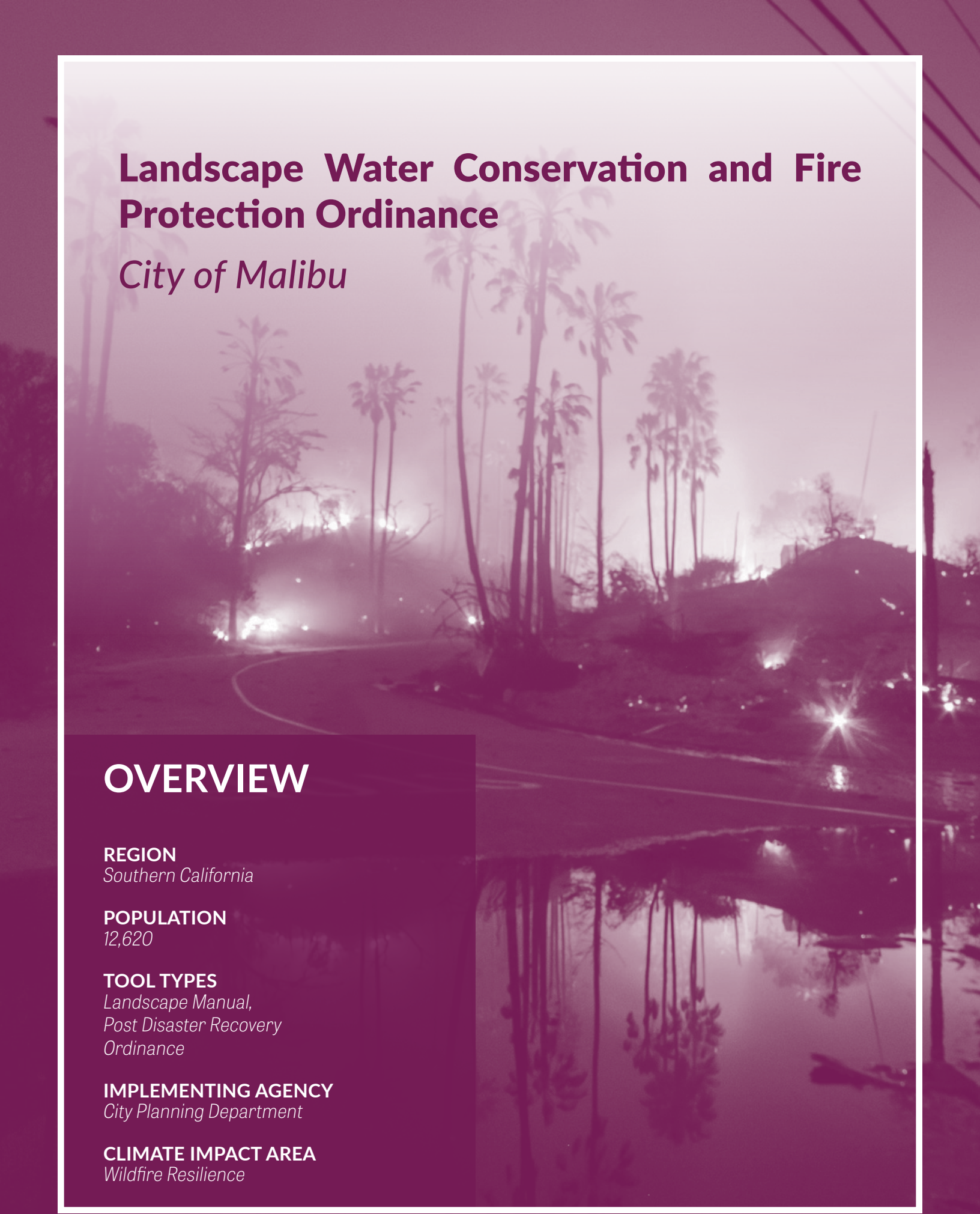
Landscape Water Conservation and Fire Protection Ordinance

City of Malibu



OVERVIEW

REGION
Southern California

POPULATION
12,620

TOOL TYPES
Landscape Manual, Post Disaster Recovery Ordinance

IMPLEMENTING AGENCY
City Planning Department

CLIMATE IMPACT AREA
Wildfire Resilience

SUMMARY

In 2018, the Woolsey Fire burned nearly 100,000 acres of land in Los Angeles and Ventura Counties during a strong Santa Ana wind event. The fire burned across the Santa Monica Mountains, through the City of Malibu, and to the Pacific Ocean. The fire destroyed 670 structures within the City of Malibu, and an additional 1,000 in surrounding areas.

After the fire, Malibu residents urged elected officials to act on concerns that hazardous landscaping contributed to fire spread within the city. In response, the City Council directed staff to prepare a citywide fire-resistant landscape ordinance. The ordinance, adopted in January 2020, updated the city's zoning code to include new fire protection standards as part of the landscaping chapter (17.53). New requirements include a citywide prohibition of palm trees and a ban on the installation of flammable materials such as bark chips, hedges, and artificial turf grass within zero to five feet from a structure.

Adoption of the ordinance successfully balanced several factors, including building public support while the community was still in recovery and ensuring that new fire-resistant landscaping restrictions were not at odds with other planning requirements in the Local Coastal Program (LCP).

This case study was selected as a Wildland-Urban Interface (WUI) Planning Best Practice because it shows how the community quickly took action to adopt a fire-resistant landscape ordinance following a wildfire. The local ordinance also highlights different natural resource and fire experts working with residents to create science-based mitigation strategies that navigate other complex planning requirements, such as the LCP. Finally, this case study includes equitable approaches to the recovery process by offering permitting assistance options to homeowners to ensure they were not impacted financially by the new ordinance.

Landscaping ordinances are regulatory mechanisms that contain the development standards for the quantity, type, location, and design of landscaping on a site. They address a variety of aesthetic, environmental, and safety issues, which can include fire risk reduction and water conservation. Landscaping ordinances that integrate fire protection may also include standards for other landscaping materials, such as fencing, walls, and gates.

TOOL DESIGN

Malibu's new fire protection landscaping ordinance expands upon existing Landscape Water Conservation regulations, meant to originally conserve water, and create drought-tolerant landscaping within the City of Malibu. This new ordinance is meant to foster both drought tolerant and wildfire-resistant landscapes within the City.

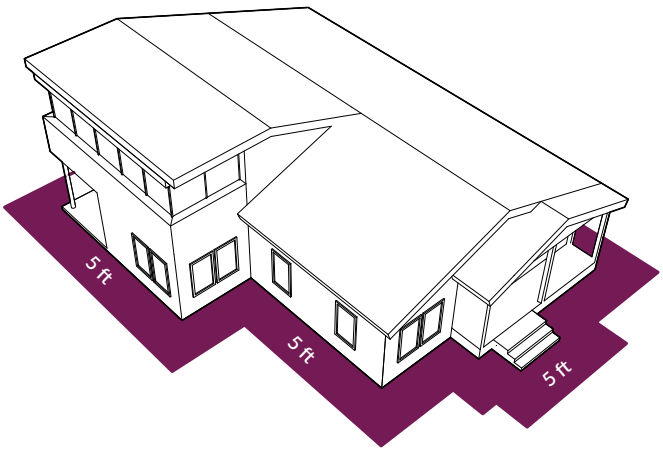
The City's new fire protection standards for landscaping broadly apply to industrial, commercial, multifamily or subdivision projects, and single-family residential uses which propose new or altered landscape areas (with a minimum of 500 sq ft. for new residential development and 2,500 sq ft. for existing residential development). The regulations also apply to any new landscaping for all single-family residences being rebuilt following destruction or damage due to a natural

Front Image: Lee Sternthal

disaster, like the Woolsey Fire.

Standards included within the ordinance are designed to reduce fire hazard and spread by minimizing the fuels available to wildfires, such as restricting or prohibiting trees, shrubs, and ground cover, and establishing the type of materials and siting for fences and walls allowed. Example provisions include:

1. *Prohibition of all new palm trees (citywide) and the prohibition of Eucalyptus, Pine, Cypress, Cedar, and Tree of Heaven species within 50 feet of a structure (with exceptions for Eucalyptus trees designated as monarch butterfly habitat)*
2. *Limitation on the maximum height of trees within or near existing utility easements where overhead power lines are present*
3. *Prohibition of all trees, shrubs, shredded bark, pine needles, artificial turf, and flammable fences and walls within zero and five feet from a structure*
4. *Removal and clearance of vegetation within ten feet on each side of public and private roadways or driveways*



Under the new ordinance, flammable materials including shredded bark, pine needles, and artificial turf are prohibited within five feet of a structure.

Landscape documentation packages are reviewed by a biologist contracted to work with the Planning Department before a permit is issued. This ensures each landscape plan complies with the Malibu Municipal Code, the LCP, as well as possible impacts to protected trees and Environmentally Sensitive Habitat Areas. Landscape installation is inspected by the City's contract biologist, and if there is a violation, that is enforced by the City's Code Enforcement Department.

IMPLEMENTATION

The City Planning Department worked closely with residents rebuilding their homes after the Woolsey Fire to ensure the new ordinance would not be a financial burden or barrier. Residents who lost homes in the fire, but who could not afford to hire a landscape architect to complete a landscape documentation package, worked with the Planning Department to draft and submit modified landscape plans that would meet the new minimum submittal requirements for permitting. These submitted plans were then reviewed and, if consistent, were approved by the Planning Department to help owners complete their rebuild.

The City of Malibu also adopted an emergency rebuilding ordinance that streamlined the coastal development permit process for on-site wastewater treatment and access road improvements where it could be demonstrated that the improvements would not impact coastal resources. The City's new zoning ordinance also created the Planning Verification process, which allowed fire-rebuild applications to be processed more efficiently over the counter instead of the typical process for a new replacement structure. This process previously consisted of a more front-loaded review of each application that may have required consideration and approval by the City's Planning Commission. The Planning Verification process helped homeowners submit and receive planning approvals for their rebuilds within a mandated three-year timeline. Furthermore, the

three-year window to obtain approval from the Planning Department also allowed homeowners to replace previously permitted development that was not consistent with current zoning ordinances without the need for a planning variance.

New palm trees, which are especially difficult for fire fighters to extinguish once ignited, are prohibited from being planted within the city limits. Image: San Bernardino County Fire

COLLABORATION & ENGAGEMENT

This process of developing an updated landscaping ordinance began almost immediately after the Woolsey fire. At the direction of City Council, the Planning Department worked with their staff arborist, a contract biologist, community members and representatives from the fire department, and other emergency response professionals to analyze how changes to landscaping requirements could decrease wildfire risk to homes and other features in the built environment. Discussions were based on fire behavior science in the home ignition zone and local observations witnessed during the recent fire. For example, bark chips, flammable vegetation, and combustible fencing acted as a wick, leading burning vegetation directly to structures, and palm trees generated embers that were carried in the wind toward surrounding homes and properties. In addition, the palm trees were difficult for firefighters to extinguish.

Champions for the proposed ordinance included Malibu residents, planning commissioners, and community emergency response team (CERT) members. Community support also allowed the City to adopt the ordinance while residents were still recovering to apply the new fire-resistant landscaping standards to properties being rebuilt from the Woolsey Fire. Although there was sympathy for residents who lost their homes, there was also broad consensus that increasing wildfire resilience through the new ordinance was important to prevent losses from future fires.

INNOVATIONS

During the development of the ordinance, staff worked closely with experts on coastal and natural resource protection rules to ensure that state regulations were followed and, where applicable, exceptions were created. For example, the ordinance allows Eucalyptus trees to be sited within 50 feet of a structure if the trees could potentially serve as a habitat for monarch butterflies. This factored into the City Council's determination that the project (i.e., ordinance) would not have any significant effect on the environment and therefore was exempt from the California Environmental Quality Act (CEQA).

In addition, the City of Malibu's location within the California Coastal Zone requires that all development and activity occurring within the Coastal Zone be subject to the City's LCP. In

the event of a conflict between the LCP and the City's General Plan or Zoning Code, those policies and regulations of the LCP will supersede. To avoid potential conflicts between the updated landscape ordinance and the LCP, the Planning Department crafted the fire-resistant landscaping standards to support the previously approved LCP goal that "new development shall minimize risks to life and property in areas of high fire hazard" without altering kind, location, intensity, or density of allowed uses.

This allowed the ordinance to be classified as a minor amendment to the City's Local Coastal Program Local Implementation Plan. Through close coordination with the California Coastal Commission (CCC), the minor amendment was reviewed and certified by the CCC in August 2020.

The Santa Monica Mountains Conservancy provided the City of Malibu with a $324,00 grant for a hazard tree removal program. Residents could apply for their hazardous trees to be removed by city staff under the grant program. Image provided by the City of Malibu.

FUNDING SOURCE

Funding for the drafting phase of the new fire-resistant standards within the City of Malibu's Landscaping ordinance was provided through the City's General Fund. Any ongoing costs associated with implementation are recovered through permit application fees.

Further, the City of Malibu received a $324,000 grant from the Santa Monica Mountains Conservancy for a hazard tree removal program. Residents with dead and dying hazardous trees could sign up to have trees removed for free with consultation from the city arborist and city public safety staff. While not directly linked to the new landscaping ordinance, this helped the city further advance its wildfire resiliency goals to help residents prepare for wildfire.

ADDITIONAL CONSIDERATIONS

REPLICABILITY

For communities considering adopting a landscape ordinance that includes fire protection standards, the City of Malibu's process offers key insights:

1. *Working with experts such as arborists, biologists, and fire specialists, can help determine the appropriate plant species to select and manage local climate and ecosystem conditions. Working with ecological experts also helps identify and create any necessary exceptions to avoid potential adverse environmental impacts. Based on capacity and need, this expertise can be built as internally, or on a contractual basis.*

2. *Advancing goals already adopted in the general plan, land use plan, and Local Coastal Program implementation priorities allows for a more efficient process when adopting new landscaping regulations.*

3. *Applying new regulations to include fire rebuilds also increases community resilience to future wildfire events. The City's creation of modified landscape plans for economically disadvantaged residents further enabled them to implement new regulations without creating an additional financial burden imposed by the ordinance.*

RESPONDING TO DATA, STATE REGULATIONS, & CLIMATE CHANGE IMPACTS

California's Fourth Climate Change Assessment Los Angeles Regional Report acknowledged that climate projections indicate there could be a 60% increase in area burned as a result of Santa Ana driven wildfire events, and a 75% increase in non-Santa Ana driven events in the Los Angeles Region by the mid-21st century under a higher global greenhouse gas (GHG) emissions scenario. If these projections prove true, fires like the Woolsey Fire, which occurred during a Santa Ana wind event, will become more common. In updating their landscape ordinance to include fire protection provisions, the City of Malibu has proactively increased the resilience of new and rebuilt homes for a future in which wildfire events are more frequent.

Research and guidance from the National Fire Protection Association (NFPA) and the Insurance Institute for Business and Home Safety (IBHS) on the importance of an ember-resistant zone (zero to five feet surrounding structures) support the efficacy of Malibu's Landscape and Fire Protection Ordinance on protecting homes from ignition during wildfire events. This ember-resistant zone is now also codified into state law for State Responsibility Areas (SRAs) and will be included in new Board of Forestry and Fire Protection regulations by January 1, 2023 (AB 3074, Fire prevention: wildfire risk: defensible space: ember-resistant zones).

FURTHER INFORMATION

For more information, please visit the City of Malibu Planning Department's Fire-Resistant Landscaping Webpage.

This case study is part of a series of Wildland-Urban Interface (WUI) Planning Best Practices. Each case study focuses on a specific planning tool (or set of tools) that a community is utilizing to reduce risk and build resilience to wildfire across the state of California. This project is part of California Climate Investments, *a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.*