

10.13. Community at Risk: Tualatin Valley Fire and Rescue

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

Tualatin Valley Fire and Rescue Description

Tualatin Valley Fire & Rescue provides fire protection and emergency medical services to approximately 497,710 citizens in one of the fastest growing regions in Oregon. The 390 square mile service area includes eleven cities and unincorporated portions of Clackamas, Multnomah, Washington and Yamhill County. In 2016, contract services were extended to Newberg and the surrounding area to enhance emergency medical and fire protection service to more people and strengthen regional response efforts. The cities covered by TVF&R in Clackamas County include Rivergrove, West Linn and Wilsonville.

TVF&R has 25 fire stations and employs more than 400 career firefighters, a volunteer fire station, a Command and Business Operations Center, Training Facility, a South Operating Center, and full-service fleet maintenance shop.

Wildland Urban Interface (WUI)

The Wildland Urban Interface areas in the Clackamas County portion of TVF&R's District are characterized by suburban communities and rural residential homes surrounded by heavy fuels and steep slopes. In addition, many of the older neighborhoods here have only one way in and one way out with narrow, steep driveways and poor water supply.

Heavy and continuous fuels dominate many of the parks and natural areas surrounding the communities here, so fires that begin on public land or on smaller private residential lots can quickly threaten the communities and natural resources that thrive in the cities of West Linn, Rivergrove, and Wilsonville. In addition, response times from rural fire stations could be delayed, which underscores the need for community preparedness in the wildland urban interface.

TVF&R Wildfire Hazards

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

Structural Ignitability

TVF&R promotes the creation of defensible space, use of fire-resistant roofing and building materials, and community preparedness in the WUI. TVF&R works well with Clackamas County and the cities of West Linn, Rivergrove, and Wilsonville to integrate these concepts at the regulatory level by providing input on access and water supply during land use reviews for new residential development.

Emergency Response

A major wildland urban interface fire in West Linn, Rivergrove, or Wilsonville may exceed the immediate resources and capabilities of TVF&R. For this reason, TVF&R has mutual aid agreements in place to allow for the sharing of resources across the county in the event of a large scale disaster including wildfires.

In the event of a large wildland fire, evacuations may be necessary. In rural residential areas this could present some challenges for evacuations where access includes long, narrow and steep driveways. Some of the identified Communities at Risk have smaller local roads serving the area and/or have limited point of egress, making it difficult to manage incoming and outgoing traffic during an emergency.

TVF&R follows Department of Environmental Quality (DEQ) burning policies for backyard burning. The majority of West Linn and Rivergrove is within the DEQ burn ban area, which does not allow backyard burning at any time of the year. Wilsonville residents are permitted only during designated burn seasons and on DEQ approved burn days.

TVF&R firefighters receive regular wildland fire training to remain current on qualifications. Although the District is able to support classroom training, lack of live- fire experience makes it difficult to maintain wildland qualifications. New staff members have little to no live-fire experience and many Battalion Chiefs assigned to task forces have difficulty completing task books without being deployed. TVF&R has been working with Metro, Tualatin Hills Park and Recreation District and Clean Water Services to identify opportunities for prescribed burns in Washington County that would benefit native ecosystems while providing live-fire experience to TVF&R staff (e.g. Cooper Mountain and Gardner Prairie). TVF&R would like to expand this partnership to the Clackamas County area by furthering relationships with Metro, Wilsonville, West Linn and County Parks staff.

Community Outreach & Education

TVF&R is dedicated to fire prevention, public safety and community wellness and uses a variety of forums to promote residential fire safety, defensible space, and safe burning practices. The community is very supportive of the TVF&R and participates in activities throughout the year, some of which include smoke detector, fire prevention, and community safety programs. TVF&R is also an active member of the Clackamas County Fire Prevention Cooperative which is a consortium of structural and wildland fire protection professionals that work together to deliver programs such as team teaching in the grade school fire safety programs, safety and County fairs, community and school programs, and fire safety house displays. TVF&R has a “Wildfire Can Happen Here” program that promotes wildfire awareness in high hazard areas. To date, the majority of the areas targeted for these programs have been in Washington and Multnomah Counties, however, efforts have been made in Clackamas County as the opportunities were present. TVF&R would like to continue to expand this effort to the Clackamas Communities at Risk.

Local Communities at Risk (Strategic Planning Areas)

TVF&R recognizes that there are smaller-scale Communities at Risk that have unique wildfire hazards to be addressed at the more local scale. These areas have been identified as being particularly

vulnerable to wildfires are illustrated in Map #20 and listed in Table 10.13-1. TVF&R 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

Fuels reduction projects can and should be accomplished at the local scale, which is the creation of defensible space around homes, as well as the landscape scale to extend vegetation treatments onto adjacent forested land and natural areas. TVF&R will continue to help to facilitate cooperation between public and private organizations to ensure that fuels reduction work occurs strategically and benefits homeowners as well as adjacent public and private lands.

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 TVF&R (Map #20).

The following areas have been identified as potential fuels reduction projects by TVF&R, the cities of West Linn, Rivergrove, and Wilsonville, Clackamas County and Metro:

Mary S. Young Park	Boeckman Creek Open Space
Burnside Park and Maddax Woods	Frog Pond/Newland Creek Open Space
Camassia and Wilderness Park	Petes Mountain Area, including:
Robinwood Park	Peach Cove Natural Area
Skyline Ridge (Troon Open Space)	Willamette Narrows Forest
Buck/Barlow Intersection Open Space	Hebb Park
Wildwood Open Space	Ladd Hill Area, Including:
Hidden Springs Open Space	Graham Oaks Nature Park
Interstate 205 Corridor, including:	Magness Tree Farm
Barrington Heights	Wheatland Drive Open Space
Prosperity Park	Frobese Road/82 nd Avenue Open Space
Wilson Creek Natural/Rosemont Area	Hill Top Road (Sunnyslope Open Space)
(Wisteria/Johnson/Grapevine Open Space)	White Oak Savannah

TVF&R Wildfire Action Plan

TVF&R has developed a list of actions to build capacity at the District scale and has identified actions that can help to make the local CARs more resilient to potential wildfires. The action plan for TVF&R and the local CARs therein is provided in Table 10.13-2.

Table 10.13-1. Tualatin Valley Fire and Rescue 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
TVF&R Communities at Risk													
I-205 Corridor	High	X	X	X			X		X	X		X	This area has the highest occurrence of wildfire ignitions because the hillside is covered with light flashy fuels and is adjacent to Interstate 205. It is a south facing slope with the potential of rapid fire spread toward homes at the tope of the slope. This area should be continuously considered for fire fuel reduction.
Ladd Hill	High	X	X	X	X	X	X		X	X		X	This area has south facing slopes, limited access and long response times. Access is also poor to many of the homes in this community. There is no water available, it is heavily forested with poor defensible space and poor addressing. There is a mixture of public and private forest land. Coral Creek is a wetland area.
Wilderness Park/Camassia Park	High	X	X	X	X		X	X	X	X		X	This community as a stand pipe system but limited access. The area of concern is a NE facing slope. There is usually at least one fire ignition a year in late May, early June. This area has a high potential for an interface fire because homes are on top of a heavily vegetated, steep slope. High school kids like to recreate here and the park has an elaborate trail system that brings many visitors. This foot traffic increases the potential of ignition sources.
Skyline Ridge	High	X	X						X	X		X	This area is steep with heavy vegetation but has a north facing slope. Access is limited due to slopes.
Mary S. Young Park	Medium	X	X		X		X		X	X			This area is a mixed recreation area. It is primarily forested with trails (both chipped and paved) and an area with ballfields. Homes line it on the North and South sides and the Willamette River to the East. This park has a hydrant system along the main access.
Burnside Park and Maddax Woods	Medium	X	X	X	X		X		X	X			These natural areas are densely forested, offer trail and path systems, and river access. They offer river access and amenities that encourage many visitors.
Buck/Barlow Open Space	Medium	X	X	X				X	X	X		X	This area is characterized by steep slopes, heavy vegetation, and limited access and water supply. It has a north-facing aspect. Homes here are in need of defensible space.
Wildwood Open Space	Medium	X	X	X					X	X		X	This area is characterized by steep slopes, heavy vegetation, and limited access and water supply. It has a north-facing aspect. Homes here are in need of defensible space.
Wilson Creek Natural/Rosemont Area	Medium	X	X	X				X	X	X		X	This densely forested area has a south-facing slopes and limited access and water supply. Residential homes are nestled into and around it. The area and homes would benefit from defensible space. Protection capabilities are somewhat diminished because it is in a more rural area, so homeowners need to be more prepared.

Table 10.13-1. Tualatin Valley Fire and Rescue 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
TVF&R Communities at Risk													
Petes Mountain Area	Medium	X	X	X	X		X		X	X		X	This community is particularly vulnerable because it has a south-facing aspect . Metro owns some land here and has been working withTVF&R to implement a fuels reduction and habitat improvement project. The terrain is very steep along the river, so access is an issue. It is very densely vegetated with scrub oak and oak trees, 6 ft tall grasses and blackberries. The north facing slope is steep with access challenges.
Hidden Springs	Medium	X	X						X	X		X	The Hidden Springs Community is characterized by steep slopes, heavy vegetation, and limited access and water supply. It has a north-facing aspect. Homes here are in need of defensible space.
Robinwood Park	Medium	X	X				X		X	X			This 15 acre park is over 50 percent undeveloped with trails and forested areas.
Boeckman Creek	Medium	X	X				X			X			This forested area follows the Boeckman Creek south to the Willamette River. The area is surrounded by homes and park areas. The park (and nearby High School) encourages youth to recreate in the area and provides space to create hangouts.
Frobese Road	Medium	X	X	X				X	X	X		X	Frobese Road is one way in and out, is fairly steep, and has heavy vegetation adjacent to homes. Communications are good here, but there is little water.
Prosperity Park/Borland Rd.	Medium	X	X	X	X		X	X	X	X		X	Prosperity Park has very poor access and water supply. It is heavily forested, and homes in need of defensible space. The area between I-205 and Borland Road has a south-facing slope with a mix of light flashy fuels and heavy vegetation. There is a neighborhood to the northwest and church to the east. I-205
Hill Top Road/Sunnyslope	Medium	X	X	X				X	X	X		X	The densely forested area with few homes nestled in. It has poor access, slopes, and an increasing number of homes being built along the ridge. There is a nearby hydrant system to the North, however it may be challenging to access if responders approach from the South.
White Oak Savannah	Medium Low	X	X	X					X			X	The open space at Tannler Drive and Blankenship Road is fairly steep, has some trees and ground level fuels.
Wheatland Road Area	Medium Low	X	X	X		X			X	X		X	This is a large rural area with many residents, heavily forested with no hydrants.
Frog Pond/Newland Creek	Low	X	X	X	X				X	X		X	This community is in the northeast area of the Boeckman Creek drainage area. There are currently ladder fuels, invasive species and heavy fuels. This area is in the early stages of master planning for residential developments.

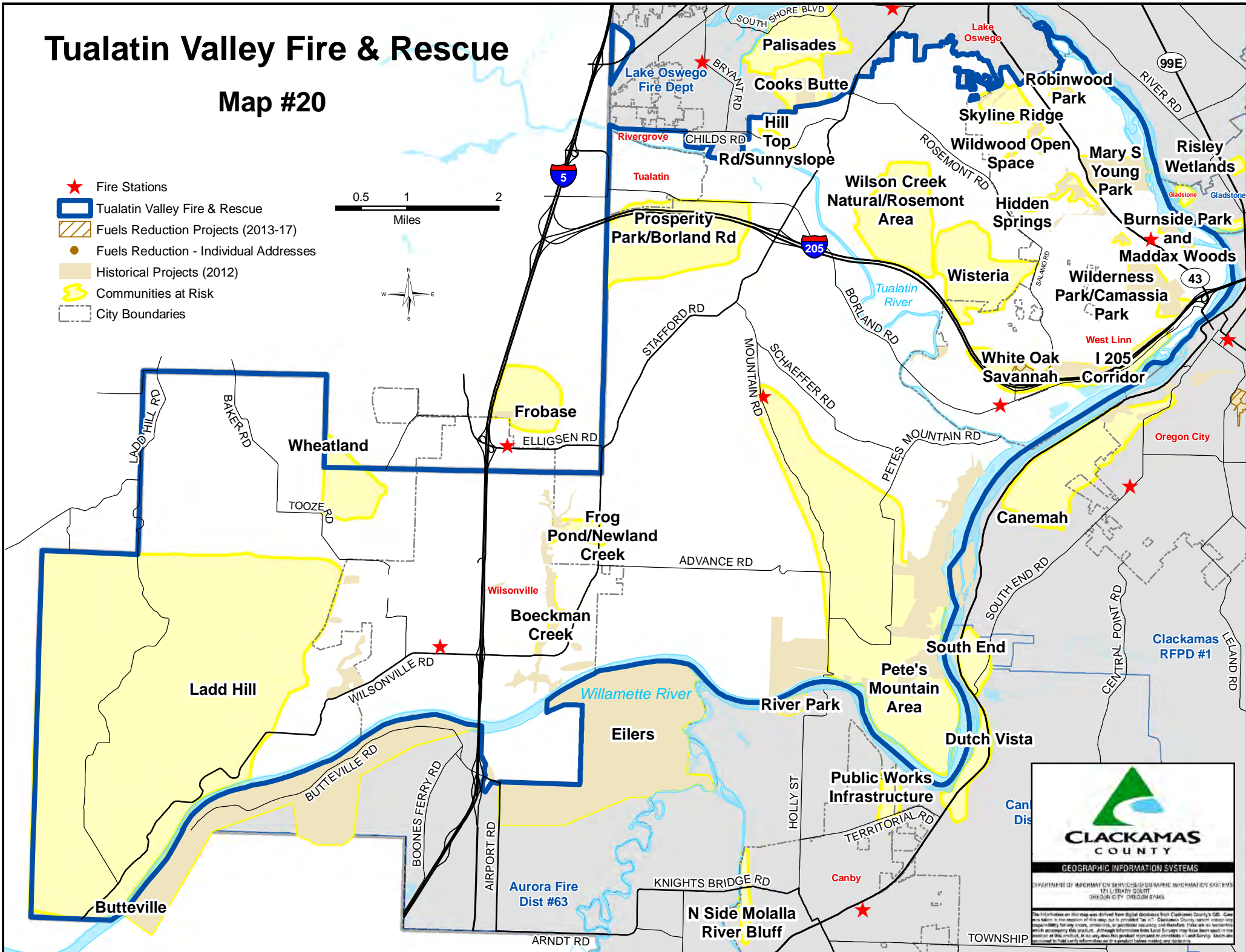
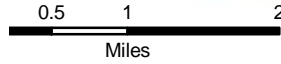
Table 10.13-2. Tualatin Valley Fire and Rescue Action Plan

Action Item	Timeframe	Partners	CAR
TVF&R Action Plan			
Identify and pursue opportunities to participate in prescribed burns and live fire training to update and maintain wildfire certifications.	Ongoing	Metro, City of Wilsonville, City of West Linn, Clean Water Services, ODF	TVF&R
Continue to foster partnerships with natural resources managers to assess and implement potential fuels reduction projects in natural areas adjacent to Communities at Risk.	Ongoing	Metro, City of Wilsonville, City of West Linn, Clean Water Services, ODF	TVF&R
Partner with the Clackamas County Fire Defense Board to participate in a WUI conflagration exercise.	2 Years	Clackamas Fire Defense Board	TVF&R
TVF&R Local Communities at Risk Action Plan			
Utilize TVF&R's "Wildfire Can Happen Here" public outreach campaign in the high-priority CARS identified in Clackamas County.	Ongoing	Fire Co-op	205 Corridor, Ladd Hill, Camissa Park
Incorporate Wildfire awareness and risk reduction strategies into TVF&R's Community Safety & Wellness Program.	Ongoing	HOA's	All CAR's
Improve address signage for emergency response.	Ongoing	Fire Co-op	All CAR's
Partner with the Fire Co-op to create and 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
Promote legal, safe and responsible debris burning through public outreach and education.	Ongoing	ODF, DEQ, Fire Co-op	All CAR's
Encourage communities to 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

Tualatin Valley Fire & Rescue

Map #20

- ★ Fire Stations
- Tualatin Valley Fire & Rescue
- Fuels Reduction Projects (2013-17)
- Fuels Reduction - Individual Addresses
- Historical Projects (2012)
- Communities at Risk
- City Boundaries



CLACKAMAS COUNTY
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