Wildfire Hazard

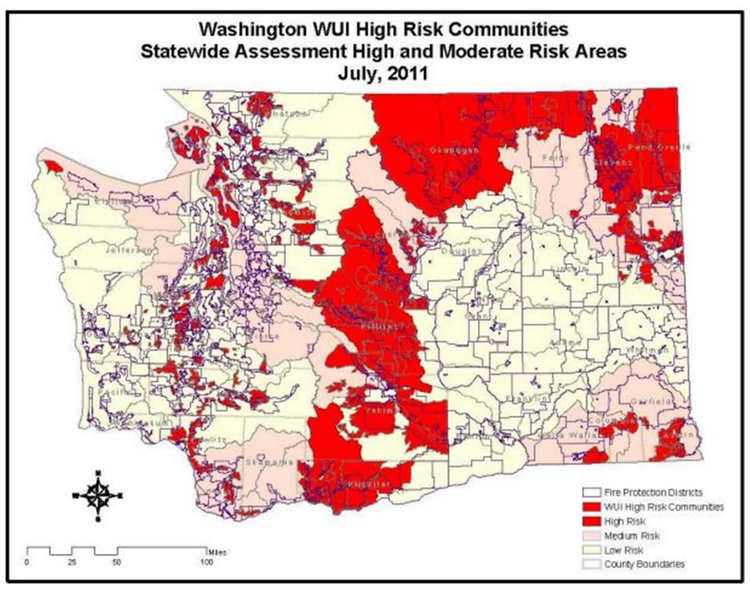
What Causes Wildfires?

Hazard Description

Wildland fires are uncontrolled fires in grasslands, brush, woodlands or forests. Most are caused by human error. Wildland fires destroy valuable resource lands, wildlife habitat, powerlines, pipelines, communications, and transportation infrastructure. The impact of a major fire would be amplified by subsequent effects of landslides and flooding during heavy rains.

Wildland fires also pose threats to people, pets, and livestock in the area that intermingle with wildland vegetation. This area is termed the wildland-Urban Interface (WUI) – Map 1 below identifies the WUI areas as identified by DNR (2011).

Map 1 (Right): Washington State WUI areas at Moderate Risk (Map Developed by WA DNR and is the most current available as of this update)



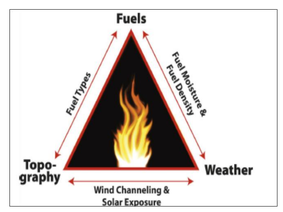
Factors Contributing to Wildfires

Fuel: Lighter fuels such as grass, leaves, and needles (sometimes called litter) quickly expel moisture and burn rapidly. Heavier fuels such as branches, logs, and trunks take longer to warm and ignite.

Weather: West of the Cascades, strong, dry, east winds in the late summer and early fall produce extreme fire conditions. East winds can last 48 hours with speed reaching 60 mph; these winds generally reach peak velocities during the night and early morning hours.

Terrain: Topography of an area influences the amount and moisture of fuel. Fires spread more easily uphill than downhill. (See steep slopes map on the right). Barriers, such as highways and lakes, can affect the spread of fire.

Limited road access to open spaces increases risk for larger wildland fires. Fewer roads delay response times for firefighters to make contact with the fire. In densely wooded areas, fires can burn for days without anyone knowing the fire exists.



Delineation of Wildfire Hazard Area

Washington State Department of Natural Resources, the U.S. Forest Service, LandFIRE, and stakeholders identified Wildland Urban Interface (WUI) communities throughout Washington, including Grays Harbor County. Communities were evaluated for fire behavior potential, fire protection capability, and risk to social, cultural and community resources. Risk factors included fire history, type and density of vegetative fuels, extreme weather potential, topography, number and density of structures and their distance from fuels, location of municipal watersheds, and potential al for loss of housing or businesses.

Map 2: Wildfire Regimes in Grays Harbor County

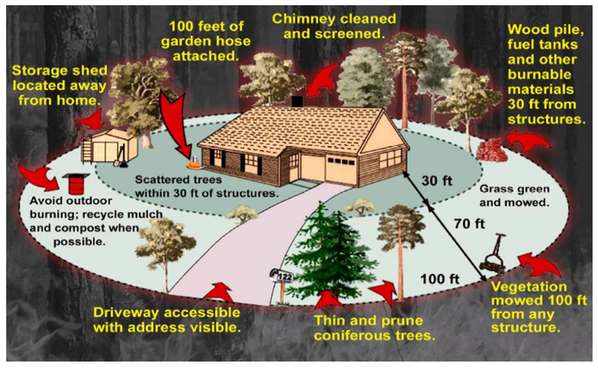
For purposes of Grays Harbor County's Risk Assessment, LandFire data was utilized, identifying the various *Fire Regimes* within the County. Fire regimes are characterized based on their frequency, intensity, extent, type, and seasonality, as follows:

- Fire frequency is the average time a fire burns in a given area.
- Fire intensity is the amount of heat released over time.
- Fire extent is the size and spatial similarities of the burning.
- Fire types or fire spread include ground fire, surface fire, and crown fire.
  - ✓ Ground fires use glowing combustion to burn organic matter in the soil.
  - ✓ Surface fires burn leaf litter, fallen branches, and ground plants.
  - ✓ Crown fires burn through to the top layer of tree foliage.
- Seasonality is the period of time during the year that the fuels of a specific ecosystem can ignite.

Below are the various Fire Regimes. Map 2 (left) illustrates the various Regimes in Grays Harbor (note: not all Regimes fall within the County).

Regime Groups

- Fire Regime Group I - 0-35 year frequency, low to mixed severity
- Fire Regime Group II - 0-35 year frequency, replacement severity
- Fire Regime Group III - 35-200 year frequency, low to mixed severity
- Fire Regime Group IV - 35 -200 year frequency, replacement severity
- Fire Regime Group V - 200+ year frequency, any severity



What can you do to reduce wildfire risk?