

CITY OF HAPPY VALLEY WILDFIRE ASSESSMENT PROGRAM



**City of Happy Valley
Wildfire Assessment
Program**



May 17, 2022

Prepared for:

City of Happy Valley
16000 SE Misty Drive
Happy Valley, OR 97086

and

Happy Valley
Homeowner
Associations

Prepared by: Director Campbell and Michael Andrews, Wildfire Specialist

Wildfire Assessment

In the wake of the devastating 2020 fire season, the City Council realized the pressing need to address fire risk and hazardous fuels within the City limits. With this in mind, they directed their staff to conduct a comprehensive assessment of all properties in the City, and tasked the Director of Community Services and Public Safety, Steve Campbell, with overseeing the project. Mr. Campbell, in turn, hired Michael Andrews, a Wildfire Specialist, to work on the project.

Mr. Andrews began working on an overall plan in July 2021, with the overarching goal of assessing fuel load and fire risk, determining appropriate mitigation measures, and developing a long-term vegetation management program. His work was diligent and thorough, resulting in a comprehensive report that was presented to the City Council by Director Campbell and Mr. Andrews.

The report highlighted the areas that were most at risk for wildfire, and provided recommendations for mitigation measures that could be taken to reduce the risk. The City Council recognized the importance of this work and sought out grants to help fund the mitigation efforts, particularly in open spaces and parks that were deemed to be at high or extreme risk.

The City also recognized the importance of educating landowners and enacting enforcement with larger landowners to ensure that they were taking appropriate measures to reduce the risk of wildfire. Additionally, the City partnered with volunteer organizations and the Clackamas Fire District to provide guidance and community service work to further reduce the risk of fire.

Despite the challenges posed by the project, the City remained committed to the goal of reducing fire risk and protecting its citizens. The work continued, and the City remained vigilant in its efforts to mitigate the risk of wildfire in its community.

Background

The city is home to thousands of acres of parks, trails, nature areas, and open spaces. As we have learned more over the past year about wildfire risk, we know that improperly managed forest and open spaces can result in potential environmental concerns regarding fuel/fire hazards which prove to be a danger to our community and residents. The Hazardous Fuels Reduction Program is slated to be a two-year project that helps in addressing wildfire risk, mitigating excessive vegetation load accumulation, and developing a long-term vegetation management program. Once the initial project is complete, current staff will be able to successfully manage the program. By implementing this project, it will reduce wildfire hazards, provide education to residents and most importantly, create a long-term sustainable vegetation management program.

Hazardous Fuels Reduction Program

The city will take the findings from this report and begin to implement the vegetation mitigation plan for each described site location. The sites ranking "high" will be immediately addressed in the summer of 2022. The sites ranking low or medium, staff will begin working with those property owners on establishing a vegetation management program. This program will provide guidance and assistance through the community services department in permanency.

Glossary of Wildfire Terms

Aerial Fuels: Anything combustible, dead or alive, that isn't in contact with ground.

Aspect: Cardinal direction towards which a slope faces.

Assessments: Evaluation and interpretation of information to provide a basis for decision making.

Backing Fire: Fire spreading against the wind or downslope.

Brush Fire: A fire burning in vegetation dominated by shrubs and brush.

Burning Period: The part of each day when fires spread most rapidly; typically, between 10:00 a.m. and sundown.

Canopy: The layer of vegetation containing the crowns (tops) of trees; usually above 20 feet.

Conflagration: A raging, destructive fire.

Control Line: Constructed or natural barriers and treated fire edges used to contain and control a fire.

Convection Column: Rapidly rising smoke column with gases, ash, dust, and other debris produced by a large fire.

Creeping Fire: Fire with low flames and slow spread.

Crown Fire: Fire that advances rapidly through the tree canopy that's generally independent of a ground fire.

Dry Lightning Storm: Lightning with little or no precipitation.

Duff: Layer of decomposing organic materials lying below the litter layer of recently deposited debris.

Exposure: General surroundings of a site with regards to its openness to wind and sun.

Fine Fuels (AKA 'flash fuels' or 'light fuels): Fast drying fuels less than 1/4" in diameter that ignite and spread fire rapidly (grass, leaves, needles, twigs, etc.).

Fire Behavior: How a fire reacts to influences of fuel, weather, and topography.

Fire Danger Rating: A system that integrates the effects of certain fire danger factors into a qualitative index.

Fire Front: The leading edge of an active fire.

Fire Hazard: A fuel complex defined by volume, type, and arrangement that determines the degree of ease of ignition and resistance to control.

Fire Proofing: Removal or treatment of fuels to reduce the danger of a fire igniting or spreading.

***Fire Risk:** The likelihood of a fire ignition.

***Fire Triangle:** The three elements necessary for a fire ignition to occur: oxygen, fuel, heat source.

Fireline: A containment or control line that is cut or dug to mineral soil.

Fuel: Any combustible material, dead or alive.

Fuel Characteristics: Components that make up the structure of the fuel bed: loading, continuity, vertical arrangement, size and shape, moisture content.

Fuel Continuity: The extent of unbroken or continuous distribution of fuel affecting a fire's ability to sustain combustion and spread.

Fuel Treatment: Manipulation and/or removal of fuels.

Green-up: The beginning of a new cycle of vegetative growth, usually in the spring or late fall.

Heavy Fuels: Large diameter fuels such as snags, logs, or large limbs which burn more slowly than fine fuels.

Initial Attack: Action to extinguish a fire by the first forces to arrive on site.

Ladder Fuels: Fuels which provide vertical connection between surface fuels and aerial fuels.

Limbing: Removing branches from standing or downed trees.

Live Fuel Moisture Content: Ratio of the amount of water to the amount of dry material in any living plant; expressed as a percentage of total weight.

Mitigation: Modifying the environment of human behavior to reduce potential adverse impacts of fire.

Probability of Ignition: The chance that a firebrand will cause an ignition.

Rate of Spread: How fast a fire moves and expands.

Relative Humidity: Ratio of moisture in the air to the maximum moisture the air would contain at saturation. Expressed as a percentage.

Resistance to Control: The relative difficulty of constructing a control line around a fire due mainly to fire behavior, topography, access, and fuel loading.

Resources: 1. Personnel, equipment, and supplies used for assignment to fires.

2. The natural resources of a given area.

Risk Assessment: Application of judgement based in knowledge and experience when determining the risk of potential fire ignition and spread, and recommendations of ways to mitigate the risk.

Slash: Vegetative debris resulting from either natural events such as wind and ice, or human activities.

Spotting: Fire brands carried ahead of the main fire which ignite new fires.

Slope: Steepness of a given landscape

Snag: A standing dead tree.

Surface Fire: Fire that burns only fuels lying on the ground.

Surface Fuels: Fuels lying on or near the ground.

Torching: The rapid burning of foliage of a single tree or a small group of trees from the ground up to the treetops.

Wildland/Urban Interface: A line, area, or zone where human development meets or intermingles with wildland.

Wildfire Fuels Hazard and Risk Rating Factors

The Fuels Hazard Rating's three main components are fuels, slope, and aspect. Each component will be rated Low, Medium, or High. Sub elements for the fuels component will be rated likewise. Each greenspace site will be assessed and rated accordingly.

Fuels: Fuels are generally considered to be anything that will burn. They may be live (vegetation) but usually are dead. There are three types: ground fuels, ladder fuels, and aerial fuels.

- a. Ground fuels include low-growing vegetation and dead, downed debris. For rating purposes, they are broken down further by fuel diameter into light fuels, medium fuels, and heavy fuels.
 - i. Light fuels, also known as flash fuels or fine fuels, burn rapidly and are usually the main reason for wildfire spread. They respond quickly to changes in humidity. Examples include grasses and other ground vegetation, dead leaves, small, downed limbs, moss. Diameters of light fuels are from 0-1/2 inch. Duff, which is a partially decomposed layer of dead vegetation, is considered a light fuel but does not burn rapidly like flash fuels. Rating:
 - Low- sparse accumulation and not continuous with scattered concentrations
 - Medium – moderate and somewhat continuous accumulation that can sustain fire spread.
 - High – dense, continuous accumulation that will sustain fire spread.
 - ii. Medium fuels are between ½ and 4 inches in diameter and are mainly comprised of downed limbs and small trees. They don't ignite as rapidly as light fuels but they hold heat longer and are more difficult to suppress. Rating:
 - Low – scattered light accumulation, not continuous.
 - Medium – moderate and somewhat continuous accumulation.
 - High – dense, continuous accumulation.
 - iii. Heavy fuels are 4 inches and larger and include large, downed limbs and downed mature trees. They don't contribute to rapid fire spread but large, downed trees can burn for days if not suppressed. Rating:
 - Low – scattered accumulations; few or no downed trees.
 - Medium – moderate and somewhat continuous accumulation.
 - High – dense, continuous accumulation. May be several downed large trees.
- b. Ladder fuels are capable of carrying fire from the ground fuels up to tall tree tops (crowns). They are the most common reason for a ground fire becoming a crown fire. They're usually pole-sized or larger firs or cedars with limbs near the ground that extend up towards or into the crowns. Rating:
 - Low – few or no ladder fuel trees.
 - Medium – scattered pockets of ladder fuel trees.
 - High – continuous and possibly dense accumulation of ladder fuel trees.

- a. Aerial fuels are the crowns of mature firs and cedars (since deciduous trees like maple, oak, cottonwood, alder, cherry is fire resistant they aren't considered a fuel source here). If the trees are sparse (open canopy), they may torch individually if ladder fuels are present. If they are dense, with crowns touching (closed canopy) they are susceptible to crown fires, which are the most difficult to control and the most destructive to a forest. Rating:

Low – no or few mature firs/cedars.

Medium – scattered but not continuous concentrations of firs/cedars.

High – closed, continuous fir/cedar canopy capable of sustaining a crown fire.

Overall fuels rating:

Low: Fuels are sparse and/or scattered and probably are not capable of sustaining a fire.

Medium: Fuels are heavier and more continuous and capable of sustaining an active but slow spreading ground fire.

High: Fuels are heavy and uniformly continuous and capable of sustaining a fast moving, difficult to control ground fire with potential to carry into the crowns.

- b. Slope: Slope steepness can greatly affect fire spread rate and intensity. Steep slopes can carry fire uphill rapidly and cause pre-heating and rapid drying of fuels ahead of the fire. Rating:

Low: flat to mild slope.

Medium: moderate steepness.

High: very steep.

- c. Aspect: Aspect is the direction that the slope (unless it's flat) is facing. South slopes, with the most exposure to the sun, dry faster and stay dry longer than north slopes. Fuels on south slopes also decompose much slower than north slopes and remain flammable longer. Rating:

Low: North slope.

Medium: Flat, northwest, northeast slope.

High: South, southeast, southwest slope.

Site fire hazard rating considering the three individually rated components of fuels, slope, aspect. Sites rated "High" are the highest priority for fuel treatment:

Low

Medium

High

Fire Risk Rating's three components are potential for human-caused ignition, accessibility to fire fighting vehicles, and potential for rapid spread. Each have the same rating criteria as the Fuels Hazard Rating of Low, Medium, and High.

- I. Potential for human-caused ignition: Sites that have high public use and accessibility such as developed trails, parks, and busy streets are the highest risks for fire starts. Sites with limited public access such as some HOAs and private land are lower risks. Rating:

Low: Little or no public use or access.

Medium: Moderate public use or access.

High: Heavy public use.

- II. Accessibility to fire-fighting vehicles: Sites with limited access for fire vehicles (no streets or narrow trails) mean a higher potential for rapid fire spread because of slower initial attack response times. Rating:

Low: Good street or wide trail access for fire vehicles to most of the site.

Medium: Moderate accessibility to most of the site.

High: Little or no access to fire vehicles

- III. Potential for rapid fire spread: Sites with explosive fuels (generally a dense, continuous accumulation of flash fuels and medium fuels) have a higher potential for rapid fire spread. A rapidly spreading fire is much more difficult to control. The rating is related to the fuels hazard rating and may or may not be related to fire vehicle accessibility. Rating:

Low: Light overall fuel loading over most of the site.

Medium: Moderate fuel loading with limited fire vehicle access.

High: High fuel loading with limited fire vehicle access.

Site fire risk rating considering the three individually rated components of potential for human-caused ignition, accessibility to fire vehicles, and potential for rapid fire spread:

Low: Low risk of fire ignition or rapid fire spread.

Medium: Moderate risk of ignition and/or rapid fire spread.

High: Dangerous risk of ignition and fire spread.

Overall site rating considering both fire hazard and fire risk:

Low: Site not considered to have a serious potential fire threat and therefor is a low priority for mitigation.

Medium: Site has moderate potential for a fire but is not currently a candidate for mitigation.

High: Site has high potential for a rapidly spreading and difficult to control fire. Mitigation is recommended.

Wildfire Assessments Report

92 assessments have been completed on 82 sites (some sites have more than one assessment due to variations in hazard/risk situations).

Assessment categories and breakdown of ratings:

Publicly owned property - 26 assessments on 22 public sites/greenspaces (includes parks, schools, trails). Of the 26 assessments, 12 are rated as "high" hazard/risk; 9 are rated "moderate"; 5 are rated "low".

Public sites rated "high" (in no particular order):

Deerfield Woods Trail (The Reserve HOA)

Happy Valley Nature Park Trail (two sites rated high)

Veterans Memorial Park

HV Wetlands Park/Trail

Hidden Falls Nature Park

Mt. Gate Trail (Lazy Hawk Ranch and Deerfield Park #5 HOAs)

Mt. Scott Creek Trail (portion next to Southern Lites Park)

Mt. Talbert Nature Park Trail (Metro)

Southern Lites Park

Spring Mountain Elementary School (North Clackamas School District)

Scouters Mountain School (North Clackamas School District)

Private Property Assessments

68 assessments on 60 HOA sites/greenspaces. Of the 68, 16 are rated “high”; 42 are rated “moderate”; 10 are rated “low” (note: there are a total of 158 HOAs/developments but only 60 have greenspaces that warranted assessments).

HOA sites rated “high” (may or may not include HOA greenspaces with public trails):

Claremont

Eastbourne Downs

Grandview Estates

Greyhawk Ridge

Jackson Hills #4

Kensington Bluff (two sites rated high)

Madison Heights

Red Rose Valley #1

Red Rose Valley #2

Sunnyside Highlands

Sunrise Heights

Taralon

The Reserve (doesn't include Deerfield Woods Trail)

Westview

Forest Highland

Notes: The trails on public sites that are rated are a mix of ownerships/responsibilities including City of Happy Valley, North Clackamas Parks, Metro, and HOAs. Trails may be located within parks in which case only the trail may be rated at this point in the project since that's where the most risk is. Same with trails located on HOAs: sometimes only the trail is rated and not the rest of the HOA, depending on the fire hazard.

Not all trails, parks, and schools with greenspaces in HV warranted assessments. If the greenspace site is highly developed and well-maintained (such as playgrounds, some paved neighborhood trails, playing fields), no assessment is necessary because there is little fire hazard present.

Almost all assessments include recommendations/prescriptions for mitigation, regardless of their hazard/risk rating.

Contents

Alexa Rose HOA Greenspace	1
Bella Cassa HOA Trail and Greenspace	2
Burgundy Rose HOA Greenspace and Trail.....	3
Carron Estates 1-2 HOA Greenspace	4
Chula Vista HOA Greenspace	5
Claremont HOA Greenspaces	6
Creekstone Estates HOA Greenspace	9
Deerfield Park 1-2 HOA Greenspace.....	10
Deerfield Park 3 HOA Greenspaces.....	11
Deerfield Park 5 HOA Greenspace	12
Deerfield Woods Trail	13
Eagle Landing Commercial Greenspace.....	14
Eagle Landing Hideaway Condos HOA Greenspace	15
Eagle Landing Residential HOA and Monterey Estates development Greenspace and Trail	16
Eastbourne Downs HOA Greenspace.....	17
Ella V. Osterman Park and Greenspace	18
Falls 1-3 HOA Greenspace (AKA The Falls at Happy Valley).....	19
Forest Highland HOA Greenspace (within Happy Valley Nature Park).....	20
Gateway to Happy Valley HOA Greenspace	21
Grandview Meadows HOA Greenspace.....	22
Greyhawk Ridge HOA Greenspace and Trail.....	23
Happy Valley Park	24
Happy Valley Crossroads greenspace	25
Happy Valley Heights Greenspace	27
Happy Valley Library Greenspace	29
Happy Valley Middle School	30
Happy Valley Nature Park Trails.....	31
Happy Valley Veterans Memorial Greenspace and Trail	34
Happy Valley Village (HV Morningside) Greenspace	35
Happy Valley Wetlands Park and Trail	36
Hidden Falls Nature Park and Trail.....	37
Hood View Park.....	39
Jackson Hills #4 Greenspace	41

Jackson Hills HOA and Trail 42

Kensington Bluff HOA Greenspace 44

Lazy Hawk Ranch HOA Greenspace and Mt. Gate Trail 46

Lincoln Heights Trail 47

Madison Heights HOA Greenspace 48

Monterey Estates development was assessed as part of Eagle Landing Residential HOA Greenspace Assessment 49

Monterra HOA Greenspace 50

Mt. Gate Trail 51

Mt. Scott Creek Trail 52

Mt. Talbert Nature Park 54

ODF Grant Proposal Description 56

High-Rated Project Areas for ODF Grant 56

Orchard Ridge HOA Greenspace 59

Parkside 1-3 HOA Greenspace 60

Pioneer Highlands Greenspace 61

Pleasant Valley Villages #1 HOA Greenspace 63

Rebstock Park (Riparian Area) 64

Red Rose Valley 1 HOA Greenspace 65

Red Rose Valley 2 HOA Greenspace 66

Rock Creek Green HOA Greenspace 68

Royal Vista HOA Greenspaces 70

Sarah Knoll HOA Greenspace 71

Scott Creek Estates 72

Scott Creek Park and Mt. Scott Trail 73

Scouters Meadow HOA Greenspace 74

Scouters Mountain #1 HOA Greenspaces 75

Scouters Mountain Nature Park 77

Scouters Mountain Elementary School 79

Shadow Ridge HOA Greenspace 80

Shadow Ridge Trail 81

Southern Lites Park 82

Spring Mountain Elementary School Greenspace 83

Spring Mountain Ranch HOA Greenspace 84

Stella Heights HOA Greenspace 85

Stillwater Estates HOA Greenspace 86

Stone Bridge HOA Greenspaces 87

Sunnyside Highlands HOA Greenspace and Trail 88

Sunrise Heights 1-2 90

Sunset View HOA Greenspace 91

Sunshine Ridge HOA Greenspace 92

Taralon HOA Greenspaces 93

The Falls at Happy Valley: 96

The Reserve HOA Greenspaces..... 97

The Stairs Trail..... 99

Tree View Estates HOA Trail and Greenspace 100

Vista Heights HOA Greenspace 101

Vista Woods HOA Greenspace..... 102

Volare Townhomes Greenspace 103

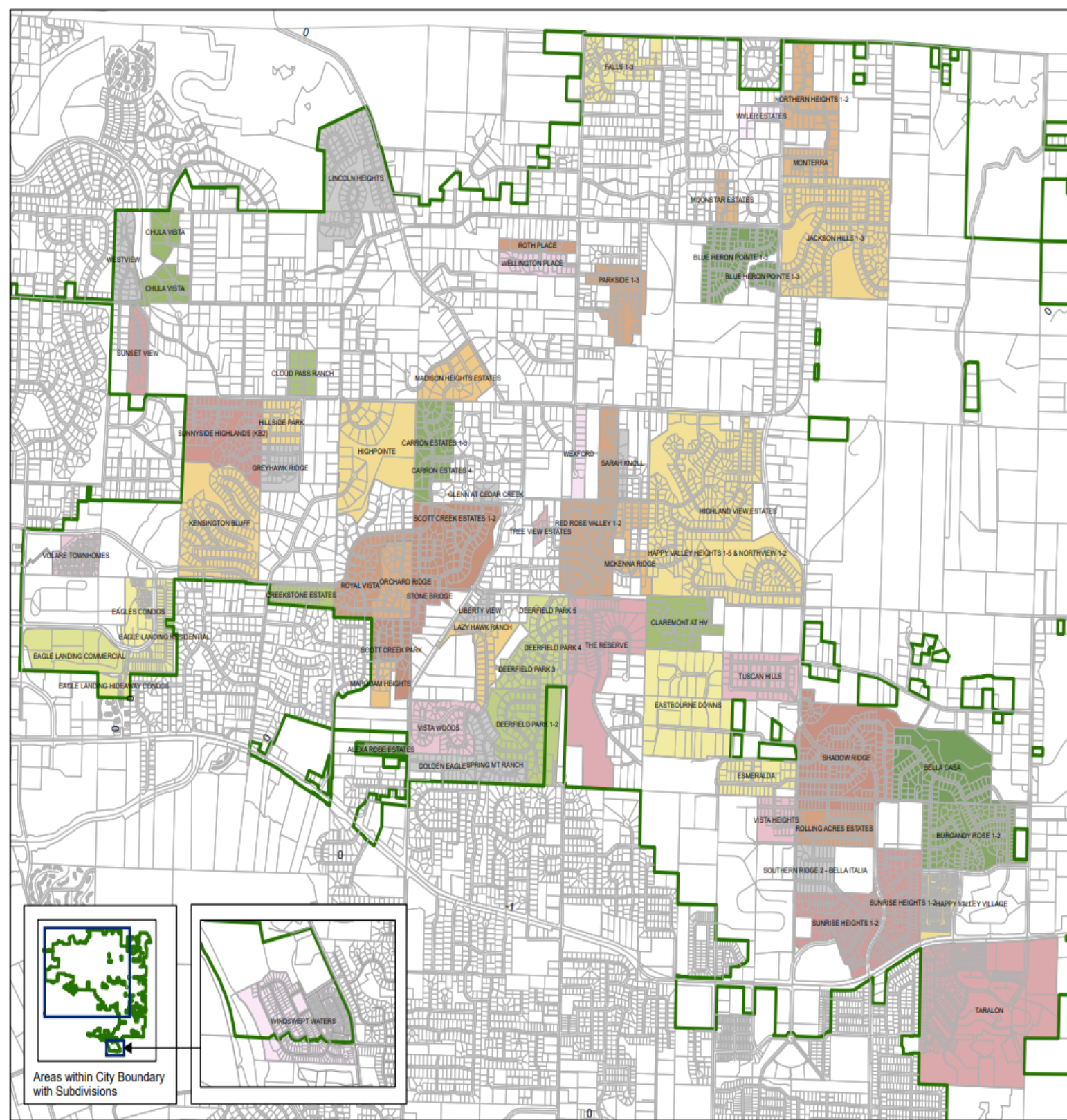
Wellington Place HOA Greenspace..... 104

Wenzel Estates HOA Greenspace 105

Westview HOA Greenspace 107

Wexford (Waterford) HOA Greenspace..... 108

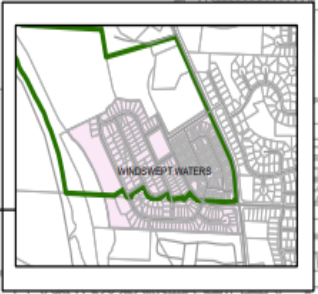
Windswept Waters HOA Greenspace 109



HOMEOWNER ASSOCIATIONS

- CHV HOA**
- ALEXA ROSE ESTATES
 - BELLA CASA
 - BLUE HERON POINTE 1-3
 - BURGANDY ROSE 1-2
 - CARRON ESTATES 1-3
 - CARRON ESTATES 4
 - CHULA VISTA
 - CLAREMONT AT HV
 - CLOUD PASS RANCH
 - CREEKSTONE ESTATES
 - DEERFIELD PARK 1-2
 - DEERFIELD PARK 3
 - DEERFIELD PARK 4
 - DEERFIELD PARK 5
 - EAGLE LANDING COMMERCIAL
 - EAGLE LANDING HIDEAWAY CONDOS
 - EAGLE LANDING RESIDENTIAL
 - EAGLES CONDOS
 - EASTBOURNE DOWNS
 - ESMERALDA
 - FALLS 1-3
 - GLENN AT CEDAR CREEK
 - GOLDEN EAGLE
 - GREYHAWK RIDGE
 - HAPPY VALLEY HEIGHTS 1-5 & NORTHVIEW 1-2
 - HAPPY VALLEY VILLAGE
 - HIGHLAND VIEW ESTATES
 - HIGHPOINTE
 - HILLSIDE PARK
 - JACKSON HILLS 1-3
 - KENSINGTON BLUFF
 - LAZY HAWK RANCH
 - LIBERTY VIEW
 - LINCOLN HEIGHTS
 - MADISON HEIGHTS ESTATES
 - MARQUAM HEIGHTS
 - MCKENNA RIDGE
 - MONTEERRA
 - MOONSTAR ESTATES
 - NORTHERN HEIGHTS 1-2
 - ORCHARD RIDGE
 - PARKSIDE 1-3
 - RED ROSE VALLEY 1-2
 - ROLLING ACRES ESTATES
 - ROTH PLACE
 - ROYAL VISTA
 - SARAH KNOLL
 - SCOTT CREEK ESTATES 1-2
 - SCOTT CREEK PARK
 - SHADOW RIDGE
 - SOUTHERN RIDGE 2 - BELLA ITALIA
 - SPRING MT RANCH
 - STONE BRIDGE
 - SUNNYSIDE HIGHLANDS (KB2)
 - SUNRISE HEIGHTS 1-2
 - SUNSET VIEW
 - TARALON
 - THE RESERVE
 - TREE VIEW ESTATES
 - TUSCAN HILLS
 - VISTA HEIGHTS
 - VISTA WOODS
 - VOLARE TOWNHOMES
 - WELLINGTON PLACE
 - WESTVIEW
 - WEXFORD
 - WINDSWEPT WATERS
 - WYLER ESTATES

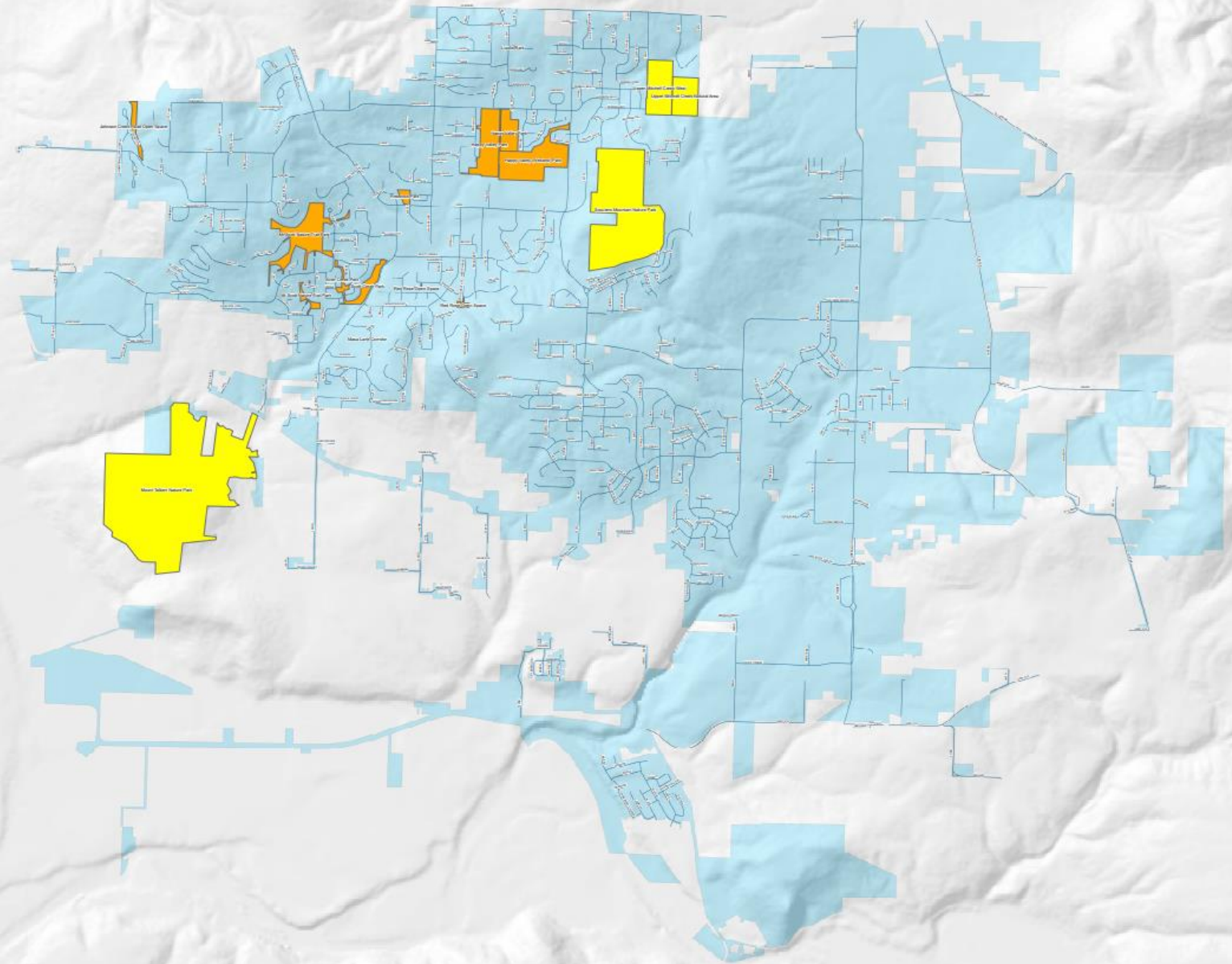
Areas within City Boundary with Subdivisions





Happy Valley and Metro Parks and Open Spaces

-  CHV Parks
-  Metro Property
-  Happy Valley city limits



Source: Original data from Clatsop County GIS and Metro (2011)
City Limits, CHV Parks, and Metro Property data provided by Clatsop County GIS and Metro (2011)
Map design and layout by [unintelligible] (2011)
Date: 08/15/2011

Alexa Rose HOA Greenspace

Ownership/responsibility: Alexa Rose HOA

Date of field assessment: 1/1/22

Description: The small greenspace is located at the east end of the HOA where Alexa Rose Lane meets 122nd Ave. It's not clear if the space is part of the HOA but it will be treated as if it is. It's along a seasonal stream and is dominated by dense blackberries with scattered hawthorn.

Fire Hazard Ratings:

Fuels:

Ground fuels: Small-sized fuels: Moderate/high (blackberries); Medium-sized fuels: Low; Large-sized fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Moderate

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Rating:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Low/moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendations: Cut the blackberries and compact the cut canes for faster decomposition.

Bella Cassa HOA Trail and Greenspace

Ownership/responsibility: Bella Cassa HOA

Date of field assessment: 8/12/21 (Shadow Ridge Trail); 1/17/22

Description: There are three greenspaces. One is the portion of the Shadow Ridge Trail that is shared with Shadow Ridge HOA and is covered by its own assessment (See Shadow Ridge Trail Assessment). The second is a small neighborhood playground/park along the south boundary of the HOA that is landscaped and well-maintained and does not require an assessment. The third is a corridor park/trail that is also the PGE right-of-way through the NW portion of the HOA. The corridor is mowed grass and scattered landscape shrubbery and does not warrant an assessment. As a result, there is no assessment necessary for the HOA. The recommendation for the Shadow Ridge Trail as it applies to Bella Cassa HOA: "Cut down any blackberries within 20 feet of the trail. Scatter any dead material that's between 2-5 inches in diameter".

Burgundy Rose HOA Greenspace and Trail

Ownership/responsibility: Burgundy Rose HOA

Date of field assessment: 1/17/22

Description: The greenspace is mostly a heavily used trail that begins in the SE corner of the HOA at a playground and WES site at the end of Peace Court and runs uphill to the NW along a seasonal creek corridor to a playground in the Bella Casa HOA. A small, well-maintained piece of ground, adjacent to and just south of the Bella Casa playground, is mowed grass and limbed conifers and is not included in the assessment. The assessment only covers the trail corridor but the WES site will be mentioned in the recommendations because of its uncharacteristically high fire hazard.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium fuels: Low/moderate; Large fuels: Low

Ladder fuels: Moderate (small area just above 157th Ave.)

Aerial fuels: Low/moderate (scattered)

Overall fuel rating: Low/moderate

Aspect Rating: Moderate

Slope Rating: Moderate

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: High

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low/moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Limb young conifers up to 6 feet above the ground (mostly the area just above 157th Ave.). Remove the cut limbs from the site. Cut up any medium-sized dead fuels and scatter or remove from site.

For the WES site: The west side of the site is steep and covered with dense blackberries that have grown up into conifers that are adjacent to several homes. Cut the blackberries down and compress the canes for quicker decomposition.

Carron Estates 1-2 HOA Greenspace

Ownership/responsibility: Carron Estates 1-2 HOA

Date of field assessment: 1/19/22

Description: There are two greenspaces. One is a WES site that is not assessed. The other is a short, narrow corridor with access on both ends that begins at Kimberley Court (across from the trailhead for Happy Valley Nature Park) and ends at Jason Lane. The overstory is a sparse mix of scattered mature Douglas fir, willow, birch and maple plus a row of crowded cedar trees. There are several large, loosely piled concentrations of homeowner branch trimmings and storm debris mixed with blackberries.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: High; Large fuels: Moderate

Ladder fuels: Moderate (line of cedars)

Aerial fuels: Moderate (cedars)

Overall fuels rating: Moderate

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE (DEBRIS PILES)

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low/moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendations: Chip or remove medium-sized fuels (2-5 inches in diameter). Limb up the row of cedars on the west end to six feet above the ground and remove or chip the branches.

Chula Vista HOA Greenspace

Ownership/responsibility: Chula Vista HOA

Date of field assessment: 12/3/21

Description: The only greenspace within the HOA boundaries is in the southwest corner in a steep forested draw. There is limited access to this area from a grown over utility maintenance road off Idleman Rd. There is no trail access from the HOA. The overstory is mostly mature Douglas fir in the draw and dense, mature brush adjacent to it leading up to homes.

Fire Hazard Ratings:

Fuels:

Ground fuels: Small-sized fuels: Moderate; Medium sized fuels: Moderate; Large sized fuels: Low

Ladder fuels: Low/Moderate

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope rating: Moderate/High

Aspect rating: High

OVERALL FIRE HAZARD OF RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Low

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Cut blackberries down (and leave in place) remove or tightly pile dead medium-sized fuels (2-5 inches in diameter) from the heavy brush area next to the mature forest.

Claremont HOA Greenspaces

Ownership/responsibility: Claremont HOA

Date of field assessment: 1/13/22

Description: There are two assessments for the large greenspaces in this HOA. One assessment will address a patch of young, very dense Douglas fir along either side the WES access road extending east from the end of Claremont Street. The other will take in the rest of the greenspace areas and is mostly forested with mature Douglas fir and big leaf maple.

WES access road area description: Two stands of young Douglas fir are included in this assessment. One area, along the north side of the WES road and extending about 75 feet in and down a steep slope, is a doghair stand of skinny, weak 15-year-old Douglas fir that has mostly fallen over from past storms. On the other side of the access road and extending uphill and south to Claremont Street is another dense young Douglas fir stand, about 20 years old. Both stands are ladder fuel hazards leading up to mature Douglas fir crowns in the vicinity.

WES access road assessment:

Fire Hazard Ratings:

Fuels:

Ground fuels - Small-sized fuels: Moderate; Medium fuels: Moderate; Large fuels: Low

Ladder fuels: High

Aerial fuels: High

Overall fuels rating: High

Slope rating: High

Aspect rating: Low

OVERALL FIRE HAZARD RATING: HIGH

Fire Risk Ratings:

Potential for human-caused ignition: Low/moderate

Inaccessibility to fire vehicles: Low/moderate

Potential for rapid fire spread: Moderate/high

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

COMBINED OVERALL FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: For the doghair stand of Douglas fir below the access road, cut down and remove all the trees that have fallen over, even if they aren't dead. Thin the remaining trees to a spacing of 10 feet. Removed trees should be hauled away or chipped on site. Cut all blackberries but leave on site. For the area between the access road and

Claremont Street, limb the young Douglas firs up to 10 feet above the ground and either chip or remove the cut branches. For the WES site: Remove dead fuels and cut blackberries. Blackberries may be left on site.

Description of the rest of the greenspace outside of WES access road area: There is a wide variety of hazard and risk conditions on the rest of the site: Along the north boundary of the HOA is a mostly closed canopy of mature Douglas fir and some maple, cherry, cottonwoods. There are some openings that contain almost impenetrable areas of mostly fire-resistant brush but with some dead fuels from storm damage and competition. There are two steep, narrow draws running east/west with seasonal streams that converge at the west boundary of the HOA.

In the SW corner of the HOA is mix of young and mature Douglas fir, big leaf maple and bitter cherry with blackberry undergrowth that is denser along the east edge of the greenspace. Although some of the homeowners above this area have kept the steep slopes below the homes clear of brush, a lot of debris from the clearing activities have been dumped among the firs and blackberries, adding to the hazard of flammable blackberries and ladders of young fir up into mature firs.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate/high; Medium fuels; Moderate/high; Large fuels: Low/moderate

Ladder fuels: Low along north boundary; high in the SW corner

Aerial fuels: Moderate/high

Overall fuels rating: Moderate/high

Slope rating: Moderate/high

Aspect rating: Low/moderate along north boundary; high in the SW corner

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

COMBINED OVERALL FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: For the forested area all along the north boundary of the HOA: Cut down concentrations of blackberries and leave in place. Cut and tightly pile any dead standing or downed understory species (filberts, cherry, hawthorn, etc.). Piles may be left to decompose or may be burned.

WILDFIRE ASSESSMENT

For the forested southwest corner of the HOA: Cut blackberry concentrations and leave in place. Remove ladder fuels from young Douglas firs up to 10 feet above ground level and tightly pile along with debris dumped by homeowners. Piles constructed under the mature Douglas fir canopy should be left to decompose. Piles constructed out in the open may be burned or left to decompose.

Creekstone Estates HOA Greenspace

Ownership/Responsibility: Creekstone Estates HOA

Date of field assessment: 12/3/21

Description: This greenspace is at the east end of the HOA. Part of it is in a brushy draw with a seasonal creek flowing north to south, and part is a small stand of mature Douglas fir and white oak. There is a narrow band of mowed grass on the short, steep slope just below Otty Road. Understory vegetation is mostly blackberries, filberts and snowberry in the draw, and holly, filberts, snowberry and some blackberries under the Douglas fir/white oak canopy. There is no trail access.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Moderate; Medium-sized fuels: Low-moderate; Large-sized fuels: Moderate

Ladder fuels: Low

Aerial fuels: Moderate (Douglas fir/white oak stand)

Overall fuels rating: Moderate

Slope Rating: Moderate

Aspect Rating: Moderate

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Low

Inaccessibility to fire fighting vehicles: Moderate

Potential for rapid fire spread: Low/moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Cut blackberries down and remove or tightly pile medium-sized (2-5 inches in diameter) dead fuels in the brushy draw. Keep the bank below Otty Road mowed.

Deerfield Park 1-2 HOA Greenspace

Ownership/responsibility: Deerfield #1 HOA

Description: Deerfield 1-2 HOA greenspaces consist of four different undeveloped tracts that are surrounded by homes. There are no public trails but several neighborhood access rights-of-way. Vegetation on the tracts vary from open meadows to forested areas of mostly mature Douglas fir and bigleaf maple. Understory in the forested areas is mostly fire-resistant filbert, hawthorn, bitter cherry, Oregon grape, salal, and sword fern. This HOA is the only Firewise Community in Happy Valley and, as a result, the residents have been very aggressive in managing the fire hazards. The open meadow is on a steep, west-facing slope but is mowed annually which keeps it a low fire hazard. Understory vegetation in the forested tracts has been thinned and disposed of. There are few pockets of untreated vegetation.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Low to moderate (and scattered); Medium-sized fuels: Low to moderate; Large-sized fuel: Low

Ladder fuels: Low

Aerial fuels: Low to moderate

Overall fuels rating: Low to moderate

Slope rating: Low to moderate

Aspect rating: Moderate to high

OVERALL FIRE HAZARD RATING: MOSTLY LOW EXCEPT FOR A FEW UNTREATED POCKETS

Fire Risk Ratings:

Potential for human-caused fires: Low (no public access)

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low to moderate

Proximity to homes: Moderate to high

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Continue current management of mowing the meadow annually and removing invasive vegetation and dead fuels.

Deerfield Park 3 HOA Greenspaces

Ownership/responsibility: Deerfield Park 3 HOA

Date of field assessment: 1/8/22

Description: Most of the site is a narrow, horseshoe-shaped band that surrounds the outside of the HOA homes on Redhawks Lane and Hawks Crest Place. The south boundary is in a well-maintained greenspace corridor shared with Deerfield Park 1-2. The western edge of the horseshoe has been well-maintained where it borders a high-hazard piece of private property. Along the north side of the horseshoe is mostly mature Douglas fir and maple with sometimes heavy blackberries and other brush with pockets of storm debris. Another smaller piece of mowed greenspace is across (east of) Spring Mountain Road from the horseshoe area that briefly follows a seasonal stream course with two runoff retention pond sites.

Fire Hazard Ratings:

Fuels:

Ground fuels - Small-sized fuels: Moderate; Medium-sized fuels: Moderate; Large-sized fuels: Low

Ladder fuels: Low

Aerial fuels: High (only around Douglas fir along north boundary)

Overall fuels rating: Moderate

Slope rating: Moderate

Aspect rating: High

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: On the north boundary where the mature Douglas fir dominates: cut blackberries down. Tightly pile or chip medium-sized (2-5" in diameter) storm debris and any other dead material and yard debris dumped in the greenspace by neighbors. For the rest of the horseshoe area: keep the brush cut. For the seasonal stream course across Spring Mountain Road: keep the grass mowed.

Deerfield Park 5 HOA Greenspace

Does not include the portion of Deerfield 5 covered by the Mountain Gate Trail assessment. The assessment only covers the north portion of the greenspace next to Mountain Gate Road and Spring Mountain Drive.

Ownership/responsibility: Deerfield Park 5 HOA

Date of field assessment: 1/8/22

Description: This part of the greenspace is a mostly forested patch of mature Douglas fir, bigleaf maple, and bitter cherry. Understory is cherry, filbert, blackberries and hawthorn. The area has been cleared of some debris and blackberries but there are still some storm debris pockets along Mountain Gate Road. The site is on a moderately steep north-facing slope.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium-sized fuels: Moderate; Large-sized fuels: Low/moderate

Ladder fuels: Low

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope Rating: Moderate

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignitions: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Cut down blackberries. Pile, chip, or remove dead, medium-sized debris from within 30 feet of Mountain Gate Road between the Mountain Gate Trailhead and Spring Mountain Road.

Deerfield Woods Trail

Ownership/responsibility: The Reserve HOA

Field assessment date: 9/15/21

Description: Deerfield Woods Trail is a ½ mile loop off of Mt. Ridge Avenue. The greenspace the trail winds through has areas of dense 20–30-year-old Douglas firs, heavy accumulation of dead understory fuels and patches of 10–15-year-old blackberries. There are scattered mature Douglas fir, big leaf maple, bitter cherry and white oak. Understory is a dense mix of over-mature filbert, cherry, maple, hawthorn, poison oak. The bottom (west flank) of the greenspace is a mild slope that quickly becomes progressively steeper towards the top (east flank) along Mt. Ridge Avenue. The slope faces west. The trail is mostly inaccessible to fire vehicles.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Moderate-high (old blackberry patches); Medium fuels: High; Large fuels: Moderate.

Ladder fuels: High (Douglas fir pockets).

Aerial fuels: Moderate-high (Douglas fir)

Overall fuels rating: High

Overall slope rating: High

Overall aspect rating: High

OVERALL FIRE HAZARD RATING: HIGH

Fire Risk Ratings: Potential for human-caused fires: Moderate-high.

Inaccessibility to fire vehicles: High.

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommendation: Remove ladder fuels from all Douglas firs up to 10 feet above ground and either chip or remove from the site. Cut and remove dense pockets of years-old blackberries. Remove all dead medium fuels within 20 feet of either side of the trail and below adjacent homes. These measures will bring the overall rating to moderate but only for a few years.

Eagle Landing Commercial Greenspace

Ownership/responsibility:?? (Maybe Eagle Landing Residential)

Date of field assessment: 12/10/21

Description: As of 12/10/2021 most of this flat, undeveloped greenspace is under construction. The only part that is not is along a channeled seasonal creek along the entire south boundary of the site. The assessment will only cover the creek area. Overstory trees are mostly cottonwood and willow with a few scattered Douglas firs. Understory vegetation is a mix of fire-resistant species: cottonwood, willow, snowberry, spirea as well as pockets of blackberries. Outside the creek riparian area, it's mostly grass and blackberries. There is a trail along the creek that is somewhat connected to the well-developed interpretive creek trail located in the Eagle Landing Residential HOA greenspace to the east (assessed separately). This assessment may need to be revised after the site has been developed.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Low/moderate; Medium-sized fuels: Moderate; Large-sized fuels: Low

Aerial fuels: Low

Ladder fuels: Low

Overall fuels rating: Low

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: Low

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Blackberries are not dense enough to be a problem yet but what is on site should be cut down to prevent a hazardous accumulation.

Eagle Landing Hideaway Condos HOA Greenspace

Ownership/responsibility: Eagle Landing Hideaway Condos HOA

Date of field assessment: 12/10 21

Description: The small, flat greenspace is along the east boundary of the HOA and is mostly a fenced runoff retention area with cattails and other wetland shrubs with some scattered 10–15-year-old Douglas fir. The other area is next to the runoff retention in the far SE corner and is a popular park-like spot with mowed grass, picnic tables, and mature Douglas firs with limbs reaching the ground. Note: the large open space just west of the existing condos is part of the HOA but is under construction as of the date of this assessment.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Low; Medium-sized fuels: Low; Large-sized fuels: Low

Ladder fuels: Moderate

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Potential for human-caused fires: Moderate/high (in the park-like area)

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Moderate (around mature Douglas firs)

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Cut limbs off the mature Douglas firs up to 10 feet above the ground and remove from the site.

Eagle Landing Residential HOA and Monterey Estates development Greenspace and Trail (Doesn't include Eagle Landing Hideaway Condos or Eagle Landing Commercial)

Ownership/responsibility: Eagle Landing HOA

Date of field assessment: 12/7/21

Description: There are two greenspace areas in this HOA: One is along the west boundary next to Eagle Landing Golf Course that follows a north-south flowing creek. The other is a constructed storm water runoff channel that runs east-west along the south HOA boundary. Assessment factors will only consider the creek greenspace. There is a well-maintained, popular interpretive trail along both sides of the creek. There is an open canopy of mostly mature white oak and Douglas fir.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Low/moderate; Medium-sized fuels: Moderate; Large-sized fuels: Moderate (from fallen large oaks)

Ladder fuels: Low

Aerial fuels: Low/moderate

Overall fuels rating: Low/moderate

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: High

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Remove moderate-sized fuels (limbs) from fallen oak trees. For the storm runoff channel along the south boundary of the HOA: keep it mowed.

Eastbourne Downs HOA Greenspace

Ownership/responsibility: Eastbourne Downs HOA

Date of field assessment: 1/14/22

Description: The one greenspace is a 2-acre rectangular meadow in the NW corner of the HOA. Although it's mostly grass that gets mowed annually there is a portion on the north end of the meadow dominated by dense blackberries that extend into neighboring forest. The assessment will focus on the blackberries but the meadow will be included in the recommendations.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High (dead blackberry canes); Medium fuels: Moderate; Large fuels: Low

Ladder fuels: Low/moderate

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope rating: Moderate

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Moderate/high

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

COMBINED OVERALL FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Mow and compact the blackberries that are in the meadow and the forested area. Keep the meadow mowed at least annually. Keep the blackberries mowed after they've been cut down.

Ella V. Osterman Park and Greenspace

Ownership: North Clackamas Parks and Recreation

Description: Osterman Park is part developed park and part undeveloped greenspace. The assessment is only for the greenspace area which surrounds the park in a sort of horseshoe shape. The mostly closed canopy is a mix of Douglas fir, bigleaf maple, Oregon white oak, bitter cherry and cottonwood. Understory consists of a moderate to high density of fire-resistant filbert, vine maple, ocean spray, cherry, and poison oak. A seasonal creek flows through the east portion. There are assorted undesignated trails throughout leading from the surrounding neighborhoods. Small pockets of storm debris are scattered throughout the area. The generally south aspect slope is flat to mild.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium-sized fuels: Low-moderate; Large fuels: Low.

Ladder fuels: Low;

Aerial fuels: Low to moderate;

Overall fuel rating: Moderate

Overall slope rating: Low

Overall aspect rating: Moderate-high

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Low-moderate

Inaccessibility to fire-fighting vehicles: Moderate-high

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: LOW TO MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Falls 1-3 HOA Greenspace (AKA The Falls at Happy Valley)

Ownership/responsibility: Falls 1-3 HOA

Date of field assessment: 11/30/21

Description: There is one well managed greenspace on the site that begins along the east side of 132nd as a runoff retention area and extends east across Margie Way. It consists of mowed grass around the outside of the space and a pruned hawthorn patch in the middle. Along the east boundary of the space next to a fence are a few 20-year-old cedars that could be limbed up. Although there is no defined trail the site is fairly flat and open with good access to small sized fire apparatus.

Fire hazard ratings:

Fuels:

Ground fuels: Small sized fuels: Low; Medium-sized fuels: Low; Large sized fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low

Slope rating: Low

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: LOW

Fire risk ratings:

Potential for human-caused fires: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Keep the grass mowed. Remove lower limbs on the cedars along the east boundary of the greenspace to 6 feet above the ground.

Forest Highland HOA Greenspace (within Happy Valley Nature Park)

Ownership/responsibility: Forest Highland HOA and City of Happy Valley (portion of the Happy Valley Nature Park)

Date of field assessment: 3/8/2022

Description: This HOA includes the southeast portion of Happy Valley Nature Park. An access trail to the HV Park loop trail begins at the north end of 118th Court but was assessed as part of the whole trail system and will not be part of this HOA assessment. This assessment addresses a narrow greenspace corridor (possibly a utility R/W) that extends north from Otty Road between 119th Court and 121st Court up to the main body of the park. Since there is no trail the only access into the site is by adjacent residents. The corridor has long been used as a yard debris dumping ground by residents on either side, and as a result, along with dense blackberries, the fuel loading is very high. The overstory is scattered mature Douglas fir.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High; Medium fuels: High; Large fuels: Low/moderate

Ladder fuels: Moderate

Aerial fuels: Moderate

Overall fuels rating: High

Slope rating: Low/moderate

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/moderate

Inaccessibility to fire vehicles: Moderate/high

Potential for rapid fire spread: Moderate/high

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Residents need to stop dumping debris into the site. Existing dumped yard debris may be left in place to decompose. Cut down blackberries. Remove lower limbs of mature Douglas fir to a height of 10 feet above ground.

Gateway to Happy Valley HOA Greenspace

Ownership/responsibility: Gateway to HV HOA

Date of field assessment: 3/2/22

Description: The greenspace is a riparian area along the NE side of the HOA. The stream is a seasonal tributary of Scott Creek and is dominated by dense willow shrubs and blackberries. There's not much of a canopy to speak of. There is no trail or street access to the greenspace.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate (blackberries); Medium fuels: Low/moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: Low/moderate

Aspect rating: Low

Slope rating: Low

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Rating:

Probability of a human-caused ignition: Low/moderate

Inaccessibility to fire vehicles: Moderate

Probability of rapid fire spread: Low/moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Cut down blackberries and medium sized (2-5 inches in diameter) dead shrubs/limbs. Blackberries should be left in place, but not in the stream bed. Cut dead shrubs/limbs into 3–4-foot lengths and either scatter (but not in the stream bed) or pile tightly for faster decomposition.

Grandview Meadows HOA Greenspace

Ownership/responsibility: Grandview Meadows HOA

Date of field assessment: 3/4/22

Description: The fairly flat 1 ½ - 2-acre greenspace was planted 5-6 years ago with valley ponderosa pine, Douglas fir and a variety of other native shrubs. A seasonal stream bed, created by the developer to drain runoff, runs through it from the SW to the NE but it is not considered a riparian area for protection purposes. Two areas within the site are tall grass, with no plantings: one along the north side next to a paved trail and one in the SE corner. Blackberries are beginning to spread throughout the site. The site is surrounded on three sides by homes and one side by a paved neighborhood trail.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High (grass); Medium fuels: Moderate (pine and fir saplings); Large fuels: Low

Ladder fuels: Moderate

Aerial fuels: Low

Overall fuel rating: Moderate

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low/moderate

Potential for rapid fire spread: Moderate (grass)

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: The pines and firs are too young to have lower ladder-hazard limbs removed. To mitigate the ladder threat, mow the grassy areas (where there are no planted shrubs) annually. Cut down the blackberries so they don't become a hazard under the pines/firs later.

Greyhawk Ridge HOA Greenspace and Trail

Ownership/responsibility: Greyhawk Ridge HOA

Date of field assessment: 1/1/22

Description: This greenspace is band along the south boundary of the HOA and includes a popular trail that's part of a network of trails (known as The Stairs Trail) shared with Sunnyside Highlands HOA and Kensington Heights HOA. The popular trail is at the top of a steep south facing slope that has a variety of hazards including blackberries extending up into young and mature conifers, ladder fuels, storm debris piled along the trail and dead standing brush. There are homes directly above the greenspace and trail, and access to fire vehicles is difficult. There is a WES runoff retention site at the east end of the greenspace.

Fire Hazard Ratings:

Fuels:

Ground Fuels; Small-sized fuels: Moderate/high; Medium sized fuels: Moderate; Large-sized fuels: Low/moderate

Ladder fuels: Moderate

Aerial fuels: Moderate/high

Overall fuel rating: Moderate/high

Slope Rating: High

Aspect Rating: High

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused fire: Moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommendations: Within 20 feet of the trail: Cut blackberries to the ground. Cut and remove (or chip) from the site ladder fuel limbs from conifers up to six feet high on young trees (10-15 years old) and up to ten feet high on older conifers. Remove from the site or chip medium-sized (3-6 inches in diameter) storm debris within 20 feet of the trail. Larger debris may be left in place.

Happy Valley Park

Ownership/responsibility: City of Happy Valley

Date of field assessment: 8/21/21

Description: Happy Valley Park is a popular large, flat, developed park with sports facilities, playgrounds, picnic areas, trails, and dog parks. It is part of a complex that includes Happy Valley Wetlands Park but for fire assessment purposes they are treated as two different parks. The extensive grass areas are mowed frequently and fire vehicle access is very good.

Fire Hazard Ratings:

Fuels:

Ground fuels: Small fuels: Low; Medium fuels: Low; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused ignition: High

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Medium

OVERALL FIRE RISK RATING: MODERATE

OVERALL FIRE HAZARD AND FIRE RISK RATING: LOW

Happy Valley Crossroads greenspace

Ownership/responsibility: HV Crossroads HOA

Date of field assessment: 2/17/22

Description: There are two greenspaces. One is in the NW corner of the HOA below a paved trail. It slopes to the west towards Rock Creek and is mostly an open canopy with a few mature maple and Douglas fir with some snags. The understory is dense, impenetrable blackberries. The other is a flat wetland with a grove of mature ash trees and a meadow area next to Misty Drive just north of Fred Meyer. Grass, scattered blackberries and some young planted Douglas firs make up the understory. There is some storm debris on the ground from the ash trees. This area is fenced off, presumably to keep the public out.

Each area is assessed separately.

Assessment for the NW corner blackberry patch:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High (blackberries); Medium fuels: Moderate; Large fuels: Low/moderate

Ladder fuels: Moderate

Aerial fuels: Low

Overall fuels rating: Moderate

Slope rating: Moderate

Aspect rating: Moderate/high

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: At a minimum, cut down and compact blackberries within 20 feet of the edge of the paved trail. Ideally, cut down all blackberries in the greenspace.

Assessment for the ash grove:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low/moderate; Medium fuels: Moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low/moderate

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Rating:

Potential for human-cause fire ignition: Low/moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Low/moderate

OVERALL FIRE RISK RATING: LOW

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Scatter the pockets of ash limbs that are on the ground. Cut any blackberries and leave in place. For the meadow area between the ash grove and 172nd, mow the area in June.

Happy Valley Heights Greenspace

Ownership/responsibility: Happy Valley Heights HOA

Dates of field assessment: 10/24/21, 11/2/21,

Description: Happy Valley Heights Greenspace covers a large area of several different tracts. For this reason, the assessment will be divided into two areas. One (tract H) is a mostly forested, hilly area bounded by 145th Avenue on the east, Alta Vista Dr. along the south, and Rimrock Dr. along the north. The other (comprised of tracts A,B,C,D) is mostly flat and is mainly brush and grass and is bounded by King Rd on the north side, and Rolling Meadows Dr. along the south and east.

Assessment #1; Forested Area Description (Tract H): There are actually two stands of mature forest in this area divided by dense, deciduous understory and a small, dense patch of young (20-years-old) Douglas fir. The mature stands are heavily shaded by large, mostly closed-canopy Douglas fir. The whole area is dissected by three draws with seasonal creeks that eventually feed into Mt. Scott Creek.

Fire Hazard Ratings:

Fuels:

Ground fuels: Small-sized fuels: Low to moderate; Medium fuels: moderate; Large fuels: Low

Ladder fuels: Low (except for one pocket of young DF. See recommendations)

Aerial fuels: Moderate to high (old growth fir areas with closed canopy)

Overall fuels rating: Moderate

Slope rating: Moderate

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fires: Low (minimal access)

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Low to moderate

Proximity to homes: Moderate to high

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Assessment #1 Recommendations: There has already been a lot of hazard reduction work done in this area with fuel pullbacks behind vulnerable homes and blackberry removal. Recommend removing and scattering ladder fuels in the patch of 20-year-old Douglas fir that divides the two areas of mature Douglas fir.

Assessment #2; Flat area description (tracts A, B, C, D): These tracts are scattered throughout the neighborhood and consist mostly of brushy or grassy meadows. Some areas are wetlands that are swampy for several months. There are few mature tall trees rather several, sometimes dense accumulations of brush species: hawthorn, spirea, willow, cottonwood, maple, ninebark, red osier dogwood, cattails; all of which are generally fire resistant. The HOA has done a good job of pulling back brush from within 20-30 feet of fences. Some pulled back brush has resulted in pockets of dead fuels. There are a couple designated trails but mostly there's not obvious public access to most tracts. Since most of the area is flat, fire vehicle access is fairly good.

Fire hazard ratings

Fuels:

Ground fuels: Small-sized fuels: Moderate-high (grasses); Medium-sized fuels: Low-moderate (except for pockets of dead fuels in pullback areas); Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: Moderate

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW-MODERATE

Fire Risk Ratings

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low-moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Assessment #2 Recommendations: Where there are pockets of dead fuels from fence pullbacks either scatter fuels beyond the fence buffer zones or pile to break up fuel continuity. Hauling away or chipping the fuels is not feasible on most tracts. In large areas of dense brush where fire hazard will eventually increase over time, consider cutting fire breaks in the form of corridors (6-8 feet wide) through the affected sites.

Happy Valley Library Greenspace

Ownership/responsibility: City of Happy Valley

Date of field assessment: 11/1/21

Description: This greenspace is a narrow draw with a seasonal creek that feeds into Rose Creek. It is situated between Sieben Parkway and Oregon Trail Drive and is just off the southwest corner of the library. There are a few scattered mature Douglas fir, western red cedar, and big leaf maple (along with several snags) and a dense, decadent understory of several brush species. There's no trail access but fair road access to most of the site. There are several areas of dead fuels on the ground.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Moderate; Medium-sized fuels: Moderate; Large fuels: Low to moderate.

Ladder fuels: Low to moderate

Aerial fuels: Low

Overall fuels rating: Moderate

Slope rating: Moderate

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Low to moderate

Potential for rapid fire spread: Low to moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Remove dead medium-sized fuels and ladder fuels (Douglas fir and cedar trees) within 30 feet of Sieben Park Way. The ladder fuels should be removed to a height of 10 feet from ground level.

Happy Valley Middle School

Ownership: North Clackamas School District

Date of field assessment: 2/14/22

Description: The greenspace in this assessment is an L-shaped piece of land north of the school and north of Happy Valley Baptist Church. On the west end is a small meadow next to a part of the Happy Valley Wetlands Trail. The east portion of the greenspace is a grassy/brushy wetland area. In between the meadow and the wetland area is dense hawthorn and scattered blackberries.

Happy Valley Nature Park Trails

Ownership/responsibility: City of Happy Valley, Forest Highland HOA and Highpoint HOA

Date of field assessment: 7/27/21

Description: Happy Valley Nature Park is a system of roughly 2 miles of trails bisected by a seasonal tributary of Scott Creek. There are seven trailheads and a main loop trail within the boundary of the park. The assessment will be in three parts: one assessment for the main park loop trail, one for the 118th Court access trail, and one for the Solomon Court access trail. Both access trails have much higher hazard/risk than the rest of the park. The entire park is apparently within the Highpoint HOA and Forest Highland HOA. The assessments cover only the trail system and not the whole park.

Main Park Trail Loop Assessment:

Fire Hazard Ratings:

Fuels: Small fuels: Moderate; Medium fuels: Moderate; Large fuels: Low-moderate

Ladder fuels: Low

Aerial fuels: Low-moderate

Overall Fuel Rating: Moderate

Slope Rating: Moderate

Aspect Rating: Moderate-high

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings: Potential for human-caused ignition: Moderate-high

Inaccessibility to fire-fighting vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Cut down any blackberries within 20 feet of the trail. Scatter any dead, down medium-sized fuels (2-5 inches in diameter).

118th Court Access Trail Assessment:

Description: The access trail from the end of 118th court to the main loop trail is roughly 150 yards long. Most of the trail is flanked by tall, dense grass with scattered Douglas fir ladder fuels which has created an explosive fire potential.

Fire Hazard Ratings:

Fuels: Ground fuels- Small-sized fuels: High; Medium fuels: Moderate; Large fuels: Low

Ladder fuels: High

Aerial fuels: Moderate

Overall fuel rating: High

Slope rating: Low-moderate

Aspect rating: High

OVERALL FIRE HAZARD RATING: HIGH

Fire Risk Rating: Potential for human-caused ignition: Moderate-high

Inaccessibility to fire-fighting vehicles: High

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommended treatment: Mow the grass at least twice each summer; remove Douglas fir ladder fuel limbs to ten feet above ground level, remove heavy pockets of fir and maple debris from winter storms.

Solomon Court access trail assessment:

Description: This narrow access trail drops down from Solomon Court on a steep, east facing slope to the main (Studebaker) trail. There is a continuous bed of blackberries and medium-sized dead fuels in dense, old undergrowth along with pockets of storm debris. There is also at least one large pile of debris near the trail that has been a debris dumping ground for a nearby house.

Fire Hazard Ratings;

Fuels:

Ground fuels: Small-sized fuels: Moderate; Medium-sized fuels: High; Large-sized fuels: Moderate-high.

Ladder fuels: Moderate

Aerial fuels: Moderate

Overall fuels rating: Moderate-high

Slope rating: High

Aspect rating: Moderate-high (east facing)

OVERALL FIRE HAZARD RATING: MODERATE TO HIGH

Fire Risk Ratings:

Potential for human-caused ignition: High

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Moderate-high

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE TO HIGH

Recommendation: Remove dead medium-sized fuels and all blackberries within 20 feet of the uphill side of the access trail from Solomon Court trailhead to main trail loop. This is a short-term fix to temporarily mitigate the existing hazard and risk. Also, remove the large pile of debris next to the trail that was illegally dumped by the house(s) above the trail.

Happy Valley Veterans Memorial Greenspace and Trail

Ownership/responsibility: City of Happy Valley

Date of field assessment: 1/22/22

Description: The approximately two-acre greenspace is a flat, wide creek corridor bookended by Misty Drive on the northwest end and 162nd Avenue on the southeast end. Overstory is dominated by young, dense 15-year-old Douglas fir but also has ash, maple, cascara, willow, and alder. Understory is dominated by blackberries, dense in some areas, but also has a variety of scattered native, fire-resistant shrubs. A popular trail follows the creek.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate/high (blackberries and dead Douglas fir limbs); Medium fuels: Moderate; Large fuels: Low

Ladder fuels: High

Aerial fuels: High (Douglas fir)

Overall fuels rating: High

Aspect Rating: Moderate

Slope Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused ignition: High

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Moderate

Proximity to homes/businesses: High

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Cut down blackberries and compact for faster decomposition. Thin Douglas firs to a six-foot spacing and limb up remaining Douglas firs up to eight feet above ground. Remove cut trees and limbs from the site or chip and leave chips on site.

Happy Valley Village (HV Morningside) Greenspace

Ownership/responsibility: Happy Valley Village HOA

Date of field assessment: 1/6/22

Description: There is a steep, wedge-shaped, mowed greenspace with scattered young trees along 157th Ave starting just north of Sunnyside Road and a WES site along the north side of Sunnyside Road just west of 157th Ave. The assessment does not include the WES site.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium-sized fuels: Low; Large-sized fuels: Low

Ladder fuels: Low/moderate

Aerial fuels: Low

Overall fuels rating: Low

Slope rating: High

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Rating:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Keep the grass mowed. Young Douglas firs need no limbing.

Happy Valley Wetlands Park and Trail

Ownership/responsibility: City of Happy Valley

Field Assessment Date: 9/8/21

Description: Happy Valley Wetlands Park is a flat natural area with a heavily used one-mile-long trail running through it. It's adjacent to the popular, highly developed Happy Valley City Park. During the winter and spring most of the Wetlands Park is saturated and swampy but as summer progresses it dries out except for a couple ponds and a creek that is reduced to a trickle. The east half of the park is a grassy meadow with cattails, sedges, spirea with scattered young ash, cottonwood, hawthorn, willow. The main paved trail follows along the south boundary but there are a few unofficial trails scattered through the grass. The west half has a raised boardwalk trail through dense red dogwood, hawthorn, Indian plum, wild rose, service berry, young willow with scattered mature Douglas fir, cottonwood, and maple. Competing vegetation and debris left by trail clearing has created a lot of dead, flammable material throughout the site. Fire vehicle access to the boardwalk is not possible.

Fire Hazard Rating: Fuels:

Ground fuels - Small-sized fuels: High; Medium fuels: Moderate-high; Large fuels: Low-moderate.

Ladder fuels: Low-moderate (west end near HV City Park)

Aerial fuels: Low

Overall fuel rating: Moderate-high

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE-HIGH

Fire Risk Rating:

Potential for human-caused ignition: High

Inaccessibility to fire-fighting vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommendation: For the east half of the site (grassy area): Mow breaks in the grass (where feasible) roughly every 50 feet with the breaks running north-south. For aesthetics, breaks shouldn't be in straight lines, rather they should be somewhat meandering (Be creative). North-south breaks are to counter the typical hazardous summer winds that are usually either from the west or the east. For the west half (boardwalk area): Remove all dead fuels from within 20 feet of both sides of the boardwalk. This includes dead standing fuels, trail clearing debris and storm debris.

Hidden Falls Nature Park and Trail

Ownership: City of Happy Valley

Date of field assessment: 8/6/21

Description: Hidden Falls Park is a trail that accesses a portion of Rock Creek canyon. There are two trailheads, one on SE Nightingale Ave and the other at the north end of SE 162nd. Because the trail is also a utility access road it is paved and wide enough for fire vehicles to use. The Park area is bisected by Rock Creek which flows NE to SW. Slopes on either side of the creek are steep. The slope west of Rock Creek faces southeast and the slope east of Rock Creek faces northwest. Most of the area is dominated by a mixed canopy of old growth Douglas Fir and Western red cedar and younger big leaf maple and cottonwood. A portion of the slope below and northwest of the 162nd where it was cleared for utility access is mostly grass although native planted shrubs are scattered throughout.

Fire Hazard Ratings:

Fuels: Ground fuels: Small fuels: low in the forested area; high in the grassy area. Medium fuels: moderate in forested area; low in the grassy area. Large fuels: moderate in the forested area; low in the grassy area.

Ladder fuels: moderate

Aerial fuels: moderate

Overall fuel rating: moderate

Slope rating: high

Aspect rating: moderate

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: moderate

Inaccessibility to fire-fighting vehicles: low

Potential for rapid fire spread: moderate

Proximity to homes: high

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE (HIGH FOR THE GRASS SLOPE)

Recommendation: Even though the overall rating is moderate, the grassy area on the east side of the site warrants mitigation since it's a steep, west facing slope with homes being constructed directly above. Grass should be cut at least twice during the summer months. For the forested portion of the trail: remove or chip dead, medium-sized fuels (2-5 inches in diameter) within 20 feet of the trail.

Hood View Park

Date of field assessment: 8/6/21

Ownership/responsibility: North Clackamas Parks and Recreation

Description: Hood View Park is mostly a sports complex consisting of four ballparks and a community center but there are several acres of undeveloped space on the north end of the property which is what this assessment addresses. The space is mostly grass with blackberry patches with a gravel access road through it and well used informal trails. The site is fairly flat with a couple of mild draws that harbor most of the blackberries. An area outside the park that is a serious fire hazard threat will be addressed in the recommendation.

Fire Hazard Ratings:

Fuels:

Ground fuels: Small fuels: High; Medium fuels: Low; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: Moderate

Slope rating: Low-moderate

Aspect rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire-fighting vehicles: Low

Potential for rapid fire spread: Moderate

Proximity to homes: Low

OVERALL FIRE RISK RATING: MODERATED

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: As long as this area remains undeveloped, the blackberry patches will continue to grow older and larger, which will increase the hazard every year. While they are not a significant threat yet they will be in a few years and along with the large area of grass will become a high hazard situation with potential for rapid fire spread. An area of serious concern though, that is not part of Hood View Park is along the north and east boundaries where a large abandoned private Christmas tree farm with very dense 30-year-old firs mixes with the blackberries and grass just inside the park. The combination makes for a very volatile fire hazard. Recommend mowing a 15-foot fire break along the

boundary. wherever the tree farm meets the park to create separation between the fine fuels (grass and blackberries) and the crown fire hazard from the dense, decadent fir stand.

Jackson Hills #4 Greenspace

Ownership/responsibility: Jackson Hills #4 HOA

Date of field assessment: 2/14/22

Description: The greenspace is along a branch of Mitchell Creek, in the SE corner of the HOA. A trail follows the creek from the end of 152nd Ave. southwest to Spy Glass Drive. There is also a WES enclosure next to the trail opposite the creek. Although most of the area is forested with a canopy of mature Douglas fir and cedar (along the creek), there are two steep grassy, south facing slopes above the trail. Under the canopy the understory varies between heavy blackberries where the canopy is open and sword fern where the canopy is more closed.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High on the grass slopes and moderate in the blackberries; Medium fuels: Moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: High (mature Douglas fir and red cedar)

Overall fuels rating: Moderate

Slope Rating: Moderate/high

Aspect Rating: High north of Mitchell Cr. and low south of Mitchell Cr.

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate/high (along the popular trail)

Inaccessibility to fire vehicles: Moderate/high

Potential for rapid fire spread: Moderate/high (especially on the grassy slopes)

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Mow the grassy slopes above the trail by June. Cut the blackberries down within 20 feet of the trail.

Jackson Hills HOA and Trail

Ownership/responsibility: Jackson Hills HOA

Date of field assessment: 7/25/21

Description: This trail is about ½ miles long and is split between two greenspaces that are linked by Lopez Avenue. Trail begins at 145th and Denali at a small wetland area. The trail follows the south boundary of the wetland to Lopez Ave. Lopez Ave. becomes the trail until Spyglass Dr. where it enters a forested greenspace located between Spyglass and Nicholas Dr. The trail ends at Nicholas Dr. There will be two assessments; one for the wetland and one for the forested greenspace.

Wetland site assessment:

Description: This is a seasonal wetland with vegetation common in wetland areas: Cattails, red dogwood, spirea, alder, willow, ash. There are some scattered young Douglas fir and grass.

Fire Hazard Ratings: Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: Low; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: Low

Slope rating: Low

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings: Potential for human-caused fires: Moderate-high

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Cut down blackberries along Jackson Hills Dr. and limb the young Douglas firs five feet above the ground. Blackberry canes may be left on site but the fir limbs should be scattered or removed from the site. As the wetland species become denser there may be some future fuels created by die-off from competition.

Forested greenspace site assessment:

Description: This portion of the site is bordered on the west and north by Spyglass Drive, on the east by Nicholas Drive and on the south by a forested Metro natural (undeveloped) area. It is a mild to moderate north to northwest facing slope. The mostly closed canopy is mature Douglas fir and big leaf maple with an understory of fire-resistant filberts, hawthorn, cherry, and young big leaf maple. Ground vegetation is mostly sword fern.

Fire Hazard Ratings: Fuels:

Ground fuels: Small sized fuels: Low; Medium sized fuels: Low; Large sized fuels: Low

Ladder fuels: Low

Aerial fuels: Moderate

Overall fuel rating: Low

Aspect rating: Low

Slope rating: Moderate

OVERALL FIRE HAZARD RATING: LOW-MODERATE

Fire Risk Ratings: Potential for human-caused fires: Moderate

Inaccessibility to fire vehicles: Moderate-high

Potential for rapid fire spread: Low-moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

COMBINED OVERALL FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: No treatment necessary at this time. The closed canopy and generally north slope have resulted in sparse accumulation of undergrowth and ladder fuels. Winter storm damage is minimal.

Kensington Bluff HOA Greenspace

Ownership/Responsibility: Kensington Bluff HOA

Date of field assessment: 12/3/21

Description: This large HOA is situated on a long, very steep SW facing slope. There are two assessments for this HOA because there are two different fuel situations. One area, in the NW corner of the HOA, is a combination of forest and dense brush with no trail access that runs up into identical conditions in the SW corner of Sunnyside Highland HOA (The assessment for this portion of Sunnyside HOA will match the assessment for the NW corner of Kensington HOA). The other area spans a large part of the HOA: steep grassy strips between switchback streets and homes with scattered young fir. A steep, paved stair and sidewalk trail (part of The Stairs Trail) follows along the east boundary of the HOA.

Assessment #1: Grassy strips and The Stairs Trail:

Fire Hazard Rating:

Fuels:

Ground fuels- Small-sized fuels: Moderate/high; Medium-sized fuels: Low/moderate; Large-sized fuels: Low

Ladder fuels: Moderate (scattered fir)

Aerial fuels: Moderate (scattered fir)

Overall fuels rating: Moderate

Slope rating: High

Aspect rating: High

OVERALL FIRE HAZARD RATING: MODERATE-HIGH

Fire Risk Rating:

Potential for human-caused fire ignition: High

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE-HIGH

Recommendation: The extreme steepness and SW aspect of this site make it a high hazard/risk situation. Grass and berries along the stair trail should be cut annually by June. Grass in the steep strips between streets and homes should be mowed, especially around the isolated fir trees which are torching risks. Firs should be limbed up 6 feet and limbs removed from the site.

Assessment #2: NW corner of HOA:

Fire Hazard Rating:

Fuels:

Ground fuels- Small-sized fuels: Moderate/high; Medium-sized fuels: Moderate/high; Large-sized fuels: Low

Ladder fuels: Moderate

Aerial fuels: Moderate/high

Overall fuels rating: Moderate/high

Slope Rating: High

Aspect Rating: High

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommendation: Cut down blackberries and leave in place. Cut down and pile all dead medium-sized fuels. Limb all Douglas fir branches to a height of 10 feet and pile tightly with dead fuels. Piles may be burned or left to decompose.

Lazy Hawk Ranch HOA Greenspace and Mt. Gate Trail

Description: The Mt. Gate Trail Assessment covers almost all of the Lazy Hawk Ranch greenspace. There is a mowed and landscaped lawn along the northwest boundary of Spring Mountain Elementary School that's technically part of the Lazy Hawk HOA greenspace but it doesn't warrant an assessment. As a result, there is no assessment, per se, for this HOA.

Lincoln Heights Trail

Ownership/responsibility: Lincoln Heights HOA

Date of field assessment: 9/24/21

Description: Lincoln Heights Trail is a 1-mile-long neighborhood trail situated mostly along a heavily shaded, narrow, fairly steep draw with a seasonal creek (Veterans Creek) running through it. The overstory is mostly a closed canopy of mixed-age bigleaf maple with scattered Douglas fir and cedar. The understory consists of salmonberry, blackberry, vine maple, ninebark, filbert, cascara, and elderberry. The south end of the trail has dense English ivy on the ground and growing up trees and a several holly trees. The trail crosses streets several times. Due to the steepness, there are several scattered flights of stairs throughout the site.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium fuels: Low-moderate; Large fuels:

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low

Overall slope rating: Moderate

Overall aspect rating: Low-moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings: Potential for human-caused fires: Moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW-MODERATE

Recommendations: Since the site is heavily shaded with low fuel-loading and fire-resistant understory and overstory, not much treatment is necessary at this time except to cut down the blackberries before they become a hazard. The cut blackberries canes may be left on site.

Madison Heights HOA Greenspace

Ownership/responsibility: Madison Heights HOA

Date of field assessment: 11/26/2021

Description: There are two greenspaces within this HOA. One is a small, narrow piece on the west boundary (part of a neighborhood access trail to Happy Valley Nature Park) which is not assessed. The other greenspace is a wedge-shaped piece that's in a draw and is adjacent to a seasonal creek in the SE corner of the HOA. This is a mostly forested area with some mature Douglas fir trees and a row of 30-foot-tall assorted evergreens along a fence line. Dense blackberry patches are mixed in with the evergreens. There is a gravel maintenance driveway along the south boundary of the HOA that accesses the greenspace.

Fire Hazard Ratings:

Fuels:

Ground fuels: Small-sized fuels: Moderate-high (blackberries); Medium-sized fuels: Moderate; Large-sized fuels: Low

Ladder fuels: Moderate-high

Aerial fuels: Moderate-high

Overall fuels rating: Moderate-high

Slope rating: Moderate

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: MODERATE (HIGH IN BLACKBERRIES)

Fire Risk Ratings:

Potential for human-caused fires: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE-HIGH

COMBINED OVERALL FIRE HAZARD AND FIRE RISK RATING: MODERATE-HIGH

Recommendation: Cut all blackberries and compact for quicker decomposition. Limb all evergreens up 10 feet above ground level. Remove limbs from the greenspace or chip in place.

Monterey Estates development was assessed as part of Eagle Landing Residential HOA Greenspace Assessment.

Monterra HOA Greenspace

Ownership/responsibility: Monterra HOA

Date of field assessment: 11/29/21

Description: The greenspace at Monterra HOA is a small, mostly inaccessible rectangular strip along the SE corner of the HOA boundary and is completely surrounded by homes. There are a few mature cottonwoods in the strip but mostly the site is dense, fire-resistant hawthorn and wild rose. There are some pockets of blackberries. The north end of the strip is a fenced WES site. Residents have pulled back brush from the fences along the west boundary of the greenspace and scattered it.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low/moderate; Medium fuels: Low/moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused fire ignition: Low

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Cut blackberries. Any brush, etc. that is cut along fences should be piled tightly for quicker decomposition.

Mt. Gate Trail

Owner or responsible HOA: Lazy Hawk Ranch HOA and Deerfield Park 5 HOAs

Date of field assessment: 9/14/21

Description: Mt. Gate Trail and greenspace is between Mt. Gate Road and Masa Lane with homes above and below. There are areas of heavy blackberry mixed with dense undergrowth containing dead/dying material. The winter ice storm dropped several cherry trees and other debris which was cleared off the trail but is piled along both sides. There are dense pockets of 20-year-old Douglas fir, plus cherry, filberts, and young maple. Overstory is scattered mature Douglas fir. West facing moderate-steep slope.

Fire Hazard Ratings:

Fuels:

Ground fuels: Small fuels: Moderate-high (mostly blackberries); Medium fuels: High; Large fuels: Moderate (in pockets)

Ladder fuels: Moderate

Aerial fuels: Moderate-high (young Douglas fir pockets)

Overall fuel rating: Moderate-high

Slope rating: Moderate-high

Aspect rating: High

OVERALL HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings: Potential for human-caused ignition: Moderate

Inaccessibility to fire-fighting vehicles: High

Potential for rapid fire spread: Moderate/high

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Mitigation recommendation: Remove piled debris from along trail; cut and remove dense pockets of dead/dying undergrowth; cut and remove dense pockets of blackberries. Cut and remove ladder branches from young Douglas fir to 10 feet above ground.

Mt. Scott Creek Trail

Ownership/responsibility: Varies. The trail is responsibility of the City of Happy Valley but it runs through Southern Lites Park (City of Happy Valley) and several HOAs: Marquam Heights, Scott Creek Estates, Stone Bridge, Scott Creek Estates, and Wexford.

Date of field assessment: 7/18/21

Description: Mt. Scott Creek Trail is about 1.8 miles long and loosely (at times) follows Scott Creek but is sometimes diverted to city streets. It roughly starts at Southern Lites Park and ends at King Road. The assessment only covers the portions of the trail that follow the greenspace next to Mt. Scott Creek. Two assessments were made: one for the trail portion between Southern Lites Park and 129th Ave, (Marquam Heights HOA) because it has a unique high fire hazard situation) formally called Scott Creek Trail Easement, and the other for the rest of the greenspace portion of the trail.

Scott Creek Trail Easement (Marquam Heights HOA): This portion of the trail runs through a large patch of very dense tall grass and annual vegetation, with homes at the top of a moderate to steep south facing slope. The homes are separated from the grass by highly flammable wooden fencing. Southern Lites Park is the western boundary of this area.

Ratings for Marquam Heights portion of trail:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High; Medium fuels: Low-moderate; Large fuels: Low

Ladder fuels: Low to moderate.

Aerial fuels: Low

Overall Fuels Rating: High

Slope Rating: Moderate-high

Aspect Rating: High

OVERALL FIRE HAZARD RATING: HIGH

Fire Risk Ratings: Potential for human-caused fire ignition: Moderate-high.

Inaccessibility to fire fighting vehicles: Moderate-high

Potential for rapid fire spread: High

Proximity to home: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND RISK RATING: HIGH

Mitigation recommendation: Mow the grass/weeds in June. Remove debris piled along fences.

Assessment for the rest of Mt. Scott Creek Trail (Greenspace portion of the trail only): Because of the fragmented nature of the trail portions, fire hazard varies but generally not rated as a high hazard. Tree canopies are fairly closed and consist of a mix of Douglas fir, cedar, maple, cherry, cottonwood, alder. There are some pockets of winter storm debris within the Scott Creek Estates HOA that will need treatment. Undergrowth shrubs are fairly dense but are mostly fire resistant: vine maple, cherry, blackberry, ocean spray, filbert.

Ratings for the rest of Mt. Scott Creek Trail:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low-moderate; Medium fuels: Low-moderate; Large fuels: Low-moderate

Ladder fuels: Low

Aerial fuels: Moderate

Overall Fuels Rating: Moderate

Slope Rating: Moderate

Aspect Rating: Moderate

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings: Potential for human-caused ignition: Moderate-high.

Inaccessibility to fire-fighting vehicles: Moderate

Potential for rapid fire spread: Low-moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: The trail portion that runs from Scott Cr. Lane south to Adoline Avenue (Scott Creek Estates HOA) has pockets of heavy winter storm debris. The pockets that are comprised of cedar debris need attention. Remove the medium sized cedar limbs (2-5 inches in diameter) from within 20 feet of the trail. In some cases, this will require cutting limbs off of fallen trees. Limbs may be scattered beyond the 20-foot zone where feasible or should be removed. The limbed trees and tree tops may stay in place without removing them.

Mt. Talbert Nature Park

Ownership: Metro

Date of field assessment: 8/19/21

Acres: 230

Description: Mt. Talbert Nature Park is a four-mile network of hiking trails with six trailheads circling an extinct cinder cone. The summit is roughly in the middle of the park. Since the park is so large and since the south facing side has different fire issues than the north side, there will be two different assessments, one for the south aspect and one for the north aspect.

South Aspect Description: The south half of Talbert has most of the trail mileage and therefore receives the most use. The canopy is fairly open and mostly consists of oak, maple, Douglas fir and coupled with the moderately steep south facing slope the sun dries out fuels faster and dead vegetation takes longer to decompose, making it a fire hazard for a longer period than the north slope. Understory vegetation is composed of filbert, vine maple, ocean spray. Ground vegetation is mostly Oregon Grape, poison oak, snowberry, salal, and sword fern. Heavy concentrations of debris are on the ground because of winter ice and winds. There are three dryland meadows in the area; one at the main trailhead parking on Mather Road, one near the Winningham Court trailhead, and one on the Cedar Park Drive access trail.

South Aspect Area Ratings:

Fire Hazard Ratings:

Fuels: Ground fuels – Small-sized fuels: High; Medium fuels: High; Large fuels: Moderate

Ladder fuels: Low to moderate

Aerial fuels: Moderate

Overall fuel rating: High

Slope rating: Moderate to high

Aspect rating: High

OVERALL FIRE HAZARD RATING: HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: High

Inaccessibility to fire-fighting vehicles: High

Potential for rapid fire spread: High

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: HIGH

OVERALL SOUTH TALBERT COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommendation: Remove medium-sized fuels within 20 feet of all south aspect trails. Fuels may be pulled back and scattered or piled and burned. Chipping is an option where access for a chipper is acceptable (Winningham Ct. Trailhead, for example). Keep the meadow area next to the main parking lot at Mather Road mowed within 10 feet of the trails until native plantings are established.

North Aspect Description: The north portion of Mt. Talbert Park, while just as steep as parts of the south portion, faces mostly north and, along with a more closed canopy doesn't get the drying conditions that the south does. Canopy composition is much like the south portion except there is little oak. Ground vegetation composition is similar to the south but is denser than the south.

North Aspect Area Ratings:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low-moderate; Medium fuels: Moderate; Large fuels: Moderate

Ladder fuels: Low-moderate

Aerial fuels: Low

Overall fuel rating: Moderate

Slope rating: Moderate-high

Aspect rating: Low-moderate

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire-fighting vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL NORTH TALBERT COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Cut down blackberries within 20 feet of the trail.

ODF Grant Proposal Description

The City of Happy Valley's Fire Hazard Reduction Project aims to reduce the fuel loading on twelve high priority sites within city limits. Eight of the sites include popular public parks and trails and four are within home owners' association (HOA) greenspaces. The sites are among 34 (to date) that have been assessed for their potential to trigger destructive wildfires. The 12 identified sites rated out as "high" priority using a system of fire hazard and risk rating factors that consider ten different components including fuel loading and arrangement, slope steepness and aspect, public use, accessibility to fire-fighting vehicles, and proximity to homes.

Challenges

Local public awareness and interest of fire hazard and risk in Happy Valley has been elevated lately due to climate change and the devastating western Oregon wildfires of 2020. Unfortunately, mostly because of this lack of awareness before 2020, fuel buildup has gotten to dangerous levels in some areas that are interspersed with dense housing. And, in February of 2021, a major ice/snow event instantly added tons of additional fuels in most forested areas within the city. The sites included in this proposal all have unique situations to be mitigated but all are in or near neighborhoods and most are within popular, high-use (and therefore high risk) areas.

High-Rated Project Areas for ODF Grant

Activities: The 12 high priority projects will each be addressed separately and will include the project name, description (including approximate size in area (acres) or distance (trails)), and the recommended treatment. The first eight are public parks and/or trails (some of which are within HOAs), and the remaining four are HOA greenspaces generally without public access. They appear in alphabetical order.

Public Parks/Trails:

1. Deerfield Woods Trail.

Description: This ¼ mile-long loop trail is located in dense, impenetrable brush and 20–30-year-old Douglas fir with some older mature white oak and big leaf maple. The brush consists of over-aged filbert, hawthorn, blackberries, poison oak, cherry and maple. It's situated on a steep southwest facing slope with homes above. Treatment: Remove all dead brush and live/dead blackberries within 20 feet of either side of the trail. Remove all ladder fuels from Douglas fir (limbs) up to 10 feet above the ground. Debris should be either chipped, piled tightly (to encourage faster decomposition), or removed from the project area.

2. Happy Valley Nature Park Access Trails.

Description: This park is a forested greenspace with a loop trail accessed by several neighborhood feeder trails. Two of these trails, each approximately 1/5th of a mile long, are high priority for treatment: The Solomon Ct. access trail has dense accumulations of dead fuels along the upper side of the steep trail with homes above. The 118th Ct. access trail has dense, tall grass mixed with storm debris from the 2021 ice/snow storm and mature Douglas fir with ladder fuels (limbs) reaching down to the grass. Homes are located above and below the trail. Treatment: For Solomon Ct. access trail: Remove, pile, or chip all dead fuels and blackberries within 20 feet of the upper side of the trail.

For 118th Ct. access trail: Cut the grass and any dead brush, preferably in June. Cut ladder fuel limbs from Douglas firs up to 10 feet above ground level and chip or remove from the site along with medium-sized (1-5 inches in diameter) storm debris. Larger debris may be left untreated.

3. Happy Valley Wetlands Park and Trail

Description: There are two critical areas needing attention in this very popular greenspace and trail. The first area is a meadow with about three acres of grass and assorted brush pockets and dense cattails with a trail through it. Although it's a wetland, in the summer it dries out and along with its exposure to east winds it creates a high-hazard situation. The other is a ¼ mile-long elevated boardwalk trail farther west that's attached to the meadow and winds through dense brush with a large accumulation of dead fuel. Because of the raised boardwalk, initial attack access by fire vehicles is not possible.

Treatment for the meadow: Mow creatively shaped fire breaks as soon as the meadow dries out to break up the continuity of the dense, highly flammable grass. Where feasible, mow a firebreak around cattail patches.

Treatment for the boardwalk trail: Cut and remove dead fuel and thin live brush within 20 feet either side of the trail. Debris must be hauled away.

4. Hidden Falls Nature Park and Trail.

Description: A one-acre steep grassy slope with encroaching blackberries is high priority for treatment. This area faces SW with homes above and a popular trail through it.

Treatment: Mow the grass and cut the blackberries in June.

5. Mt. Gate Trail.

Description: This is a 1/8th mile, mostly forested trail with heavy ice storm debris, dense blackberry patches, dead brush, and 20-year-old Douglas fir with ladder fuels (limbs) reaching to the ground.

Treatment: Cut Douglas fir limbs off to ten feet above ground; cut dead brush that's within 20 feet of the trail; cut down all blackberries to ground level; cut up all storm debris within 20 feet of the trail that's smaller than 5 inches in diameter. Remove or tightly pile all cut debris from the site except for blackberry canes.

6. Mt. Scott Creek Trail:

Description: There are two areas along this well-used trail that are rated "high" and require mitigation. The first area is a 1 ½ acre patch of dense, highly flammable grass and weeds above the trail and next to Southern Lites Park. The steep south facing slope leads up to wooden fences and homes. There are pockets of flammable debris near the fences that were dumped by neighbors. The second high priority area on the trail is 1/8th of a mile long from Scott Cr. Lane to Adolide Ave. There are heavy pockets of flammable cedar debris from the Feb. ice/snow event on an east-facing slope leading to homes above.

Treatment: For the 1 ½ acre grass patch: Mow grass and berries by June; remove dumped debris from the site.

For the cedar debris: Remove all medium sized cedar limbs (1-5 inches in diameter) within 20 feet of the trail.

7. Mt. Talbert Nature Park Trail

Description: The portion of this heavily-used trail that rates "high" is approximately 1/3rd of a mile long starting at the main trailhead. This area is on a steep, south-facing slope with heavy sun exposure through a scattered mature Douglas fir and white oak canopy. There is accumulated dead understory fuels and several pockets of storm debris from the Feb. 2020 ice/snow event. Access to the site by fire-fighting vehicles is impossible. Homes surround the park.

Treatment: Pull back all medium-sized fuels (1-5 inches in diameter) within 20 feet of the trail. Fuels may be scattered widely to break up the continuity or piled tightly and either burned or left on site to decompose.

8. Southern Lites Park

Description: The high priority portion of this popular neighborhood park is an undeveloped/unmaintained 1 ½ acre patch between Scott Creek and homes above the park. It's on an exposed south slope with dense grass/weeds and several concentrations of loosely piled debris from past utility work and limbs and tree tops from storms.

Treatment: Mow fire breaks in the grass and remove or pile and burn all medium-sized (1-5 inches in diameter) limbs and tree tops.

Home Owners Association (HOA) Greenspaces

1. Kensington Bluff HOA Greenspace

Description: There are two high priority areas on this very steep, southwest facing slope that have homes above and below. The first area is an inaccessible (to fire vehicles) one acre patch of dense blackberries/brush and scattered Douglas fir with lower limbs (ladder fuel) reaching down into the brush. The second area is along a very steep, exposed stair trail approximately 1/8th mile long with grass/weeds/brush and scattered conifer trees with limbs (ladder fuel) reaching the ground.

Treatment: For the one-acre brush patch: Cut and pile all blackberries, dead brush, and Douglas fir limbs (up to 10 feet above ground level). Piles may or may not require burning.

For the stair trail: Cut grass; limb the Douglas fir branches to 10 feet above ground and totally remove the limbs from the area.

2. Madison Heights HOA Greenspace

Description: The high priority area of concern is a ½ acre patch next to homes that's a mix of dense, decadent blackberries and other brush with young evergreens (fir, cedar, hemlock) and mature Douglas fir with limbs to the ground.

Treatment: Cut all blackberries and dead brush to the ground. Cut limbs from evergreens up to 10 feet above the ground and chip limbs or remove from the site.

3. Red Rose Valley HOA Greenspace

Description: A ½ acre of dense, highly flammable reed canary grass and scattered, loosely piled pockets of cut down medium- and large-sized fuels is the focus of the high rating. The site is in a wetland with a seasonal creek that dries out in the summer. The site is fully exposed to the sun and has several homes nearby.

Treatment: Mow the grass as soon as the site is dry enough. Pile the dead fuels tightly to promote faster decomposition, or remove the medium-sized fuels (2-6 inches diameter) from the site.

4. Westview HOA Greenspace

Description: The high rating for this greenspace is due to a 1/3rd acre stand of dense 15-year-old Douglas fir situated along a sidewalk on a steep west-facing slope with larger, mature Douglas fir above. Ladder fuel from the young firs reach to the ground. Homes are on either side of the area.

Treatment: Cut and remove from the site (or chip in place) fir limbs up to 10 feet above ground and 50 feet up the slope from the sidewalk.

Orchard Ridge HOA Greenspace

Ownership/responsibility: Orchard Ridge HOA

Date of field assessment: 1/7/22

Description: The greenspace winds its way through the HOA along a seasonal stream. The NW border of the greenspace/HOA, where the stream course begins, is shared with Royal Vista HOA and the SE boarder, where the stream exits, the HOA is shared with Stone Bridge HOA. Some parts of this winding greenspace are mowed grass corridors. The stream course is a patchy mix of dense brush, blackberries and loosely piled debris in some areas (which has created scattered, concentrated fire hazards), and is cleaned out and well-maintained in other stretches.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: Moderate (High in debris piles); Large fuels: Moderate

Ladder fuels: Low/moderate

Aerial fuels: Low/moderate

Overall fuel rating: Moderate

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate/high

Potential for rapid fire spread: Low/moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Concentrations of medium-sized (2-5 inches in diameter) dead debris in and next to the stream course should be piled tightly (for quicker decomposition), chipped or hauled out. Larger debris may be left in place. Cut down blackberries and leave in place.

Parkside 1-3 HOA Greenspace

Ownership/Responsibility: Parkside HOA

Date of field assessment: 11/29/21

Description: There is one greenspace area within the Parkside HOA in the SE corner. It's a mostly open, grassy meadow with low shrubs and young ash, alder, cottonwood around the edges. The grass is mostly dense, highly flammable reed canary grass. There is no public access but a utility maintenance driveway runs along the south boundary from the end of 134th east to a small, undeveloped forested portion of Happy Valley City Park. The SE corner of the greenspace abuts this portion.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High; Medium-sized fuels: Low-moderate; Large-sized fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Moderate

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: MODERATE (MOSTLY DUE TO DENSE, FLAMMABLE CANARY GRASS)

Fire Risk Ratings:

Potential for human-caused fire ignition: Low-moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Mow the densest grass accumulations (especially the canary grass) once per year, preferably late spring. Cut down any blackberries. Mow all grass within 10 feet of wooden fences.

Pioneer Highlands Greenspace

Ownership/Responsibility: Pioneer Highlands HOA

Date of field assessment: 10/17/21

Description: Pioneer Highlands HOA consists of five tracts of open space. One is a small developed park/playground; one is a WES retention area; three are undeveloped forested areas. The assessment only addresses those three. All three areas are bisected by steep draws with seasonal streams. The overstory/canopy is a mix of mature Douglas fir and big leaf maple. In some areas the canopy is closed and others it's more open with dense, fire-resistant understory species. The area that parallels Vrandenberg Road (tract D) is heavily shaded. Tracts B and C are a mix of closed and open canopies. Tract B has a short trail that runs above the draw. Tract D has a paved emergency access road from Vrandenberg Road up to homes and two overgrown (and currently undrivable) vehicle accesses. Fire vehicle accessibility is marginal over the three tracts.

Fire Hazard Ratings:

Fuels:

Ground Fuels – Small-sized fuels: Low to moderate

Medium sized fuels: Low to moderate

Large sized fuels: Low

Ladder Fuels: Low

Aerial Fuels: Low to moderate

Overall fuel rating: Low to moderate

Slope rating: Moderate to high

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire-fighting vehicles: Moderate to high

Potential for rapid fire spread: Low

Proximity to homes: Moderate to high

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

WILDFIRE ASSESSMENT

Recommendations: Cut down blackberries and remove or chip dead medium-sized fuels (2-5 inches in diameter) within 20 feet of the chipped trail on tract B. Clear the two obscured dirt vehicle access routes in tract D (coming off of Vrandenberg Rd.) of debris and undergrowth to allow access to four-wheel-drive fire vehicles.

Pleasant Valley Villages #1 HOA Greenspace

Ownership/responsibility: Pleasant Valley Villages #1

Date of field assessment: 3/15/22

Description: The greenspace is a corridor along the east side of Rock Creek starting at the north end where Rock Creek crosses 172nd and running south along the creek down to a point across from the end of Crossroads Avenue. There is a paved trail running through most of the greenspace. Except for the far north point of the site, which is heavy blackberries, the corridor has been planted within the last five years with native trees and shrubs. There are scattered pockets of mature Douglas fir and western red cedar along the creek. The only area that needs attention from a wildfire hazard standpoint is the patch of blackberries at the north point between Rock Creek and 172nd Ave but the whole greenspace is addressed in the assessment.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low but moderate/high in the blackberries; Medium fuels: Moderate; Large fuels: Low/moderate

Ladder fuels: Low

Aerial fuels: Low/moderate

Overall fuels rating: Moderate

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendations: The only area recommended for treatment is the north point of the greenspace where blackberries are densest from where Rock Creek crosses 172nd south to the homes on the north side of Voyageurs Loop. The berries should be cut and compacted.

Rebstock Park (Riparian Area)

Ownership/responsibility: City of Happy Valley

Date of field assessment: 3/2/22

Description: The assessment addresses only the riparian area along the west boundary of the park, not the mowed grass. The seasonal creek that runs through it is a tributary of Scott Creek. Vegetation is dominated by dense willow shrubs and blackberries. There is no overstory (canopy) to speak of.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low/moderate; medium fuels: low/moderate; large fuels: low

Ladder fuels: low

Aerial fuels: low

Overall fuel rating: Low/moderate

Aspect Rating: Low

Slope Rating: Low

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Probability of human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to buildings: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Cut down blackberries and medium-sized (2-5 inches in diameter) dead brush. Blackberry canes may be left in place but out of the stream bed. Dead brush may be scattered or piled tightly but not in the stream bed.

Red Rose Valley 1 HOA Greenspace

Ownership/responsibility: Red Rose Valley 1, 2 HOAs

Date of field assessment: 10/2/21

Description: The greenspace portion of the HOA is a wetland between Oregold Ct. and Tropicana CT. that's attached to Mt. Scott Creek and includes a seasonal stream that runs into Mt. Scott Creek from Mountain Gate Road. It's mostly open meadow with some scattered cottonwood and willow and other wetland brush species. The area dries out in the summer and as the dominant reed canary grass dies back it becomes very flammable. Brush that the residents on the north end of Oregold Ct. have cleared away from their fences have been loosely piled in the greenspace and hinder access and contribute to the fire hazard. Vehicle access to the area is limited.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High; Medium fuels: Moderate: Large fuels: Low/moderate

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: High

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: HIGH (DUE TO REED CANARY GRASS)

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Moderate/high

Potential for rapid fire spread: High

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: As soon the site dries out adequately, the reed canary grass should be cut. The brush debris along the south side of the site (just north of Oregold Ct.) should either be chipped, removed or tightly piled (to facilitate quicker decomposition).

Red Rose Valley 2 HOA Greenspace

Ownership/responsibility: Red Rose Valley 2 HOA

Date of field assessment: 10/2/21 and 1/11/22

Description: There are several greenspaces in this large HOA. There are five closely mowed grass corridors over utility rights-of-way that are not assessed. Two greenspaces, one along a seasonal tributary of Mt. Scott Creek just south of Scott Creek Lane and along Mountain Gate Rd, and another in a forested area in the southeast corner of the HOA, will each have separate assessments.

Mt. Scott Creek tributary description: This flat, narrow corridor (about 300 feet long) follows along a seasonal tributary from Mountain Gate Road west to the west end of Scott Creek Lane. There are scattered mature cottonwood and Douglas fir with several fire-resistant brush species underneath. There are some pockets of dead fuels and blackberries.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium fuels: Low/moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendations: Any dead fuels within the corridor can be scattered to reduce fuel continuity. Any blackberries should be cut to ground level and left to decompose.

Forested area in the southeast corner: Description: This band of forest begins at the junction of Mountain Gate Road and Waterleaf Drive and runs east to the east boundary of the HOA. It is between Evening Star Court to the north and

Windflower Court to the south. It's mostly on a steep, north facing slope and has mature cottonwood, Douglas fir, bitter cherry, bigleaf maple, alder and ash in the canopy and several impenetrable fire-resistant brush species plus heavy pockets of blackberries in the understory. Vehicle access to most of the site is difficult.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: Moderate; Large fuels: Low

Ladder fuels: Low/moderate

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope Rating: High

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Cut blackberries to the ground. Remove limbs from young Douglas firs (less than 20 feet tall) up to 6 feet above ground. Remove limbs from taller Douglas firs up to 10 feet above ground. Create a 20-foot vegetation/fuel break along the north property lines of the homes along Windflower Court. Debris created from the fuel break should be tightly piled (or chipped) for faster decomposition.

Rock Creek Green HOA Greenspace

Ownership/responsibility: Rock Creek Green HOA

Date of field assessment: 3/5/22

Description: This large greenspace is mostly mowed grass (that used to be a golf course and is not part of the assessments), but also includes a forested and sometimes brushy riparian area. The seasonal creek flows through a steep draw before entering Rock Creek. The east end of the riparian area is mostly willow and dense blackberries on a mild slope and transitions to mature Douglas fir, big leaf maple and cedar along a very steep draw that feeds into Rock Creek. Under the closed canopy surrounding the draw the vegetation is comprised of patches of sword fern, English ivy, holly, and Oregon grape. Around the edges are blackberries. There is a trail that roughly follows the draw in some places. There doesn't appear to be much public use of the riparian area. There are two assessments; one addresses the east end of the riparian area that is dominated by brush and blackberries. The other addresses the closed canopy on the west end with mature fir, cedar, maple.

Assessment for brush/blackberry area on the east end of the riparian area:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High (dense blackberries); Medium fuels: Moderate; Large fuels: Moderate

Ladder fuels: Low/Moderate

Aerial fuels: Low/Moderate

Overall fuels rating: Moderate

Slope Rating: Moderate

Aspect Rating: High on the south facing slope of the draw; low on the north facing slope

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Rating:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: Low

OVERALL FIRE RISK RATING: MODERATE

COMBINED OVERALL FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Although blackberries dominate the whole east, brushy riparian area, one part is of particular concern and should be dealt with first. On the north side of the draw there is a portion of extremely dense blackberries above a trail that's just above the creek. The dryer south facing slope, along with the dense berries and the added

human risk of the trail below make for a dangerous situation even though there are no homes directly above. The berries should be cut down and compacted to reduce the chance of rapid fire spread should an ignition occur.

Assessment for the forested area on the west end of the riparian area:

Fire Hazard Rating:

Fuels:

Ground fuels – Small-sized fuels: Low/moderate; Medium fuels: Moderate (in small patches of storm debris); Large fuels: Moderate

Ladder fuels: Low/moderate

Aerial fuels: High

Overall fuel rating: Low/moderate

Aspect Rating: Moderate

Slope Rating: Moderate/High

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/Moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Low/moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Due to the dense canopy cover that reduces the drying effects of the sun and the presence of mostly fire-resistant species on the ground, the only recommendation is to cut down the blackberries on the south boundary of the area where they are closest to the homes off the north end of Rock Creek Court. The cut canes may be left in place.

Royal Vista HOA Greenspaces

Ownership/responsibility: Royal Vista HOA

Date of field assessment: 1/7/22

Description: There are three narrow, horseshoe-shaped greenspace corridors surrounded by homes that are mostly mowed grass and scattered trees. This assessment will not address the mowed areas rather will cover an area (about 1/3rd acre in size) that is shared with Orchard Ridge HOA. The area is along a seasonal stream with an overstory of scattered cottonwood, willow, and Douglas fir. The understory has dense, old accumulations of blackberries and assorted brush species. The site has been used as a yard debris dumping ground for years by surrounding homeowners which, added to the blackberries, has created a dangerous, concentrated fire hazard.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High; Medium-sized fuels: High; Large-sized fuels: Moderate

Ladder fuels: Low/moderate

Aerial fuels: Low/moderate

Overall fuels rating: High

Slope rating: Low

Aspect rating: Low/moderate

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Blackberries should be cut to the ground and may be left in place to decompose. The medium-sized (2-5 inches in diameter) homeowner-dumped and naturally occurring debris along the seasonal stream course should be tightly piled (to facilitate faster decomposition), chipped, or removed from the site.

Sarah Knoll HOA Greenspace

Ownership/responsibility: Sarah Knoll HOA

Date of field assessment: 11/30/21

Description: The flat, ½ acre greenspace next to Mountain Gate Rd. has a seasonal creek along the north boundary. Most of the space is mowed grass with a few scattered young trees and a short woodchip surfaced trail. The creek has a variety of brush species and blackberries.

Fire hazard ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium fuels: Low; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: Low

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire risk ratings:

Potential for human-caused fire: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Cut blackberries along the creek and pull cut vines away from the brush in the creek. Keep the grass mowed.

Scott Creek Estates

This HOA has two greenspaces: Scott Cr. Park (and Mt. Scott Trail) and a lot of Scott Creek Trail. As a result, no assessment for the HOA specifically.

Scott Creek Park and Mt. Scott Trail

Ownership/responsibility: City of Happy Valley (?); Scott Creek Estates HOA

Date of field assessment: 11/5/21

Description: This area consists of a short section of trail (Mt. Scott Trail) and two fenced-off runoff retention ponds (Scott Creek Park). The trail runs south from the junction of William Otty Road and Cougar Place, along Mt. Scott Creek (seasonal) to Cedar Way. The trail is well maintained by a few residents and the City of Happy Valley. There are scattered Douglas firs, cottonwood, big leaf maple, and alder for the open-canopy overstory and a wide variety of mostly native and a few invasive and introduced brush/shrub species.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium fuels: Low-moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low-moderate

Overall fuels rating: Low

Slope rating: Low

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low-moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW-MODERATE

Recommendations: Continue current maintenance work of dead fuel and blackberry removal.

Scouters Meadow HOA Greenspace

Ownership/responsibility: Scouters Meadow HOA

Date of field assessment: 3/4/22

Description: The assessed greenspace is on the west end of the HOA and is connected to the greenspace of Stella Heights. There is a WES site on the east end of the HOA along 172nd that is not assessed. The assessed site is fairly open with planted native shrubs on most of the area but with a strip of natural filberts, maple, and willow running east/west along the north boundary with the Stella Heights greenspace. Although the site is fairly open, the grass appears to have been grazed down to the ground. There is not much of a canopy to speak of except for a couple mature Douglas firs. There is no public access.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium fuels: Low/Moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low

Slope rating: Moderate

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Probability of human-caused ignition: Low

Inaccessibility to fire vehicles: Low

Probability of rapid fire spread: Low

Proximity to home: Moderate

OVERALL FIRE RISK RATING: LOW

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendations: As long as the grass is kept grazed, no mitigation is recommended.

Scouters Mountain #1 HOA Greenspaces

Ownership/responsibility: Scouters Mountain HOA (or the developer)

Date of assessment: 2/14/22, 3/16/22

Description: There are several greenspaces here but there is just one assessment: for the forested areas that weren't disturbed by development. The other areas that are not assessed were cleared of most vegetation for the development and have been planted recently with a variety of native trees and shrubs. There is also a large WES enclosure along the paved trail just west of the PGE powerline. The undisturbed forested areas cover 4-5 acres and are mainly situated in two steep draws; one running north/south between Scouter's Mt. Road and Vrandenburg Road, and the other along the south boundary of the HOA/development. Both areas have patches of blackberries mixed in with a heavy accumulation of standing and downed alder snags. The overstory is mostly large, mature Douglas fir with some bigleaf maple and surviving mature alder. The west/east running paved trail, which is a part of the Scouter's Mt. Regional Trail, cuts through the forested areas but fencing and brush discourages users from entering them.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: Moderate/high; Large fuels: Moderate/high

Ladder fuels: Low/moderate

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope Rating: Moderate/high

Aspect Rating: Varies widely but because of heavy shading on the ground by mature Douglas fir and maple aspect doesn't play much of a role here and therefore is not rated.

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low/moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Because the assessment area is mostly inaccessible to the public except for a fenced trail, treatment of fuels can be limited to the trail corridor and to corridors behind homes adjacent to the forested greenspace. Within 20 feet either side of the trail and 20 feet from fences behind homes facing the forested area: Create a fire break/buffer

by cutting down blackberries and by scattering any medium-sized fuels (2-6 inches in diameter) to break up fuel continuity.

Scouters Mountain Nature Park

Ownership/responsibility: Metro

Date of field assessment: 7/8/21

Description: Scouters Mountain Nature Park is centered on and around the top of a forested hill with a single road access to the top and a loop trail around the sides. There is a paved trail along the south and west boundary of the park. The portion of the loop trail on the west slope is an old maintenance road to Deardorff Cemetery and is drivable only to small fire-fighting engines. Almost all of the site south of the summit is a fairly closed canopy of mature Douglas fir and Bigleaf maple which heavily shades the ground. The understory in this area is mostly filbert, vine maple, and young cedar. Ground vegetation is mostly sword fern. There are steep south and west facing slopes. Northeast of the summit the canopy is more open with scattered Douglas fir, alder, maple and cottonwood with a fairly dense understory of filbert, vine maple, elderberry, alder and Armenian blackberry with some open spaces containing ground vegetation of sword fern and trailing blackberries. There are small pockets of downed trees in the northeast portion and the southeast portion.

Fire Hazard Ratings:

Fuels: Ground fuels – Small-sized fuels: Light/Moderate; Medium-sized fuels: Moderate; Large fuels: Moderate (in pockets of blowdown).

Ladder fuels: Light to moderate

Aerial fuels: Moderate/high

Overall fuel rating: Moderate

Slope rating: Moderate to high

Aspect rating: High

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings: Potential for human-caused ignitions: Moderate to high

Inaccessibility to fire-fighting vehicles: Moderate to high

Potential for rapid fire spread: Moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: No treatment necessary at this time. However, the open areas described above in the northeast where there are dense accumulations of young undergrowth will eventually become a higher fire hazard as competition begins to kill off vegetation and creates more available fuel. There is a small patch (two acres or so) of dense 30–40-year-old assorted evergreens and deciduous trees planted by the Boy Scouts that, on its own, would be assessed as a

high hazard and medium risk. Since it is surrounded by relatively fire-resistant vegetation and is largely inaccessible to the public it does not warrant treatment unless public access to it is improved.

Scouters Mountain Elementary School

Ownership: North Clackamas School District

Date of field assessment: 3/9/22

Description: The greenspace area is about 2 acres in size and is just west of the school. It was originally an open field but is now a mix of dense blackberries, tall grass and a variety of young deciduous trees and young scattered conifers. There are a few mature Douglas firs. There are no trails and no road access except for the school parking lot. There are homes along the north boundary of the site; private forest land along the west boundary, and an open field awaiting development along the south boundary. The site is very vulnerable to the dry fall east winds.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High (blackberries and grass); Medium fuels: Low/moderate; Large fuels: Low

Ladder fuels: Moderate

Aerial fuels: Low/Moderate

Overall fuel rating: Moderate/high

Aspect rating: Moderate

Slope rating: Low

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Low

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendation: At a minimum, create a 20-foot-wide fuel break along the north boundary where the homes are, and along the west boundary where forest lands are. The break should be mowed/cleared of all blackberries and grass. Any conifers within the 20-foot fuel break should be limbed up 10 feet above ground and the branches scattered outside the fuel break.

Shadow Ridge HOA Greenspace (not counting Shadow Ridge Trail which has its own assessment)

Ownership/responsibility: Shadow Ridge HOA

Date of field assessment: 1/28/22

Description: The greenspace (not including the Shadow Ridge Trail) is between the turnaround at the end of Taryn Ct. and Shadow Ridge Trail (north of the creek). There is a WES site just east of Taryn Ct. The 2–3-acre area had been dominated by dense blackberries and scattered cherry, holly, and hawthorn but recently the HOA has cut down and compacted almost all of the blackberries and most of the other invasive species (hawthorn, holly). As a result, even though (in the short-term) the small-sized fuel loading hazard is fairly high because of the dead blackberries and brush, the long-term hazard prognosis is very good as long as the blackberry regrowth is kept in check. A small, mowed grassy area (less than ½ acre) is across 147th Ave. between Aldridge Road and 147th.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High (dead blackberries and other dead cut brush); Medium fuels: Moderate; Large fuels: Low/moderate

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: Moderate

Slope Rating: Moderate

Aspect Rating: High

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Although the fire hazard is fairly high for the short term (1-2 years) because of the dead blackberries and brush, no further treatment is necessary at this time. As the blackberries grow back, however, they should be cut down every couple years to keep future fire hazard low.

Shadow Ridge Trail

Date of field assessment: 8/12/21 and 1/28/22

Ownership/Responsibility: Bella Casa HOA and Shadow Ridge HOA

Description: Shadow Ridge Trail is a loop that officially begins at Happy Valley Town Center and proceeds north through various neighborhoods before dropping into a seasonal creek at the Palermo Ave. trailhead. The trail at this point follows along the south side of a forested draw that runs from Palermo to 147th Avenue. The assessment only addresses this forested portion. The seasonal creek is the north boundary for Bella Casa and Shadow Ridge HOAs. The canopy is mostly closed and is dominated by fire resistant big leaf maple with scattered Douglas fir, cherry, cottonwood. Understory vegetation is a generally dense mix of fire-resistant filbert, vine maple, hawthorn, salmonberry, alder along with some scattered flammable young western red cedar. The trail is situated along a moderately steep north aspect slope. A few portions of the trail are accessible to brush rigs (small fire-fighting vehicles). Several short neighborhood trails access the main trail. (Update as of 1/28/22: The portion of the trail maintained by Shadow Ridge HOA has been cleared of fuels)

Fire Hazard Ratings:

Fuels: Ground fuels: Small: Low-moderate; Medium fuels: Low-moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low/moderate

Overall Fuel Rating: Low-moderate

Overall slope rating: Moderate

Overall aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings: Potential for human-caused fire ignition: Moderate/high

Inaccessibility to fire-fighting vehicles: Moderate/high

Potential for rapid fire spread: Moderate

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendation: Cut down any blackberries within 20 feet of the trail. Scatter, remove, or chip any dead material that's between 2-5 inches in diameter.

Southern Lites Park

Ownership/responsibility: City of Happy Valley

Date of field assessment: 9/13/21

Description: Southern Lites is at the south end of Scott Cr. Trail. Part of the park is developed with play structures and a watered, mowed lawn but most of the area within the park is along Scott Cr. and is undeveloped. It is bordered by Scott Creek along the south, 117th Ave along the west, Scott Cr. Park HOA along the east, and homes above the park along the north. Overstory trees are mostly cottonwood, alder, bigleaf maple, and willow with some cedar in Scott Cr. Heavy grass is in a seasonal creek draw along the west end and above the portion of Scott Cr. Trail that runs through the park. Most of the park is a mild, south facing slope that drops off sharply into Scott Cr. There are scattered pockets of loosely piled medium and heavy-sized fuels. This assessment deals only with the undeveloped portion.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High; Medium fuels: Moderate-high (in pockets); Large fuels: Low-moderate.

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: Moderate-high (mostly small fuels)

Slope Rating: Moderate

Aspect Rating: High

OVERALL FIRE HAZARD RATING: MODERATE-HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate-high

Inaccessibility to fire-fighting vehicles: Moderate

Potential for rapid fire spread: Moderate-high

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommendations: The high hazard rating is because of the grassy areas above the trail up to the homes and below the developed portion of the park just above Scott Cr. The grass between the trail and the homes should be kept mowed. Below the developed area where there are piles/concentrations of tree debris: Remove, chip or tightly pile medium-sized fuels (2-6 inches in diameter). Cut fire breaks through the grass.

Spring Mountain Elementary School Greenspace

Ownership/responsibility: North Clackamas School District

Date of field assessment: 1/28/22

Description: The greenspace (not counting athletic fields and playground) is east of the school parking lot. It is a steep, west facing slope that was landscaped and planted with a variety of native and introduced trees and shrubs when the school was built but it hasn't been maintained. As a result, dense blackberries have taken over a lot of the area and there are homes directly above.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate/high (blackberries); Medium fuels: Low/moderate; Large fuels: Low

Ladder fuels: Moderate

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope Rating: High

Aspect Rating: High

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low/moderate

Potential for rapid fire spread: Moderate/high

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Cut down and compact the blackberries. Limb the conifer branches 5-10 feet above ground level, depending on the height of the trees (shorter conifers – 5 feet; taller conifers – 10 feet). Remove limbs from the site or chip and leave chips in place.

Spring Mountain Ranch HOA Greenspace

Ownership/responsibility: Spring Mountain Ranch HOA

Date of field assessment: 1/8/22

Description: There are two greenspaces; one is a mowed lawn along Wagner Street just south of Spring Mt. Drive that will not be addressed in this assessment. The assessment only covers a south-facing, mildly steep forested strip between Spring Mt. Drive and Spring Mt. Court. The canopy/overstory is mature Douglas fir, bigleaf maple and a few white oaks. The understory is holly, filbert, young Douglas fir, cherry. Ground vegetation is mostly blackberries and heavy areas of fire-resistant English ivy. There are scattered pockets of debris from storms, etc. There is no trail access.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium-sized fuels: Moderate; Large-sized fuels: Low/moderate.

Ladder fuels: Low/moderate

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope Rating: Moderate

Aspect Rating: High

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Low

Inaccessibility to fire vehicles: Moderate/high

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Cut down blackberries; pile medium-sized dead ground fuels in tight piles to accelerate decomposition. Cut (and pile) limbs from young Douglas fir to a height of 8 feet above the ground.

Stella Heights HOA Greenspace

Ownership/responsibility: Stella Heights HOA

Date of field assessment: 3/4/22

Description: The greenspace is on the west end of the HOA and is attached to the greenspace for Scouters Meadow HOA, directly to the south of Stella Heights. The two greenspaces are roughly divided by a small stream and are assessed separately. The steep draw that the stream flows through is a riparian area. There is a WES enclosure in the NE corner of the HOA along 172nd but it is not assessed. The assessed space was recently planted by the developer and includes Douglas fir seedlings in the stream draw and various native shrubs above. There is no canopy to speak of but a few isolated willows and maples. Grass and blackberries are in the NW corner. There is a chipped neighborhood interpretive trail through the site.

Fire Hazard Ratings:

Fuels:

Ground Fuels – Small-sized fuels: Moderate; Medium fuels: Low; Large fuels: Low

Ladder Fuels: Low

Aerial Fuels: Low

Overall Fuels Rating: Low

Aspect Rating: Moderate

Slope Rating: Moderate

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Cut the grass and blackberries in the NW corner of the greenspace.

Stillwater Estates HOA Greenspace

Ownership/responsibility: Stillwater Estates HOA

Date of field assessment: 3/2/22

Description: The greenspace has two parts: one is a WES enclosure that will not be addressed; the other is a small riparian area on the north end through which Mt. Scott Creek flows. The site is dominated by willows and blackberries with a few mature cottonwoods. The popular Scott Creek Trail follows the north side of the greenspace and a neighborhood access trail to the Scott Creek Trail follows the west side.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate (blackberry concentrations along the trail); Medium fuels: Low/moderate;
Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low/moderate

Aspect Rating: Low

Slope Rating: Low

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate/high

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Low

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Cut down the blackberries and compact the cut canes but keep them out of Scott Creek.

Stone Bridge HOA Greenspaces

Ownership/responsibility: Stone Bridge HOA

Date of field assessment: 1/22/22

Description: There are four greenspaces. Two are short neighborhood trail accesses to Scott Creek Trail and a WES site that are not addressed in the assessment. The other greenspace, that is assessed, is a seasonal stream corridor on either side of Adoline Avenue. The overstory is mostly scattered, mature Douglas fir with a few big leaf maples. The understory along the creek southeast of the stone bridge railing on Adoline is a sometimes dense, impenetrable mix of fairly fire-resistant brush, except for concentrations of blackberries and a few young pines and cedars. Northwest of the stone bridge railing on Adoline, homeowners have kept the stream course cleaned out and well-maintained.

Fire Hazard Ratings for the stream corridor east of Adoline Ave.:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: Moderate; Large fuels: Low

Ladder fuels: Moderate

Aerial fuels: Low/moderate

Overall fuel rating: Moderate

Slope Rating: Low/moderate

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendations: Cut blackberries and any dead standing debris down to ground level and leave in place to decompose.

Sunnyside Highlands HOA Greenspace and Trail

Ownership/responsibility: Sunnyside Highlands HOA

Date of field assessment: 1/1/22

Description: There are three significant greenspace sites that are covered in two separate assessments.

The first site with its own assessment is in the SW corner of the HOA and is attached to a high fire hazard greenspace in the NW corner of Kensington Bluff HOA. Like its Kensington Bluff neighbor, the site is on a steep south facing slope with dense undergrowth, ladder fuels, aerial fuels, and poor fire access with homes directly above. There is a trail along the upper end of the site.

The second site, also with its own assessment, is attached by a narrow strip to the first site and is a protected seasonal stream corridor between Celano Court and Pheasant Ridge Drive.

The third site, which will have recommendations but no assessment is in the SE corner of the HOA and consists of a mowed greenspace along a trail (part of The Stairs Trail) with scattered young (10–15-year-old) cedars.

Site one: (SW corner of HOA)

Fire Hazard Ratings:

Fuels

Ground fuels – Small-sized fuels: Moderate/high; Medium fuels: Moderate/high; Large fuels: Moderate

Ladder fuels: Moderate/high;

Aerial fuels: Moderate/high

Overall fuels rating: Moderate/high

Slope rating: High

Aspect rating: High

OVERALL FIRE HAZARD RATING: HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate/high

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Moderate/high

Proximity to home: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommendations: Cut down all blackberries. Cut and tightly pile medium-sized (2-5-inch diameter) dead fuels. Larger fuels may be left in place. Remove limbs from Douglas firs up to 10 above the ground and pile. Piles may be burned, chipped, or left in place to decompose.

Sunrise Heights 1-2

Ownership/responsibility: Sunrise Heights 1-2

Date of field assessment: 1/16/22

Description: There are three greenspaces here and, although all will be mentioned, only one is assessed. Not assessed: 1. A narrow grass trail corridor from Sunnyside Road straight north to Misty Dr. This corridor is mowed frequently and well-maintained. 2. Two meticulously landscaped and well-maintained steep slopes on both sides of 152nd, beginning at the jct. of Sunnyside Road and running north. The assessment is for a small area (less than one acre) just across Misty Drive from Sunridge Terrace Apartments and about 1/10th of a mile north of Sunnyside Rd. It's on a very steep, south-facing slope of blackberries, uncut grass and scattered 10-15-year-old cedars and firs. A stair trail from Misty Dr. up to 147th St. is along the west boundary and a WES underground reservoir is directly above along the north boundary.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate/high; Medium fuels: Low; Large fuels: Low

Ladder fuels: Moderate

Aerial fuels: Low

Overall fuels rating: Moderate

Slope Rating: High

Aspect Rating: High

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: High

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Cut down and compact the blackberries. Limb up the conifers to 4 feet above ground level and remove limbs from the site. Although the grass is uncut, it's short and sparse and does not need mowing.

Sunset View HOA Greenspace

Ownership/responsibility: Sunset View HOA

Date of field assessment: 12/3/21

Description: Although there are three very small greenspaces, two are planted street divider spaces that are well maintained with fire resistant vegetation that will not be part of the assessment. The other small area is along the east side of Nicole Ln. between addresses 10296 and 10248. It's in a draw with scattered overstory trees and short brush and blackberries that have been recently cut down.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Moderate; Medium-sized fuels: Low/moderate; Large sized fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low

Slope Rating: Low

Aspect Rating: Moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Keep the grass and blackberries mowed.

Sunshine Ridge HOA Greenspace

Ownership/responsibility: Sunshine Ridge HOA

Date of field assessment: 3/8/22

Description: There are three greenspaces within the HOA but only one is assessed; it's a very steep, south-facing slope between the PGE right-of-way (and paved trail) and the end of Lyon St. The site is comprised of dense blackberries with pockets of filberts, hawthorn, cherry, and young alder and young Douglas fir. The overstory (canopy) is scattered mature Douglas fir and big leaf maple. There is an informal trail through the site and a paved trail below. A steep draw dissects the site.

The greenspaces that are not assessed are the PGE right-of-way and a WES site in the SW corner of the HOA.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High; Medium fuels: Moderate; Large fuels: Moderate

Ladder fuels: Moderate/high (blackberries)

Aerial fuels: Moderate

Overall fuels rating: High

Slope rating: High

Aspect rating: High

OVERALL FIRE HAZARD RATING: HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: HIGH

Recommendations: The dense blackberries have created a very high hazard to the homes on Lyon Street above the site. Cut down the berries on both sides of the paved switchback trail and compact them to facilitate faster decomposition. Obliterate the informal trail north of the paved trail to reduce the risk of human-caused fire ignition.

Taralon HOA Greenspaces

Ownership/responsibility: All Taralon HOAs (six)

Date of field assessment: 1/4/22

Description: This area has several highly developed and well-maintained mowed greenspaces and trails which will not be included with these assessments. There are three unique sites, however that are not maintained to any extent and each of the three will have their own individual assessments.

Site One: This site is about two acres in the SW corner of the HOA and is bordered by 154th Ave. on the west, Thornbridge Drive on the south and Nightingale Ave. on the east. It is mostly a flat wetland with an open canopy of mature oak, ash, alder, cottonwood, willow and scattered dying mature Douglas fir. Undergrowth is very dense in places and consists of mostly blackberries, and fire-resistant willow, red dogwood and low-growing wetland perennial weeds and grasses. Although it is a wetland, it dries out late in the summer. A short neighborhood trail accesses three sides.

Site One Ratings:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium-sized fuels: Low/moderate; Large-sized fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low/moderate

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate/high

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Keep grass and weeds mowed within 10 feet of the trail

Site Two: This area is about 2 ½ acres on the south end of the HOA just above Cherry Blossom Way and is mostly a dense closed-canopy of mature Douglas fir and western red cedar along a seasonal stream draw that flows into Rock Creek. Undergrowth is sparse because of the dense canopy. Blackberries dominate the north edge of the site but they are part of the assessment for Site Three which is pretty much all blackberries. Blowdown of some cedars has resulted in pockets of large fuels. There is no vehicle or trail access.

Site Two Ratings:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium-sized fuels: Moderate; Large-sized fuels: Moderate/high

Ladder fuels: Moderate

Aerial fuels: High

Overall fuels rating: Moderate

Slope Rating: Moderate

Aspect Rating: Low/moderate

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Low/moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Cut the limbs off the downed trees and scatter to reduce fuel bed continuity.

Site Three: This site is comprised almost entirely of dense blackberries in a wedge-shaped 2–3-acre site northeast of, and adjacent to, site two. Along the east boundary is a NW Natural Gas right of way mowed clearing (AKA in this case: a fire break) through the blackberries that extends down to Rock Creek. There is no trail or road access. The south portion is very steep.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High; Medium-sized fuels: Moderate; Large-sized fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Moderate

Slope rating: High

Aspect rating: High

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-cause fire ignition: Low/moderate

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Cut the blackberries down, or at least cut 20-foot corridors (fire breaks) through the blackberries from east to west, contour to the slope.

The Falls at Happy Valley: See Falls 1-3 for assessment

The Reserve HOA Greenspaces (Deerfield Woods Trail not included. It has its own assessment)

Ownership/responsibility: The Reserve HOA

Date of field assessment: 1/11/22

Description: There are two greenspaces (doesn't count the assessment for Deerfield Woods Trail and greenspace which is completely within The Reserve boundaries) that is addressed in one assessment. One area is rectangular (about 1 1/2 acres) in the NE corner of The Reserve and is in a shaded, forested draw with a canopy of mature maple, alder, cottonwood, alder and a few Douglas firs. The understory is fairly sparse except for patches of blackberries (especially along the east boundary) and young, fire-resistant brush and trees. The assessment focuses on this area. The other area is a narrow, steep, west-facing strip along the east side of Mt. Ridge Road across from Deerfield Woods. Overstory vegetation is a mix of mostly fire-resistant young alder and maple but also some young flammable conifers. Understory is dominated by dense pockets of blackberries.

Assessment for NE corner:

Fire Hazard Ratings:

Fuels – Small-sized fuels: Moderate (blackberries); Medium fuels: Moderate; Large fuels: Low/moderate

Ladder fuels: Low

Aerial fuels: Low/moderate

Overall fuels rating: Low

Slope rating: High

Aspect rating: Low/moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused ignition: Low

Inaccessibility to fire vehicles: High

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: LOW/MODERATE

COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: The west-facing slope on the east end of the greenspace should have the dense areas of blackberries cut down and left in place. Pockets of medium-sized fuels (dead/downed limbs and small trees) should be scattered to reduce fuel continuity.

Assessment for the area along the east side of Mt. Ridge Road across from Deerfield Woods Trail:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: High (blackberries); Medium fuels: Moderate; Large fuels: Low

Ladder fuels: Moderate

Aerial fuels: Low

Overall fuels rating: Moderate

Aspect Rating: High

Slope Rating: High

OVERALL FIRE HAZARD RATING: MODERATE/HIGH

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: High

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendations: Cut blackberries down and compact the canes for faster decomposition. Limb young conifers up to four feet above ground level and scatter branches on site.

The Stairs Trail

Ownership/Responsibility: Kensington Bluff HOA, Greyhawk Ridge HOA, Sunrise Heights HOA

Dates of field assessment: 1/16/22; 12/3/21; 1/1/22

Description: This 1-mile-long trail is within three different HOAs and has been assessed as part of each one so it doesn't have its own assessment.

Tree View Estates HOA Trail and Greenspace

Ownership/responsibility: Tree View Estates HOA

Date of field assessment: 1/11/22

Description: The greenspace follows Mt. Scott Creek south from Scott Creek Lane along a trail to the start of Snowfire Court. This trail isn't officially a part of the Mt. Scott Creek Trail but rather a side trail. Along a straight, paved portion of the trail running south from Scott Creek Lane the blackberries are very dense. Where the trail is a wood chips or a graveled surface there are further pockets of blackberries and storm debris.

Fire Hazard Ratings:

Fuels:

Ground fuels - Small-sized fuels: Moderate; Medium fuels: Low/moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low/Moderate

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Cut blackberries and pull vines out of the brush and onto the ground for faster decomposition.

Vista Heights HOA Greenspace

Ownership/responsibility: Vista Heights HOA

Date of field assessment: 1/14/22

Description: The greenspace is in the SW corner of the HOA and is currently undergoing a forest restoration project in cooperation with Clackamas County Water and Environmental Services, City of Happy Valley and The Friends of Trees. The roughly 1 ½ acre patch has an overstory of scattered mature Douglas fir and a small grassy area along a seasonal stream.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium fuels: Low; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Moderate

Overall fuels rating: Low

Slope rating: Moderate

Aspect rating: Moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused ignition: Moderate

Inaccessibility to fire vehicles: Low/moderate

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: MODERATE

COMBINED OVERALL FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendations: None

Vista Woods HOA Greenspace

Ownership/responsibility: Vista Woods HOA

Date of field assessment: 12/30/21

Description: There are two greenspaces connected in this HOA; one is a mowed field/lawn which is not part of the assessment. The other is along a seasonal creek that drains into a runoff retention pond next to 122nd Ave. Vegetation is cottonwood, willow, hawthorn, blackberries and some scattered introduced pine and cedars in a narrow corridor along with cattails and rushes in a small permanent wetland spot. Some homeowners have done a good job clearing brush away from fences and removing it.

Fire Hazard Rating:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: Low; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuels rating: Low

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Rating:

Potential for human-caused ignition: Low/moderate

Inaccessibility to fire vehicles: Low

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW

Recommendation: Cut blackberries down to the ground. Limb up the cedars and pines to six feet above ground level and remove limbs from the site.

Volare Townhomes Greenspace

Ownership/Responsibility: Volare Townhomes HOA

Date of field assessment: 12/7/21

Description: The greenspace, located on the west side of the townhouse complex, is along a re-channeled seasonal creek. Since most of the site was significantly disturbed around 20 years ago most of the vegetation is relatively young. Some trees and shrubs were planted by the developer but mostly the vegetation is a natural mix of blackberries, teasel, cottonwood, willow, alder and a few mature oaks next to Causey Ave. There is no trail access to the greenspace from the townhouses but there is a nearby trail on the property along the west boundary.

Fire Hazard Ratings:

Fuels:

Ground fuels- Small-sized fuels: Moderate; Medium-sized fuels: Low/moderate: Large-sized fuels: Low

Ladder fuels: Low

Aerial fuels: Low

Overall fuel rating: Low

Slope Rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Blackberries are all over the site but are not dense enough for immediate concern. They should, however, be cut down to prevent a dangerous accumulation.

Wellington Place HOA Greenspace

Ownership/responsibility: Wellington Place HOA

Date of field assessment: 3/2/22

Description: The greenspace consists of narrow corridors around the north and south boundaries of the HOA surrounding the homes of Wellington Court and five seasonal riparian draws. The corridors and four of the five riparian areas are groomed and well maintained and are not necessary to assess. The only area that is addressed in this assessment is in the SW corner of the HOA. It's a brushy riparian patch under a shaded, mostly closed canopy of mature Douglas fir. Vegetation is mostly fire-resistant species but also a lot of blackberries. There is a short, informal trail through a portion of the site.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: Low/moderate; Large fuels: Low

Ladder fuels: Low

Aerial fuels: Moderate

Overall fuels rating: Low/moderate

Aspect Rating: Low

Slope Rating: Low/moderate

OVERALL FIRE HAZARD RATING: LOW

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Recommendation: Cut down blackberries but don't leave the canes in the stream bed. Any dead debris from other sources should be scattered on site but not into the stream bed.

Wenzel Estates HOA Greenspace

Ownership/responsibility: Wenzel Estates HOA

Date of field assessment: 4/22/22

Description: The greenspace is a protected seasonal stream corridor that runs across the north side of the HOA and then south along 142nd. Because of different fuel situations, there are two assessments; one for the narrower, mostly flat and open portion east of Aspen Way and one for the steeper, wider forested draw along 142nd. The area east of Aspen way has an open canopy with assorted mature fir, cedar, maple, and oak. The understory is a diverse mix of recently cut blackberries and fairly fire-resistant planted native shrubs. There is some large sized downed debris from trees that either fell some time ago or were hazard trees that were cut down. There are also a few pockets of medium-sized fuel accumulations. The area west of Aspen Way is mostly a closed canopy of fir, cedar and maple with an understory of shade tolerant and fire-resistant shrubs and ferns along both sides of a steep draw. Neither of the areas have trails.

Assessment for the area east of Aspen Way:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Moderate; Medium fuels: Moderate/high; Large fuels: Moderate

Ladder fuels: Low

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Low/moderate

Inaccessibility to fire vehicles: Low/moderate

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Treatment recommendation: Tightly pile (for quicker decomposition), chip or remove dead, medium-sized fuels (1-5 inches in diameter) within the creek corridor. Cut down and compact remaining blackberries and leave in place. Large, downed fuels need not be treated.

Assessment for the area west of Aspen Way:

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low; Medium fuels: Low/moderate; Large fuels: Moderate

Ladder fuels: Moderate (next to the homes along the south and east sides of the area)

Aerial fuels: Moderate/high

Overall fuels rating: Low/moderate

Slope rating: High

Aspect rating: Low/moderate (heavy shade reduces aspect effect)

OVERALL FIRE HAZARD RATING: LOW/MODERATE

Fire Risk Ratings:

Potential for human-caused ignition: Low/moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: High

OVERALL FIRE RISK RATING: LOW/MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: LOW/MODERATE

Treatment recommendation: Cut off and tightly pile fir and cedar limbs 10 feet up from the ground from mature trees along the back fences of homes along the south and east boundary of the greenspace area.

Westview HOA Greenspace

Ownership/Responsibility: Westview HOA

Date of field assessment: 12/5/21

Description: There are two small greenspace that will be included in this assessment. One is a narrow strip along the east side of Westview Ct. directly across the street from house address #9689 and the other is another small area along the east side of Overlook Ln. There is a planted, well-maintained street divider space at the north end of Westview that will not be assessed. The greenspace strip along Westview is dense 15-year-old Douglas fir with limbs reaching the ground on a steep, west-facing slope. The greenspace along Overlook Ln has a protected seasonal creek in a mildly sloped draw. The overstory is mature fir and mixed deciduous trees without much for understory fuel.

Fire Hazard Ratings:

Fuels:

Ground fuels: Small-sized fuels: Low/moderate; Medium-sized fuels: Moderate; Large-sized fuels: Low

Ladder fuels: High (along the Westview Ct. strip)

Aerial fuels: High (along Westview Ct. strip)

Overall fuels rating: Moderate/high

Slope rating: High

Aspect rating: High

OVERALL FIRE HAZARD RATING: HIGH

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate

Inaccessibility to fire vehicles: Low

Potential for rapid spread: Moderate/high

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE/HIGH

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE/HIGH

Recommendation: The only area needing attention at this point is the strip next to Westview Ct. across from house #9689. All young Douglas fir within 50 feet of Westview Ct. should be limbed up 10 feet and the limbs removed or chipped along with any dead fuels.

Wexford (Waterford) HOA Greenspace

Ownership/responsibility: Wexford HOA

Date of field assessment: 11/20/21

Description: The small, flat, forested greenspace of Wexford HOA is along a short neighborhood access trail from the south end of Waterford Ct to the Mt. Scott Cr. Trail. Mt. Scott Creek runs through it. The overstory is mostly mature Douglas fir with some scattered maple and cottonwood. The heavily shaded understory is a dense mix of fire-resistant species but with some dead fuels and blackberries mixed in. There is winter storm debris that will need attention.

Fire Hazard Ratings:

Fuels:

Ground fuels – Small-sized fuels: Low-moderate; Medium fuels: Moderate (high in pockets of debris); Large fuels: Moderate

Ladder fuels: Low

Aerial fuels: Moderate

Overall fuels rating: Moderate

Slope Rating: Low

Aspect Rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fires: Moderate

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Low

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Remove dead fuels and all blackberries from within 20 feet of the gravel access trail, and the main (paved) Mt. Scott Creek Trail.

Windswept Waters HOA Greenspace

Ownership/responsibility: Windswept Waters HOA

Date of field assessment: 12/19/21

Description: Of the three greenspace areas in this HOA, two are highly developed parks with maintained lawns and will not be part of this assessment. The assessed area is a long strip on the bluff of the Clackamas River along the west boundary of the HOA. The strip is mostly blackberries and grass with scattered mature and young Douglas fir, cottonwood and big leaf maple. The north end of the strip has been cleared of blackberries and has been planted with assorted native tree and shrub species. A neighborhood trail accesses most of the strip. A chain-link fence delineates the boundary between the strip and the bluff that drops very steeply to the Clackamas River.

Fire Hazard Ratings:

Fuels:

Ground fuels; Small-sized fuels: Moderate-high (blackberries and grass); Medium-sized fuels: Low; Large-sized fuels: Low

Ladder fuels: Moderate

Aerial fuels: Low-moderate

Overall fuels rating: Moderate

Slope rating: Low

Aspect rating: Low

OVERALL FIRE HAZARD RATING: MODERATE

Fire Risk Ratings:

Potential for human-caused fire ignition: Moderate-high

Inaccessibility to fire vehicles: Moderate

Potential for rapid fire spread: Moderate

Proximity to homes: Moderate

OVERALL FIRE RISK RATING: MODERATE

OVERALL COMBINED FIRE HAZARD AND FIRE RISK RATING: MODERATE

Recommendations: Cut down blackberries. Mow grass areas annually, preferably around June.
