

10.8. Community at Risk: Lake Oswego Fire Department

The Lake Oswego Fire Department has been identified as a Community at Risk (CAR) by Oregon Department of Forestry. The Department has participated in the Clackamas County CWPP planning process to evaluate capabilities to prevent, prepare for and respond to potential wildfire events.

Lake Oswego Fire Department Description

The Lake Oswego Fire Department provides emergency response to nearly 50,000 citizens within the City of Lake Oswego and three adjoining contract districts (Lake Grove Rural Fire District, Riverdale/Dunthorpe Fire District, and Alto Park Water District).

Four fire stations are strategically located throughout Lake Oswego to provide rapid emergency service to citizens in need 24 hours a day. Emergency services include fire suppression, emergency medical response, hospital ambulance transportation, water & dive rescue, technical rescue operations, hazardous materials incidents, and disaster response.

Along with protecting citizens within the city and contract districts, the Lake Oswego Fire Department has mutual aid agreements with the Portland Fire and Life Safety Bureau, Tualatin Valley Fire & Rescue and is a signatory to the Clackamas Fire Defense Board.

Wildland Urban Interface (WUI)

Growth and development in forested areas is popular within the City of Lake Oswego. Wildfire has an effect on development, yet development can also influence wildfire. Owners often prefer homes that are private, have scenic views, are nestled in vegetation, and use natural materials. A private setting may be distant from public roads, or hidden behind a narrow, curving driveway. These conditions however, make evacuation and firefighting difficult. The scenic views found along Iron Mountain Bluff, Palisades, Mountain Park and around the lakes rim can also mean areas of dangerous topography. Natural vegetation contributes to scenic beauty, but it may also provide a ready trail of fuel leading a fire directly to the combustible fuels of the home itself.

The forested hills surrounding Lake Oswego are considered to be interface areas. The interface neighborhoods are characterized by a diverse mixture of varying housing structures, development patterns, ornamental and natural vegetation, and natural fuels.

Lake Oswego Fire Department Wildfire Hazards

The Clackamas County CWPP wildfire hazard assessment assisted the Lake Oswego Fire Department in identifying areas that may be at higher risk to potential wildfires. Map #4 illustrates the overall wildfire hazard risk in the Lake Oswego Fire Department and will be used to help target areas for wildfire prevention activities.

Structural Ignitability

The Lake Oswego Fire Department promotes the creation of defensible space, use of fire-resistant roofing and building materials, and community preparedness in the WUI. Lake Oswego Fire works well with other City of Lake Oswego Departments to integrate these concepts at the regulatory level

by participating in land use reviews for new development to provide input on access and water supply. When they are deficient in access or water the Fire Marshal's Office can offer alternative measure such as residential sprinklers. Lake Oswego Fire also approves all occupancy permits to ensure that recommendations regarding access and water supply are implemented.

However, the wildfire hazard remains high in many residential developments. Some conditions existing in these areas include large houses on small lots, cedar shake roofing, open wooden decks adjacent to heavy fuels, and homes built on steep slopes with wooden stilts as support.

One of the most problematic issues is highly flammable cedar shake roofing. Roofs are the most vulnerable part of the home, as the majority of homes lost to wildland fires are ignited from embers landing on roofs and gutters. Despite this threat, some Home Owners Associations (HOA's) in Lake Oswego still require cedar shake roofs. Lake Oswego Fire would like to reduce the structural ignitability of roofs by educating these HOA's about the risks associated with cedar shake and the viable, attractive alternatives. Lake Oswego Fire would also like to work with the City of Lake Oswego Building Department and Oregon Department of Forestry to adopt a Wildland Urban Interface area which would disallow cedar shake roofs in areas particularly vulnerable to wildfire.

Road access is a major issue for all emergency service providers. Firefighters are particularly challenged by narrow roads, with limited access because the fire trucks are large, and the equipment needed to fight fires is located on the trucks. When there is doubt concerning the stability of residential accesses, or adequate turn around space, the fire fighters can only work to remove the occupants, but saving the structure is difficult. Many of the Communities At Risk (CAR's) to wildfire in Lake Oswego exhibit a combination of these issues that limit access.

Although the City of Lake Oswego has comparatively a good water system, additional hydrants could be installed in the Iron Mt. Bluff area and in other communities at risk to assist with fire suppression efforts should they be needed. This and the other issues listed here are addressed in the Lake Oswego Fire Department Action Plan.

Emergency Response

Lake Oswego Fire Professionals are trained for wildland fires with an annual training regime that supports the S-130 and S-190 with a goal of training staff to S-290. Certification through DPSSST is voluntary.

Lake Oswego Fire officials are most concerned with potential wildfires igniting in late summer during and east wind event. A major wildland urban interface fire in Lake Oswego would quickly exceed the resources and capabilities of the Department. For this reason, LO Fire has Mutual Aid agreements in place which allow for the sharing of resources across the county in the event of a large scale disaster including wildfires. Due to its location, Tualatin Valley Fire and Rescue or Portland Fire and Rescue in neighboring Washington and Multnomah Counties would likely be the first to provide mutual aid during an event.

Community Outreach & Education

Lake Oswego Fire is dedicated to fire prevention, and uses a variety of forums to promote residential fire safety, defensible space, and emergency preparedness. Lake Oswego developed an

educational hand-out focusing on defensible space and distributed this and other Firewise materials through mass mailings. Lake Oswego Fire has been focused on fire alarms and sprinklers in new construction and emergency preparedness. Fire professionals are invited to speak and provide training in emergency preparedness at Home Owners Association meetings on a regular basis.

Local Communities at Risk (CAR's)

The Lake Oswego Fire Department also recognizes that there are smaller-scale Communities at Risk that have unique wildfire hazards to be addressed at the more local scale. Communities that have been identified as being particularly vulnerable to wildfires are illustrated in Map #15 and listed in Table 10.8-1. Lake Oswego professionals considered the following factors to determine the local CARs including:

- Need for defensible space
- Access limitations (narrow driveways, lack of address signage, one way in/one way out)
- Steep slopes that can hinder access and accelerate the spread of wildfire
- Lack of water available for wildland fire fighting
- Heavy fuels on adjacent public lands
- Potential ignition sources from recreationists and transients
- Agricultural and backyard burning
- Lack of community outreach programs to promote wildfire awareness
- Communications difficulties

Fuels Reduction

Lake Oswego has a very restrictive tree ordinance designed to retain urban canopy for environmental and aesthetic benefits. Currently, homeowners can trim trees and can treat ladder fuels, but cannot cut any trees that are 5 inches or great in diameter. Lake Oswego Fire has worked with the City to consider expanding these provisions for the creation of defensible space on residential properties as well as the natural areas managed by the City adjacent to CAR's. For example, in 2003 a fuels reduction demonstration project was implemented in Cooks Butte Park and the adjacent community. The Spring Brook Park HOA has also been successful in creating defensible space around homes.

Since that time, the City has acquired many more natural areas, but very little has been done to mitigate wildfire hazards in these areas. Lake Oswego Fire recognizes the need to work with the City Planning Department in amending the Tree Ordinance to balance the benefits of urban canopy with the risk to life and property from wildfires. To ensure that landscape-level treatments are paired with projects to create defensible space around vulnerable communities, priority fuels reduction projects have been overlaid with the Communities at Risk Identified by Lake Oswego Fire (Map #15).

Fuels Reduction Priorities include:

Iron Mountain Bluff
Spring Brook Park
Waluga Park

Cooks Butte Park
Tryon Creek

Lake Oswego Fire Department Action Plan

Lake Oswego Fire has developed a list of actions to build capacity at the Department scale and has identified actions that can help to make the local CARS more resilient to potential wildfires. The action plan for Lake Oswego Fire and the local CARS therein is provided in Table 10.8-2.

Table 10.8-1. Lake Oswego Local Communities at Risk

Community At Risk	CAR Priority	Defensible Space	Access	Water	Public Forest Lands	Private Forest Lands	Recreators/ Transients	Protection Capabilities	Burning	Preparedness	Communications	Steep Slopes	Description
Lake Oswego Fire Local Communities at Risk													
Iron Mountain Bluff	High	X	X	X	X		X	X		X	X	X	The residential area at the top of a Iron Mountain bluff is at risk to wildfire because it there is heavy vegetation and steep slopes which will drive a fire toward the homes. There are a few one way in and out roads in the neighborhood, while, the only roads that would be used for firefighting are one way in and out. The homes need defensible space, and the adjacent city-owned park would benefit from fuels reduction as would the piece that is owned by the Hunt Club . There is a good hydrant system up top and Iron Mtn Blvd. An above ground water main and wildland detectors have been discussed in the past, but no progress has been made toward these efforts. The adjacent parks lands, have had a few ignitions here but LO's effective initial attack has halted major damage here. Protection capabilities are compromised because it is quite a hike and it is steep for response. LO has done a lot of outreach and some residents have expressed interest in reducing wildfire hazards. There has not been a community meeting, but individuals have been concerned about parking and limiting access. Communications by radio is good, but cell phones are spotty.
Palisades	High	X								X		X	The homes in this community are close together, are surrounded by heavy vegetation and are on very steep slopes. There is good access, good water and good communications. A focus here is on preparedness and education because this HOA still requires Cedar Shake roofs.
Cooks Butte	High	X	X	X	X		X	X		X	X	X	This is the most remote park in LO. It is steep, has poor access on a couple roads, and if a fire were to start here, there is no early notification so response times could be an issue. The community is on the periphery of the Park. Recreators light campfires in the park so it has previously been closed during fire season, but now they just post no burning and let people in during fire season so that there are eyes on the ground. The area has southern exposure, steep slopes and heavy fuels so the park would benefit from FR but not as high a priority as Iron Mountain. There are 2 water reservoirs in the park, and there is a hydrant but it has no pressure. A demonstration project was done here to remove fuels. There are drier flashy fuels on the periphery with a mature forest in the center. The lighter fuels are in interface. There is also a big grass field that the Parks Dept. mows. The residents adjacent to Cooks Butte are not very prepared and people have a perception that it isn't going to burn. Shared fire protection with TVFR.
Mountain Park	High	X	X		X		X	X		X		X	The homes in this community are close together, are surrounded by heavy vegetation and are on very steep slopes, ranging from 100 ft to 1000 ft. There are some green belt trails that would provide some limited access for firefighting. A few years ago, the City cleared some of these trails for brush truck access. Priorities for this community are preparedness and defensible space.
Tryon Creek State Park	Medium	X	X	X	X		X			X		X	There is a residential area surrounding this State Park. The park has an older stand of mature trees, but defensible space around homes is needed. Access and water are limited here and it is visited by many recreators, which presents some outreach opportunities. Transients also use this park. Lake Oswego Fire shares protection with Portland Fire and they review response strategies annually.
Spring Brook Park	Medium	X	X		X		X			X			This community was targeted for a community meeting because LO and Parks thinned the parks property adjacent to the community. Some training on emergency preparedness was done here. Defensible space around the homes is needed. There are lots of trails in the park that could be used for firefighting, but LO doesn't have a lot of equipment for that type of response. Roads aren't bad in this area, slope is gentle and protection capabilities are good. There is a junior high very close which could serve as a staging area.
Waluga Park	Medium	X	X	X	X					X		X	There is a residential community adjacent to this city park, which has heavy vegetation and some slope steep slopes near the top. The area is characterized by flashy fuels and ladder fuels leading to heavier fuels.

Table 10.8-2. Lake Oswego Action Plan

Action Item	Timeframe	Partners	CAR
Lake Oswego Fire Action Plan			
Work with City of Lake Oswego to allow exemptions under the Tree Ordinance for creation of defensible space around homes as well as fuels reduction into parks adjacent to Communities at Risk.	Short-Term	City of Lake Oswego, ODF	Lake Oswego Fire
Work with the City of Lake Oswego Building Department to adopt a WUI area in which cedar shake roofing is disallowed.	Short-Term	City of Lake Oswego, ODF	Lake Oswego Fire
Continue annual wildland fire training for Lake Oswego Fire professionals.	Ongoing	ODF	Lake Oswego Fire
Lake Oswego Fire Local Communities at Risk Action Plan			
Conduct a Community Meeting to educate community on defensible space, and measures that can be taken to reduce structural ignitability. Solicit feedback on wildfire prevention projects the community would support.	Ongoing	ODF, Lake Oswego Parks	All CAR's
Work with Lake Oswego Parks to reduce hazardous fuels in City Parks adjacent to Communities at Risk.	Ongoing	Lake Oswego parks, ODF	Iron Mtn. Bluff, Cooks Butte, Spring Brook Park, Waluga Park, Mountain Park
Distribute outreach materials that promote responsible burning, defensible space and reduction of structural ignitability within the Home Ignition Zone.	Ongoing	Fire Co-op	All CAR's
Reduce hazardous fuels in the ROW of potential evacuation routes. Engage residents adjacent to primary evacuations routes to extend treatments onto private land.	Ongoing	City of Lake Oswego	All CAR's
Obtain structural ignitability data by conducting structural triage assessment data collection (including GPS points) for homes in strategic planning areas.	Ongoing	ODF	All CAR's
Develop a community-driven pre-disaster plan including evacuation routes, telephone call down trees, and other strategies for strengthening community response.	Ongoing	Clackamas County Emergency Management	All CAR's
Implement road addressing (including length of driveways) and other signage for emergency response.	Ongoing	ODF	All CAR's
Seek grant funding to support fuels reduction and creation of defensible space around homes.	Ongoing	ODF	All CAR's

Lake Oswego Fire Department

Map #15

Mountain Park/Johns Woods/Holly Orchard

Tryon Creek

Riverdale RFPD #11 JT

Springbrook Park

Iron Mountain

KRUSE WAY

A AVE

Waluga Park

BOONES FERRY RD

Oswego Lake

Lake Oswego

MCVEY AVE

Clackamas RFPD #1

Palisades

Cooks Butte

Tualatin Valley Fire & Rescue

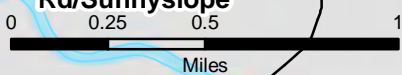
Robinwood Park

- ★ Fire Stations
- ▭ Lake Oswego Fire
- ▨ Fuels Reduction Projects (2013-17)
- ▩ Historical Projects (2012)
- ⚡ Communities at Risk
- ▭ City Boundaries



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Rivergrove
Tualatin



Portland

Milwaukie

COUNTRY CLUB RD

STAFFORD RD

Willamette River