery which was over \$250,000.
- From February 13 – 15, 2019, the City was hit by the “Mid-February 2019 Storms” resulting in damage throughout the city including down trees and debris blocking roadways; significant damage to the north City Hall wall from flooding; damage to the creek rip-rap; damage to storm drains needing emergency repairs; and damage to fencing around storm drains. The City also spent staff time and money on emergency protective measures like sandbags, geo-tech experts, and activation of the Emergency Operations Center. The response costs and damage from the storm totaled approximately \$229,000.
- March 2020 was the start of the multi-year global COVID-19 Pandemic. The City implemented public health orders and safety measures to maintain public safety while also ensuring the continuation of government services and the local economy. The City's costs related to the COVID-19 Pandemic were approximately \$1 million.

Intentionally left blank