

✓	Houses & Other Structures: Recommended Firewise Actions	How Often?	Source
	Remove dead vegetation & other flammable material from corners, roofs, carports, & gutters, & both on & below decks, porches, & wooden stairs & walkways.	At least annually	1,2
	Replace flammable deck furniture & door mats with fire-resistant materials.	N/A	
	Cover chimney/stove pipe outlet with metal mesh with no more than 1/8" openings.	N/A	2
	Screen attic vents with metal mesh with no more than 1/8" openings.	N/A	1
	Screen in under-eave & soffit vents with metal mesh with no more than 1/8" openings.	N/A	1
	Install non-flammable separation between flammable fence & house or other structures.	N/A	1
	Clad deck & porch posts in non-flammable material (e.g., sheet metal).	N/A	
	Screen area below elevated portions of house, decks, & porches using metal mesh with no more than 1/8" openings or other non-combustible material. (Contact Firewise Committee member Rose O'Donnell for some tips on screen design & installation.)	N/A	2
	Replace loose or missing shingles or other roofing.	At least annually	
Sources			
1	"Firewise Guide to Landscape and Construction," Firewise Communities. http://firewise.org/wildfire-preparedness/be-firewise/home-and-landscape.aspx		
2	"Living with Fire: A Guide for the Homeowner," Pacific Northwest Wildfire Coordinating Group. http://www.odf.state.or.us/AREAS/eastern/walkerrange/NORTHWES.pdf		
3	Safety Tips, Okanogan County Fire District 6. http://okanogancountyfd6.com/safetytips.html		

Lots with Structures: Recommended Firewise Actions		
✓	ZONE 1: Within 30' of House, Attachments, & Outbuildings (Attachments include wooden decks, stairways, fences, & walkways; outbuildings include garages, guest houses, & woodsheds.)	Source
	Estimate the slope(s) within Zone 1: gentle slopes are <20%; moderate 21-40%, & steep >40%. (Contact Heather if you'd like your own Defensible Spaces map; see Contacts page & Sample Defensible Spaces maps.)	N/A
	Remove firewood & other stacked/piled combustibles (e.g., scrap wood, slash piles) & place uphill of house, if possible. (Position so that logs will not roll down against house.)	1,3,4,5
	Cut all tree branches within 15' of roof or chimney.*	1,2,4
	Cut all branches that overhang house, attachments, or outbuildings.*	1,3,4
	Establish a 5-10' wide fuel-free zone around house & 10' for propane tank (e.g., replace bark mulch with gravel or lava rock; remove conifers (pine, fir, juniper) & highly flammable shrubs (bitterbrush/greasewood, sage)).	2,3,4,6
	Create fuel breaks using non-flammable landscaping materials (e.g., gravel walkways).	16
	Remove dead leaves, twigs, cones, & branches, & reduce layers of dead needles to a depth of no more than 2".*	1,2,4,5
	Remove all tree branches within 6-15' of ground, depending on tree size (lower for small trees).*	1,2,4
	Remove all dead shrubs & standing dead trees.*	1
	Remove all downed trees, unless embedded into the ground. (Remove all exposed branches from downed trees that are embedded into the ground).*	1
	After grass & other herbaceous (non-woody) vegetation, such as arrowleaf balsamroot, dry up for the season, cut it to no more than 4" tall.*	1,2,4,5
	Remove small conifers (e.g., pine, fir, juniper) & highly flammable shrubs (e.g., bitterbrush (aka greasewood), sage, & juniper) from below the branches of conifer trees or keep trimmed down so that the vertical separation is at least 3x the shrub height.	1
	Prune or thin small conifers (e.g., pine, fir, juniper) & highly flammable shrubs (e.g., bitterbrush (aka greasewood), sage, & juniper) as follows:	
	Gentle slope (green on maps): prune or thin to spacing of 2x shrub height.*	
	Moderate slope (orange on maps): prune or thin to spacing of 4x shrub height.*	
	Steep slope (red on maps): prune or thin to spacing of 6x shrub height.*	
	Prune or thin coniferous trees (e.g., pine, fir) as follows:	
	Gentle slope (green on maps): prune or thin to spacing of 10-30' between outer branch tips.* (Firewise recommends 30'.)	
	Moderate slope (orange on maps): prune or thin to spacing of 20-30' between outer branch tips.* (Firewise recommends 30'.)	
	Steep slope (red on maps): prune or thin to spacing of 30' between outer branch tips.*	
	Use xeriscaping close to house (i.e., plants that don't dry out in summer). Select low maintenance plants that require little to no fertilizer. Provide for irrigation that conserves water (e.g., timed drip &/or soaker hoses).	1,4

>> See next page for Zone 2 <<

✓	ZONE 2: Between 30 & 100' from House, Attachments, & Outbuildings	Source
	Create fuel breaks using non-flammable landscaping materials (e.g., gravel walkways).	46
	Estimate the slope(s) within Zone 2. (See first item under Zone 1 for more information.)	
	Using the following guidelines, determine whether Zone 2 is defensible space, buffer, or a mix. Actions for each type of space are below.	
	Gentle slope (<20%; green on maps): Zone 2 is defensible space for shrubs, buffer for grass & trees.	
	Moderate slope (21-40%; orange on maps): Zone 2 is defensible space.	
	Steep slope (>40%; red on maps): Zone 2 is defensible space.	
	For Defensible Space:	
	Remove accumulations of dead leaves, twigs, cones, & branches, & reduce layers of dead needles to a depth of no more than 2".*	1,2,4,5
	Remove all tree branches within 6-15' of ground, depending on tree size (lower for small trees).*	1,2,4
	Remove accumulations of dead shrubs & standing dead trees. (Leaving a few standing dead trees outside Zone 1 is good, because they are an important component of the habitat. Cut off any limbs that are within 6-15' of the ground, though, depending on tree size (lower for small trees).*)	1
	Remove accumulations of downed trees, except those embedded into the ground. (Remove all exposed branches from downed trees that are embedded into the ground).*	1
	Prune or thin small conifers (e.g., pine, fir, juniper) & highly flammable shrubs (e.g., bitterbrush (aka greasewood), sage, & juniper) as follows:	
	Gentle slope (green): prune or thin to spacing of 2x shrub height.*	
	Moderate slope (orange): prune or thin to spacing of 4x shrub height.*	
	Steep slope (red): prune or thin to spacing of 6x shrub height.*	
	Prune or thin coniferous trees (e.g., pine, fir; not healthy deciduous trees, such as aspen) as follows:	
	Gentle slope (green): N/A (see buffer).	
	Moderate slope (orange): prune or thin to spacing of 20' between outer branch tips.*	
	Steep slope (red): prune or thin to spacing of 30' between outer branch tips.*	
	For Buffers:	
	Remove tree branches within 6-10' of ground, depending on tree size (lower for small trees).*	4
	Remove accumulations of downed trees, except those embedded into the ground. (Remove all exposed branches from downed trees that are embedded into the ground).*	2
	Prune or thin coniferous trees (e.g., pine, fir) to 5-30' between outer branch tips. NOTE: This recommendation does not apply to healthy deciduous trees such as aspen, alder, cottonwood, & willow, which retain more moisture & can retard fire.*	2,4,6

>> See next page for Zone 3 <<

✓	ZONE 3: Between 100 & 200' from House, Attachments, & Outbuildings	Source
	Estimate the slope(s) within Zone 2. (See first item under Zone 1 for more information.)	
	Using the following guidelines, determine whether Zone 2 is defensible space, buffer, or a mix. Actions for each type of space are below.	
	Gentle slope (<20%; green on maps): Zone 3 is buffer.	
	Moderate slope (21-40%; orange on maps): Zone 3 is defensible space for shrubs, buffer for grass & trees. Uphill of the house, the defensible space for flammable shrubs is smaller, depending on slope. For slopes of 21-25%, Zone 3 is defensible space only within 130' of the house; for slopes of 26-35%, it is defensible space only within 160' of the house; and for slopes of 35-40%, all of Zone 3 is defensible space for shrubs.	
	Steep slope (>40%; red on maps): Zone 3 is defensible space for shrubs & trees, buffer for grass.	
	For Defensible Space:	
	Remove accumulations of dead leaves, twigs, cones, & branches, & reduce layers of dead needles to a depth of no more than 2".*	1,2,4,5
	Remove all tree branches within 15' of ground.*	1,2,4,5
	Remove accumulations of dead shrubs & standing dead trees. (Leaving a few standing dead trees is good, because they are an important component of the habitat. Cut off any limbs that are within 6-15' of the ground, though, depending on tree size (lower for small trees).*)	1
	Remove accumulations of downed trees, except those embedded into the ground. (Remove all exposed branches from downed trees that are embedded into the ground).*	1
	Prune or thin small conifers (e.g., pine, fir, juniper) & highly flammable shrubs (e.g., bitterbrush (aka greasewood), sage, & juniper) as follows:	
	Gentle slope (green): N/A (see buffer).	
	Moderate slope (orange): prune or thin to spacing of 4x shrub height.*	
	Steep slope (red): prune or thin to spacing of 6x shrub height.*	
	Prune or thin coniferous trees (e.g., pine, fir; not healthy deciduous trees such as aspen) as follows:	
	Gentle slope (green): N/A (see buffer).	
	Moderate slope (orange): N/A (see buffer).	
	Steep slope (red): prune or thin to spacing of 30' between outer branch tips.*	
	For Buffers:	
	Remove accumulations of woody debris.*	1
	Remove accumulations of downed trees, except those embedded into the ground. (Remove all exposed branches from downed trees that are embedded into the ground).*	2
	Prune or thin coniferous trees (e.g., pine, fir) so outer branch tips don't touch. NOTE: This recommendation does not apply to healthy deciduous trees such as aspen, alder, cottonwood, & willow, which retain more moisture & can retard fire.*	4

>> See next page for Note & Sources <<

***Note:**
It is okay to leave slash piles, which make good habitat, outside the defensible space perimeter. For chipped slash, make sure to disperse chips, so that depths do not exceed 2", to avoid creating fuel or killing underlying vegetation. For burning of slash or other debris, get permission in advance from Pine Forest Manager (Brad Sawtell).

Sources	
1	"Living with Fire: A Guide for the Homeowner," Pacific Northwest Wildfire Coordinating Group. http://www.odf.state.or.us/AREAS/eastern/walkerrange/NORTHWES.pdf
2	"Community Wildfire Safety through Regulation: A Best Practice Guide for Planners & Regulators," National Fire Protection Association. 2013. http://www.fs.fed.us/openspace/resources_and_tools.html .
3	"The basics of defensible space and the 'home ignition zone:' Recommendations from the Firewise Communities Program." http://Firewise.org/wildfire-preparedness/be-Firewise/home-and-landscape/defensible-space.aspx?sso=0
4	"Firewise Guide to Landscape and Construction," Firewise Communities. http://firewise.org/wildfire-preparedness/be-firewise/home-and-landscape.aspx
5	Safety Tips, Okanogan County Fire District 6. http://okanogancountyfd6.com/safetytips.html
6	"Home Landscaping for Fire," University of California Department of Agriculture & Natural Resources Publication 8228. firecenter.berkeley.edu/docs/CE_homelandscaping.pdf

√	Vacant Lots: Recommended Firewise Actions	Source
	Remove accumulations of woody debris.*	1
	Remove accumulations of downed trees, except those embedded into the ground. (Remove all exposed branches from downed trees that are embedded into the ground.)*	2
	Remove all tree branches within 10' of ground.*	1
	Prune or thin coniferous trees (e.g., pine, fir) so outer branch tips don't touch. NOTE: This recommendation does not apply to healthy deciduous trees such as aspen, alder, cottonwood, & willow, which retain more moisture & can retard fire.*	3
*Note:		
	It is okay to leave slash piles, which make good habitat, outside the defensible space perimeter. For chipped slash, make sure to disperse chips, so that depths do not exceed 2", to avoid creating fuel or killing underlying vegetation. For burning of slash or other debris, get permission in advance from Pine Forest Manager (Brad Sawtell).	
Sources		
1	"Living with Fire: A Guide for the Homeowner," Pacific Northwest Wildfire Coordinating Group. http://www.odf.state.or.us/AREAS/eastern/walkerrange/NORTHWES.pdf	
2	"Community Wildfire Safety through Regulation: A Best Practice Guide for Planners & Regulators," National Fire Protection Association. 2013. http://www.fs.fed.us/openspace/resources_and_tools.html .	
3	"Firewise Guide to Landscape and Construction," Firewise Communities. http://firewise.org/wildfire-preparedness/be-firewise/home-and-landscape.aspx	

Emergency Access & Egress: Recommended Firewise Actions		
√	Emergency Access	Source
	Apply for Okanogan County–assigned E–911 address. (Don't use lot number & don't assume address on tax assessor site or other sources is correct.)	3,4
	Install a reflective metal address sign with numbers at least 4" high that are easily visible at night from <u>all</u> directions of potential travel by emergency vehicles. Note: Okanogan County Fire District 6 prefers the blue signs available through their website (see below; add website info on proper sign placement.)	2,4,5
	For houses that share a driveway, install two separate signs on a single post & install a second sign for each house at or readily visible from the split in the driveway, to identify clearly which house is which.	3,4,5
	Make driveway surface at least 12' wide.	4
	Maintain 12' of plowed driveway width in winter.	4
	Maintain at least 16' horizontal & 12' (15' even better) vertical clearance between/below woody vegetation & other obstructions along driveway.	3,4
	If driveway is > 150' long, provide an emergency vehicle turnaround area with a minimum inside radius of 28'. See source #4 for layout options.	1,3,4
	For gated driveways, ensure minimum 12' opening &, if locked, coordinate with OCFD6 about access in your absence.	4
√	Emergency Egress	Source
	Enroll in Okanogan County Department of Emergency Management emergency notification system.	6
	Identify at least two exit routes from Pine Forest & familiarize yourself with the geography through which they pass, to know which route to take under which circumstances.	1
√	Both Access & Egress	Source
	Include driveway pullouts (minimum 10' wide by 35' long) if your driveway is > 150' long. Place every 300' if driveway 600' or longer.	4
Sources		
1	"Living with Fire: A Guide for the Homeowner," Pacific Northwest Wildfire Coordinating Group. http://www.odf.state.or.us/AREAS/eastern/walkerrange/NORTHWES.pdf	
2	Winthrop Firefighters Association, Okanogan County Fire District 6. http://www.winthropfirefighters.org/address-signs.html	
3	Pine Forest Community Wildfire Risk Assessment, Okanogan Conservation District, Summer 2015.	
4	Safety Tips, Okanogan County Fire District 6. http://okanogancountyfd6.com/safetytips.html	
5	Reflective Address Sign mounting guidelines. Winthrop Firefighters Association, Okanogan County Fire District 6. http://www.pine-forest.org/pdfs/House_Number_Regulation_Signs_PF_Website.pdf (page 2)	
6	Okanogan County Alerts System. http://www.okanogandem.org/everbridge.htm	

New Construction & Major Remodeling: Recommended Firewise Actions

	Siting	Source
√	Where possible, avoid building in canyons or on steep slopes, ridge tops, or saddles.	2
	Locate propane tank at least 30' from structures.	
√	Structures	Source
	Use fire-resistant roofing material (e.g., Class A shingles, metal, slate, tile).	1,2
	Use fire-resistant siding material (e.g., stucco, metal, cementitious siding), at least on lower walls.	1,2
	Avoid cedar siding.	
	Box in eaves.	1,2
	Use double- or triple-pane windows.	1,2
	Avoid or replace plastic & fiberglass skylights.	1
	Use terraces/patios instead of wooden decks.	1
	If do build deck(s), use non- or less-combustible materials.	3
√	Driveway	Source
	Make driveway with no more than 10% grade (5% is even better).	4
	Use minimum 28' inside radius for all turns & switchbacks.	4
	Make driveway surface at least 12' wide.	4
	Maintain at least 16' horizontal & 12' (15' even better) vertical clearance between/below woody vegetation & other obstructions along driveway.	3,4
	If driveway is > 150' long, provide an emergency vehicle turnaround area with a minimum inside radius of 28'. See source #4 for layout options.	1,3,4
	Include driveway pullouts (minimum 10' wide by 35' long) if your driveway is > 150' long. Place every 300' if driveway 600' or longer.	4
Sources		
1	"Firewise Guide to Landscape and Construction," Firewise Communities. http://firewise.org/wildfire-preparedness/be-firewise/home-and-landscape.aspx	
2	"Living with Fire: A Guide for the Homeowner," Pacific Northwest Wildfire Coordinating Group. http://www.odf.state.or.us/AREAS/eastern/walkerrange/NORTHWES.pdf	
3	"Fire-Resistant Decks," Professional Deck Builder. http://www.deckmagazine.com/codes-and-standards/fire-resistant-decks_o.aspx	
4	Safety Tips, Okanogan County Fire District 6. http://okanogancountyfd6.com/safetytips.html	